

Managing Threat, Cost, and Incentive to Kill: The Short- and Long-Term Effects of Intervention in Mass Killings

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Abstract

How do third party interventions affect the severity of mass killings? We theorize that episodes of mass killing are the consequence of two factors: (1) the threat perceptions of the perpetrators and (2) the cost of implementing genocidal policies relative to other alternatives. To reduce genocidal hostilities, interveners must address these factors. Doing so requires that interveners alter the genocidaire's expectation of a successful extermination policy, which in turn requires a demonstration of the third party's resolve. This cannot be achieved immediately upon intervention, and given the perpetrator's strategic response to third party involvement, we expect intervention to increase hostilities in the short-term. With time, however, we contend that the characteristics of neutral interventions offer the greatest opportunity for reducing the violence in the long-term. A statistical analysis of the 1955 to 2005 period supports our theoretical expectations.

The ongoing conflict in the Sudan has initiated an impassioned debate over the use of third party intervention to halt gross human rights violations perpetrated against civilian populations. Moral outrage and the memory of the international community's failure in Rwanda to live up to the lofty "never again" ideal has led to calls for an intervention force with a mandate to protect civilians. Yet, a key aspect of the debate over intervention has been the question of whether third party involvement can successfully alter the magnitude of genocidal violence. While the moral imperative to "do something" to end state-sponsored mass murder and legal issues regarding state sovereignty deserve careful consideration, such issues are only relevant once the debate over the effectiveness of foreign intervention has been resolved. Many have championed the virtues of intervention in genocide (Feil 1998; Barnett 2002). However, others in the scholarly community have shown that interventions in internal conflicts often generate undesirable outcomes (Bloom 1999, Regan 2002, Balch-Lindsay and Enterline 2000).¹ This study directly addresses the effectiveness of third party intervention effectiveness in genocides. We argue that much of the ongoing debate stems from a failure to compare the short- and long-term effects of intervention. We posit that while foreign interventions often contribute to an initial surge in violence against civilians, impartial interventions reduce the magnitude of violence in the long-term. Unlike other types, impartial interventions provide the means for resolving the issues that drive episodes of mass killing. By disaggregating interventions according to the side supported, we assert that effectiveness is a function of intervention type and the third party's resolve in staying committed to the crisis over time.

The analysis presented below notes the beneficial effects of neutral intervention in reducing genocidal violence, providing information that will better inform policymakers. Our results suggest that if leaders are interested in increasing stability, neutral interventions are the best option. The caveat to this is that leaders must both weather the initial surge in violence

provoked by neutral intervention as well as commit to long-term involvement if their goal is a reduction in civilian deaths. Below, we consider several explanations of mass killing. Among them, we note two common motivations for regime-sponsored mass murder, setting the basis for our theoretical expectations with respect to the effect of intervention on genocide magnitude.

Threat, Cost, and the Incentive to Kill

Several explanations for the use of regime-sponsored mass killing policies have been put forward in the literature, including psychological (Bauman 2001; Charny 1982; Waller 2002), institutional (Harff 2003; Rummel 1997), opportunistic scapegoating (Staub 1989; Midlarsky 2005), and strategic approaches (Midlarsky 2005; Valentino et. al. 2004; Valentino 2000, 2004). Among these explanations, we note two common features that produce violent outcomes. First, mass killing is the product of a perceived threat to the regime's political goals posed by the victim group. Real or imagined, the victim group acts as an impediment to the realization of a domestic agenda that the regime believes to be fundamental to its wellbeing. This threat must then be managed in a way that allows for the agenda's attainment. Second, similar to the choice of any other policy, the regime calculates the costs of employing mass killing to obtain its desired goals.² As such, mass killing acts as a policy tool available to regimes for achieving their domestic goals. The threat posed by the victim group and the cost necessary for employing a mass killing policy are thus central to our ability explain genocide occurrence and its perpetuation once initiated.

For instance, according to the strategic account of mass killing (Valentino 2004), the victim group stands in the way of regime goals that fall into one of several categories which include concluding an ongoing civil war against guerrilla insurgents, achieving a massive restructuring of society as in communist revolutions, or taking desired territory as is common in ethnic cleansing. The regime sees the victim as a fundamental threat. From this perspective, selecting a genocidal policy for dealing with this threat is not one that requires deep social

cleavages or widely held racist beliefs. Additionally, while state-sponsored mass killing typically occurs against the backdrop of domestic instability, mass violence does not require an insurgency or popular rebellion. Rather, the state's decision to use massive violence is informed by the perceived threat posed by a dissenting element of society, and the regime only resorts to terror when other alternatives fail to deliver their desired outcomes.

This strategic setting of instability and threat can provide the opportunity for the state to undertake mass violence. The regime's vulnerability to a segment of the population structures the incumbent's belief that the extermination of the threatening group is the most sensible option available. As Valentino argues, when the goals pursued by a regime are seen as fundamental to survival and wellbeing, the threat posed by a dissenting group is substantial. For example, the Turkish regime's avoidance of defeat in World War I was seen possible only after resolving the threat posed by its Armenian population and its calls for independence. Extermination was one available policy option for achieving this goal. Cambodian mass killings were the consequence of perceived external and internal enemies of the Khmer Rouge and its goal of collectivizing the countryside, which was seen as the only means by which the Cambodia could defend itself from persistent outside threats. Mass killing of the threatening population was an attempt to assure the success of collectivization (Waller 2002; Valentino 2004). Further, overlapping territorial claims by Croats, Muslims, and Serbs in Bosnia-Herzegovina led to a perceived zero sum confrontation in which the survival of ethno-cultural identities were at stake, resulting in the ethnic cleansing of desired territory. The common thread in each school of thought is that the regime's threat perceptions motivate the initiation of violence (Davenport 1995; Gurr 1986).

However, as Valentino argues, a common misconception is that genocide perpetrators see the extermination as an end in itself. Extreme violence committed by regimes is easily confused with the actual goals sought by the perpetrators. In fact mass killing is a policy *tool*, not a policy

goal. In other words, regimes resort to mass killing in order to achieve their goals. Genocide is just one policy option available from a catalog of alternatives. Indeed, regimes often pursue several other options initially, only turning to mass killing when the available alternatives have proven too costly or ineffective. Even in the most violent episodes of mass killing, policy options including forced segregation, repression, deportation, integration and assimilation, or political compromise, reform, or power sharing are often attempted prior to implementing extermination policies. These alternatives vary widely in the quality of the regime's treatment of the victim group, ranging from violent repression to hospitable reforms. Genocide is often the last option chosen by incumbent regimes after paying due consideration to other alternatives. The Nazis, for example, sought to remove the threat posed by its Jewish population. However, the "final solution" of interning and liquidating European Jews that was ultimately pursued was chosen only after attempting to quarantine the Jews and considering their forced deportation abroad.

Still, the costs of executing a mass killing policy may be rather high relative to the alternatives. Thus, the cost of policy implementation determines the regime's type of response to its perceived threat. The expected costs associated with massive violence are shaped by several factors. For example, of importance is the nature of political institutions and the constraints placed on policymakers, particularly the executive. The constraints of democracy make the costs of implementing a campaign of violence prohibitive (Rummel 1994; Poe & Tate 1994). While differences in domestic institutions offer insights into the costs associated with mass killing, they represent only one facet of the constraints preventing regimes from adopting genocide as a policy prescription. Another constraint is domestic or international resistance to the policy. If there is little public opposition to the killing or if the international community is either ignorant of or indifferent toward the abuse then the costs of carrying out the policy should be low. Past research on the structural conditions favoring mass killings affirm this relationship. Harff (2003) shows

that limited popular participation in the political system and a peripheral position in the global system removed from foreign scrutiny increase the likelihood of mass violence. Other analyses have further confirmed that in many cases there was little overt, organized public opposition to the killing. While it would be incorrect to say that the population supported genocide in each case, it was sufficient that the population did little to prevent it.

On the other hand, however, if the target group is able to defend itself or has the support of strong domestic or international allies, the cost to the regime of carrying out the mass killing strategy will be high. In these cases, the regime will require more resources to achieve desired goals and have a lower likelihood of eliminating the perceived threat. The case of Iraqi Kurds is exemplary. Despite the Hussein regime's desire to eradicate or otherwise subjugate the Kurdish threat, the cost of pursuing this strategy was simply too high due to American air support protecting the population. This does not necessarily suggest that high costs are likely to eliminate all violence against a threatening group. Rather, it simply suggests that elevating the cost of the repression to the regime should comparatively lessen the magnitude of the violence.

The makings of a mass killing campaign are thus located in the overall threat the regime perceives from the targeted group coupled with the costs imposed on such policies. Potential genocidaires acting strategically weigh the desire to initiate or continue a policy of mass violence to reduce the threat considerate of expected costs. For higher levels of threat the regime should be willing to absorb greater resistance to its mass killing policy. If the cost of carrying out the policy exceeds the level of threat posed by the target group, the regime should substitute mass killing with an alternative policy, allowing it to achieve a portion of their goals at reduced cost.³ Whatever the regime's goal, the target group acts as an impediment, thus motivating mass killing. Consequently, international solutions to mass killing must address this relationship.

Reducing Violence through Intervention

Past research suggests that militarized interventions can provide solutions to domestic conflict by helping to resolve the security dilemma between armed factions (Walter 2002; Diehl et. al. 1996; Ratner 1996). As such, it might be expected that foreign intervention in cases of mass killing would have a similar effect (Gourevitch 1999; Power 2002). Yet genocide is a unique subset of domestic violence. While mass killings often occur within the context of an insurgency, in some cases there is little resistance on the part of victim group. Regardless, a sense of threat on the part of perpetrator is a necessary condition for genocide, and the regime's cost calculation determines whether genocide is an appropriate tool for addressing that threat. Third party interveners have the ability to affect both of these factors, thereby changing the incentive structure for the perpetrator. All else equal, mass killings will persist as long as the perpetrators feel threatened by the target group and their allies and believe that the eradication of that threat can be achieved at acceptable costs. In attempting to reduce the magnitude of a mass killing episode intervening actors can attempt to 1) reduce the sense of threat on the part of the perpetrator or 2) increase the cost to the perpetrator for carrying out the violence.

Yet, different types of intervention should have differential effects on these factors, contributing to different observed levels of killing. To address the first factor, intervention must offer means by which the perceived threat posed to the perpetrators is mitigated. Addressing the second factor requires the intervener to increase the overall cost to the perpetrator's pursuit of the mass killing policy. We argue that only neutral interveners will be able to address both tasks in a manner that can effectively reduce the violence. In accomplishing these tasks, intervener resolve is critical. As an indicator of resolve, the duration of the intervention has important consequences for the reduction of violence. As such, intervention type and duration coalesce to affect both the regime's perceived threat level and the cost associated with committing mass killing.

Intervention and Mass Killing Severity in the Short-Term

Once a regime has embarked on a genocidal strategy it is only likely to curb its campaign once it feels that it has marginalized its threat or the cost of continuing the violence rises substantially. In the former case, it might begin to deescalate violence once it believes the victim group no longer stands in the way of its vision. In the latter, international or domestic resistance might lead it to reevaluate mass killing as its chosen policy. Intervention can affect these calculations and thus the severity of violence. However, irrespective of type, interventions are likely to have the immediate effect of escalating violence, as the perpetrator perceives intervention to pose an increased threat to the realization of its goals. Increased violence serves as a tool by which the regime can test the resolve of the intervener and achieve an improved post-conflict bargaining position.

First, regarding the perpetrator's threat perceptions, the entry of foreign troops is likely to induce a sense of insecurity on the part of the regime because intervention represents a challenge to the regime's domestic hegemony. Any intervention type is thus unlikely to produce positive outcomes immediately. When regimes recognize a sincere threat to their political order, they are likely to take steps to assert control, including adopting strategies of extreme violence (see Gurr 1986, Valentino 2004). External interference may cement the regime's belief that a final solution to its domestic problem is the only acceptable result. Thus, a regime's threat perception is likely to increase immediately following intervention, especially in those cases where the purpose of the intervener is to resist the genocidal policy or to provide direct support for the target population.⁴ The regime's need to remove the threat thus becomes a more immediate priority with the addition of a third party. As such, the perpetrator should escalate the liquidation process in order to fulfill its policy before international backlash detrimentally affects the realization of its goals. Thus, whatever the motivations of an intervener, its presence exacerbates the regime's threat perception and its desire for violence in the short-term.

NATO's intervention in Kosovo reflects this argument. NATO intervened following the passage of UNSC Resolution 1199. Yet, NATO found neither the government-controlled Yugoslav National Army (JNA) nor the Kosovo Liberation Army, to be attractive sides with whom to partner in the conflict. However, in response to Serbia's ethnic cleansing of civilians in Kosovo, NATO launched Operation Allied Force (OAF) to compel Belgrade to cease the JNA's heavy-handed activities. In response, Belgrade *expanded* the ethnic cleansing in Kosovo because Milošević perceived that intervention had exacerbated the ethnic Albanian "threat." The short-term result of the NATO intervention can thus be described as escalating the mass killing in the short-term. Indeed, early criticism of OAF argued that the intervention escalated the conflict into a humanitarian disaster in the short-term, the very outcome NATO had hoped to prevent.

Second, altering the perpetrator's expectation of mass killing success at acceptable cost is also unlikely to be effective in the short-term. In fact, the willingness of the perpetrator to use increasingly extreme violence is likely to be exacerbated by intervention in the short-term. We expect this for two reasons. First, intervention often represents an impediment to a perpetrator's ability to fulfill genocidal policy goals that it considers important to its wellbeing. As a result, the perpetrators are likely to accelerate the rate of mass killing in order to "finish the job" before the third party gains the ability to affect the policy's implementation. This should especially be the case for neutral and pro-victim interventions which serve as an impediment to the successful conclusion of the genocide. While an increase in violence should also increase the cost incurred by the regime, it is reasonable for the regime to consider this increased cost as only a temporary spike. Third parties often become involved with conflict management intentions, yet the scope of the violence is frequently not fully known. Upon intervention, strategic perpetrators, like those in Rwanda, Bosnia, and Kosovo, have incentives to escalate violence, indicating the strength of their commitment to the genocide, and signaling to the intervener that any success in

intervention will come only at great expense. The intended effect of this signal is to test the resolve of the third party, dissuading it from remaining engaged. At the least, regimes responding strategically will escalate the violence immediately upon intervention to achieve a better bargaining position should the perpetrators eventually be compelled to negotiate. This short-term effect of intervention was evident in the UN intervention in Bosnia-Herzegovina. Fearing that the UN Protection Force (UNPROFOR) intervention into Bosnia would represent a solidification of the territorial status quo, a situation that none of the combatant parties saw as satisfactory, the violence escalated soon thereafter as each side sought to improve its current position and its bargaining leverage in any future negotiations (Nation 2003).

The intervener's resolve is thus important to the regime's calculation of continuing on its genocidal path (Posen 1996, 82-84). The regime must consider whether the intervention will affect its ability to fulfill the policy. As a third party's resolve for ending the violence increases, regime expectation of success should correspondingly decrease, making it more willing to settle the crisis with means other than genocide. Conversely, an uncommitted third party should not alter the regime's expectations meaningfully. Yet, signaling resolve is difficult. The regime has reason to question an intervener's willingness to bear the cost of involvement. Therefore, at least initially, the perpetrator cannot know with certainty whether it faces a staunch or irresolute third party. Rather, this information is revealed over time as the third party remains committed. Without the ability to credibly signal resolve, the third party cannot reliably affect the regime's expected cost for carrying out violence nor can it diminish the regime's perception of threat, thus making the escalation of violence the likely short-term outcome of foreign intervention in mass killings. In other words, beneficially affecting the two critical dimensions of the perpetrator's calculus is very difficult in the immediate term.⁵ This leads us to our first hypothesis:

Hypothesis 1: *Third party intervention will have an immediate and short-term effect of escalating the level of state-sponsored mass killings.*

Intervention and Mass Killing Severity in the Long-Term

In addition to the conflation of means and ends in our understanding of mass killing, another common misconception is that genocides occur abruptly, causing extreme violence in a short period, thus limiting third party opportunities to have an effect. This misconception is fueled by visible and recent genocides like that in Rwanda where approximately 800,000 people perished in 100 days. Even very rapid interventions will have a difficult time affecting such furiously sudden massacres (Kuperman 2001). However, most instances of mass killing are not nearly so swift. Rather these policies are commonly executed over protracted periods, as the elimination of large populations often requires a concerted, long-term commitment to implementation of such a brazen policy. Indeed the average length of a mass killing episode in the data analyzed below is 6.3 years. Given their extended duration, there is ample opportunity for third parties to have a significant effect on the magnitude of violence upon intervention.

As an intervener remains committed to the conflict, its ability to affect the regime's threat perception and cost calculus increases, since the third party's resolve is displayed over time. The regime will continuously update its perception of intervener commitment. Upon recognizing that the intervener is devoted to conflict resolution and that it is unlikely to withdraw, the regime is more likely to take advantage of the conflict resolution tools offered by the third party.

Perceptions of intervener commitment thus shape the third party's ability to provide the tools necessary to reduce violence. Yet, not all intervention types provide meaningful opportunities for violence reduction. While pro-regime and pro-target interveners can signal resolve as well as neutral interveners, those that support the regime or the target fail to fulfill one or both of the two dimensions for reducing violence severity. For one, pro-perpetrator intervention that is steadfast in its support for the genocidaires should actually decrease the cost of the mass killing policy, improving the regime's available means. Similarly, support for the regime offers no tools for

moderating its threat perceptions. Rather, such interventions reinforce the regime's status quo policy, fortifying the idea that the victim group poses a severe threat. Also, while a pro-target intervention may increase the costs that the regime expects to incur in executing continued mass killings by improving the target's ability to defend itself, this intervention type has a divergent effect on the level of threat that the regime perceives from the victim group. This contradiction makes it difficult to determine a systematic effect of pro-target intervention on mass killing magnitude. In fact, support for the victims may actually exacerbate mass killings as the regime's threat perception increases. The perceived threat from the victim group was already considered high enough to warrant an extreme form of violence. With persistent support from a third party, the regime's threat perception should rise accordingly, thus increasing the regime's willingness to use ever more drastic measures in attempting to marginalize or remove the victim group.

Neutral interventions, however, are the most likely to address each dimension necessary for conflict reduction. First, given the brutality that characterizes mass killings, mutual trust between the factions is minimal if not wholly absent, making resolution difficult. Neutral third parties diminish the need for trust when security guarantees are provided to both perpetrators and victims. Trust between factions is thus unnecessary. Security guarantees offer breathing space to the factions and, when effectively employed, reduce the threat perceived by the regime as the regime is guaranteed a level of security that previously appeared absent. This may then open opportunities for alternative policy choices that previously seemed unavailable to the regime.

Second, impartial interventions offer a unique ability to change the perpetrator's expectation of success. Neutral parties can exercise military force by punishing factions that continue to engage in violence similar to NATO's aerial campaign in Bosnia in response to atrocities. Such punishments increase the cost of continued violence. Unlike pro-target intervention, impartial forces offer to counteract retributive violence from the victim group.

Violence perpetuated by either faction leads to reprisals, creating a cycle that is difficult to overcome. By interceding between the perpetrator forces and the victim group, neutral third parties offer an opportunity for the perpetrator, their target, and any rebel organizations associated with the target to consider means other than violence for resolving the conflict, thus altering the expectation of a successful mass killing policy at acceptable cost to the perpetrator.

Third, an environment conducive to negotiations is made possible by the use of the above noted tools. Opportunities for the neutral intervener to act as an unbiased mediator of these talks then become readily available. The ceasefires and settlements that result can also be effectively enforced by punishing those factions that shirk on agreed frameworks. Pro-target third parties have fewer such tools, and the prejudicial nature of their involvement makes the success of these conflict resolution strategies less likely. As an example, establishing safe areas where civilians are afforded armed protection and providing for secure transport and shelter for refugees fleeing the violence are tactics that were used in some combination recently in Bosnia, Kosovo, and Sudan. While these interventions have been criticized by some observers, such tactics are indeed often successful in saving lives that would have otherwise been targeted in atrocities. In Bosnia, for example, while UNPROFOR's safe zones were not impervious to violence, the combatants commonly made efforts to avoid conflict in these regions, seeking to evade the international scrutiny and subsequent interventions that attacking these areas could beget. Furthermore, in many cases, UNPROFOR was capable of leading civilians away from violence. For instance, while the massacre in Srebrenica in 1995 was certainly gruesome, the UN troop withdrawal from the city also served to guide scores of refugees away from the bloodbath that would have awaited them had they stayed (Nation 2003, 188-190). In this sense, even those neutral interventions that are commonly criticized for their limitations offer opportunities for reducing violence.

Importantly, unlike the other types, an impartial third party can use these tools to indicate its objection to the genocidal policy alternative chosen by the genocidaires while not necessarily standing against the perpetrator's ultimate domestic goals. In fact, in the Bosnian case, Serbian forces, much maligned by the international community for its violent tactics, were afforded significant territorial concessions in line with their goals. Mass killing was the policy *tool* used to achieve the *goal* of territorial control. Both the UN and NATO, through continued involvement, made clear that the tool was objectionable while the goal was negotiable. By interceding between the perpetrators and victims, offering security guarantees to both, punishing insubordination, and directing negotiations, neutral interveners assist in reducing the threat that perpetrators perceive from the victim group and raise the cost of continued violence. As such, an intervener needs to convince the factions of its neutrality and resolve in desiring to reduce violence. Yet, establishing these traits does not occur immediately following the intervener's arrival because neither faction is able to assess the *ex ante* intentions, credibility, or commitment of the third party. Rather, the new entrant is initially viewed with suspicion. Over time third parties establish the sincerity of their neutrality, improving others' confidence in its intentions. To convince the regime of the intervener's resolve, third parties must be committed to long-term reductions in violence while weathering a short-term escalation. By this logic, we expect that neutral interventions will serve to diminish the severity of mass killings over the long-term, leading to the following hypothesis.

Hypothesis 2: *As the duration of neutral interventions increases, the severity of regime-sponsored killing will decrease.*

We now turn to a discussion of our variables. We then present analyses of our expectations.⁶

Variables and Research Design

The dependent variable is measured by the magnitude of the mass killing in each genocide year.

As previous analyses have pointed out, obtaining an accurate report of genocide severity is not

easy, as those groups closest to the violence have incentives to exaggerate their accounts of it. To handle the imprecise nature of such data, the Political Instability Task Force (PITF) (Marshall et. al. 2002) provides an ordinal measure of mass killing magnitude. Each value in the scale represents a range of civilian casualties. This coding provides greater reliability for genocide and politicide violence reports. Table 1 reports this scale.

<TABLE 1 ABOUT HERE>

As in previous research (Krain 2005), the primary independent variables are provided by the International Military Interventions (IMI) dataset (Pearson & Baumann 1993; Kisangani & Pickering 2008). These data code all overt military interventions by third parties from 1946 to 2005. A military intervention is defined by the dataset as “the movement of regular troops or forces (airborne, seaborne, shelling, etc.) of one country inside another, in the context of some political issue or dispute (Pearson and Baumann 1993, 1).” This definition is narrow. Yet, focusing on military interventions in this study is useful. Given the high level of instability associated with mass killing, military interventions are likely necessary in order to considerably affect genocide severity as opposed to diplomatic or economic alternatives.

Three intervention types are coded: pro-target, pro-government, and neutral. Pro-target interventions are those that support the victim group or confront the regime; pro-government interventions support the regime or attack the victim group; and neutral interventions support neither perpetrator nor victim. They instead act as an impartial intermediary force. To account for short- and long-term effects, we create two variables for each intervention type, yielding six variables: *Neutral Intervention Short-Term*, *Neutral Intervention Long-Term*, *Pro-Target Intervention Short-Term*, *Pro-Target Intervention Long-Term*, *Pro-Govt Intervention Short-Term*, *Pro-Govt Intervention Long-Term*. The short-term variables are coded 1 to represent the

first intervention year for each type and 0 in all other years. The long-term variables count the number of consecutive years in which each intervention is present in the genocide state.⁷

Our theory speaks to the temporal commitment of each intervention as an expression of resolve, but the time committed may not be the only intervener trait to affect genocide magnitude. The strength of the intervention may also be critical. IMI data offer an ordinal scale of each intervention's strength, distinguishing the number of troops contributed, parsed by intervention type. The ordinal scale used by the IMI data is as follows: 0 = no troops; 1 = 1 to 1,000; 2 = 1,001 to 5,000; 3 = 5,001 to 10,000; 4 = 10,000+. Teaming this scale with our intervention types, three variables are produced: *Neutral Troops*, *Pro-Target Troops*, and *Pro-Govt Troops*.

Our theory argues for a temporal effect of intervention as the amount of time committed to intervention is a strong indicator of resolve. Indeed, a very large contingent of troops may not have an important effect on genocidal hostilities if it is not given time to assert itself. Still, the number of troops committed to a conflict may also be a signal of resolve. Theoretically, we have similar expectations for these variables: neutral interventions should be the most capable of reducing the magnitude of mass killings as the number of troops committed increases.

We also include several variables in our analyses to control for other explanations of genocide severity. We include two variables to account for qualities of the violence that were found to be significant in previous work. *Mass Killing Magnitude_(t-1)* measures the level of violence produced in the previous year. This variable reflects the tendency of regimes to use repression when such tactics have been used previously (Gurr 1988, Davenport 1995). Employing extreme violence in a previous time period should positively affect on the likelihood of continued executions in the period analyzed. Next, *Mass Killing Duration* is a count variable reflecting the number of genocide years that have since passed. This measure accounts for duration dependence in genocide episodes. We expect that as the killing persists, the severity of

the mass killings should decrease, producing a negative effect. Expecting a positive relationship, we measure the genocide state's capacity for killing by accounting for the size of its military, using data taken from the Correlates of War (COW), National Material Capabilities dataset (Singer et. al. 1972). *Genocidaire Troops* thus counts the number of military personnel available to the perpetrators and is used to correspond to our intervention troop level variables.

Regime Type uses Polity IV data (Marshall and Jaggers 2002) to determine whether the type of regime affects genocide severity. More specifically, *Executive Constraints* measures the institutional constraints on a state's executive. Aydin and Gates (2008) argue in an analysis of genocide onset that simply measuring regime type misses the effect of executive power. Using a categorical measure to represent decision constraints on the executive (Marshall and Jaggers 2002), we seek to determine whether the negative effect of executive constraints on genocide onset is also applicable to severity. *Civil War* is a dichotomous variable measuring whether the genocide state is also embroiled in a civil war against a rebel group. Civil wars can provide the impetus for regimes to engage in mass killings in order to eliminate civilian support for the rebels (Valentino 2004). Civil wars can also provide domestic and international cover for human rights violations. Using data from the Armed Conflict Dataset (Gleditsch et. al. 2005), we expect civil war to increase the observed severity of mass killing. *Population* and *GDP/Capita* are two practical variables. We expect that as the population size increases, so too does the potential for victim deaths and the recruiting of genocidaires, producing a positive effect on genocide magnitude. *GDP/Capita* should have the opposite effect. As wealth rises, the willingness of individuals to partake in radical policies decreases. Population and GDP per capita scores are taken from Gleditsch (2002). We use the log-transformed values of both measures. Lastly, *Cold War* accounts for the international context. The geopolitical nature of the international system

has changed dramatically since the collapse of the Soviet Union. We control for this change, and the last year of the Cold War is coded as 1989.

Results and Analysis

Given the ordinal nature of the dependent variable, we rely on an ordered logit model to test our hypotheses.⁸ Table 2 reports our findings. We have a large number of intervention variables. We thus risk over-specifying the model by including each independent variable along with controls. We therefore run several models. Our base model only reports results for our long- and short-term expectations. Model 2 looks only at troop commitments. Model 3 is fully specified.⁹

Across models, we find consistent effects for several controls. Unsurprisingly, the lagged dependent variable and the duration term are statistically significant. *Mass Killing Magnitude_(t-1)* has a positive effect. States producing massive violence in year t-1 are likely to do so again in year t. *Mass Killing Duration* has the opposite effect. The longer genocide wears on, the more difficult it becomes to cause massive civilian deaths. Also, destitute states suffer genocides of greater magnitude, noted by *GDP/Capita*'s negative coefficient. Given that genocides generally occur in poor nations, this is an interesting finding in that that even among states in the lower stratum, wealth is a predictor of violence severity. *Civil War* has a positive effect. Civil wars increase instability, provide occasions for scapegoating by opportunists, and afford cover for rights violations. While *Population* is insignificant in model 1, it becomes significant in models 2 and 3. Interestingly, the effect is in the opposite direction, as larger populations produce lower mass killing magnitudes. Additionally, episodes of genocide may have been less severe during the Cold War. However, inconsistent significance for this variable makes us tentative to draw conclusions. Lastly, the regime type variables appear to have no systematic effect on severity.

Turning to our first hypothesis, our expectation is that intervention, regardless of the side supported, has a short-term effect of increasing the severity of mass killings. Model 1 shows that

two of the three short-term intervention variables have a positive and significant effect on mass killing magnitude.¹⁰ In other words, when neutral and pro-target third parties intervene, they contribute to an increase in the severity of mass killings in the short-term. The pro-regime coefficient is in the expected direction, but it is not significant. We interpret these findings as general support for our first hypothesis. Intervention in the short-term produces this effect because third parties are incapable of affecting the regime's expected costs of a successful mass killing policy and providing means by which to reduce the regime's threat perceptions. While third parties may offer opportunities to change regime perceptions and expectations, without adequate time to demonstrate commitment to conflict resolution, intervention cannot effectively manage the crisis. For one, the resolve of the intervener is critical to the perpetrator's cost calculation. The regime may test that commitment by immediately escalating the violence upon the third party's arrival. Higher violence levels pose higher expected costs to the third party's mission. Escalation by the regime reflects a strategic response to the intervention to test the resolve of the third party. By undertaking a radical policy, the regime has proven its capacity to react drastically to a perceived threat. Intervention intent on impeding its genocidal policy increases this threat perception. Hampered by an inability to demonstrate resolve in the short-term, third parties intent on conflict resolution are unable to alter the perpetrator's expectations and are thus incapable of effectively promoting resolutions that are acceptable to both perpetrator and victim groups. Therefore, the genocidaires may reasonably decide to escalate their killings of the targeted group in an effort to increase the cost calculus of the third party or to complete the policy before an intervention can affect the genocide's conclusion.

<TABLE 2 ABOUT HERE>

To further explore these results, we generate predicted probabilities to assess the size of our short-term intervention variables' effects on mass killing severity. Table 3 presents these

probabilities for each ordered category of mass killing severity generated from the results in model 1.¹¹ In generating these values, we hold all of the continuous controls at their means and dichotomous controls at their modal values. The baseline case represented in the second column holds each intervention variable at 0. In other words, no intervention is present in the genocide. Columns 3, 4, and 5 vary each short-term intervention type from 0 to 1 individually. As the upper half of the table indicates, each type decreases the likelihood of obtaining every category of magnitude up to 2.5, and each order above 2.5 becomes increasingly likely in the short-term upon intervention. More simply, assume a hypothetical case experiencing mass killing at a 2.5 order of magnitude. As we note in the bottom half of the table, the likelihood that this case will escalate (e.g. the sum of the probabilities for magnitudes 3.0 to 5.0) without an intervention is approximately .404. The presence of a neutral intervention increases the likelihood of escalation to .553, a 37% increase in genocide's short-term severity. Similarly, pro-target intervention increases the likelihood of escalation by 49%, and a pro-government intervention makes the likelihood of escalation greater by 29%.¹² These results lend credence to our first hypothesis, indicating that the general short-term effect of intervention is to increase genocidal violence.

<TABLE 3 ABOUT HERE>

Turning to our long-term expectations, we find support for hypothesis 2. While previous research argues that pro-target interventions may have a dampening effect on violence (Krain 2005), model 1 shows the duration of pro-target intervention increases genocide severity. While pro-target interveners are equally capable of demonstrating resolve and raising the cost of mass killing to the perpetrators, such interventions do little to ameliorate the regime's perception of threat posed by the victim group. Instead, pro-target third parties appear to exacerbate this threat perception, causing it to escalate its violence against its victims. Yet, we are somewhat tentative about his result as the pro-target variable becomes insignificant in model 3. The negative and

significant coefficient for the long-term neutral intervention variable, on the other hand, supports our expectation in hypothesis 2, indicating that as a neutral intervention remains devoted to an episode of mass killing, hostilities subside. The effect of long-term neutral interventions is further reflected in the upper half of Table 4. Starting from the hypothetical case in which violence reaches a 2.5 magnitude, the likelihood that the mass killing falls to a lower magnitude without an intervention is .441. However, this probability rises as the number of impartial intervention years increases. For example, moving from no years of neutral intervention to its 25th percentile, the likelihood of de-escalation rises to .627, a 42% increase. As the number of neutral intervention years invested is moved to its maximum (eight years), the likelihood of de-escalation increases to .924, a substantial increase of 110%. Neutral intervention thus appears to have a strong dampening effect on the severity of mass killings over time.¹³

<TABLE 4 ABOUT HERE>

Another significant effect of intervention in the long-term reported in model 1 is that pro-government intervention increases the likelihood of escalation over time. The bottom half of Table 4 reports the predicted increase in the likelihood of escalation as the number of pro-regime intervention years increases. We find that as the number of pro-government intervention years increases from zero to its maximum (fourteen years), the likelihood of escalation rises from .404 to .753, an increase of 86%. In order to dampen the violence, our theory points to the importance of altering the perpetrator's expectation of cost effectively implementing its policy. Durable pro-government interventions have the opposite intention. If they are not at the outset, pro-regime interveners become aware of the atrocities with time. Those that remain committed to supporting the regime serve to reinforce rather than alter a regime's expectation of a successful policy.

<FIGURE 1 ABOUT HERE>

Figure 1 displays our short- and long-term results from model 1 simultaneously. In this graph, the likelihood of escalation is plotted over time for neutral and pro-government interventions. The predicted probabilities of escalation are generated by holding each control variable constant and varying the short- and long-term neutral and pro-government intervention types corresponding to the intervention year. As the graph shows, both types produce a short-term spike in violence. Yet, the likelihood of escalation decreases dramatically in subsequent years as a neutral party remains committed. Pro-regime intervention, on the other hand, produces a clearly positive effect on the probability of escalation over time. Figure 1 thus lends visual credence to the exacerbating effect of pro-regime interventions on mass killings. Consistent with our expectations, the figure shows support for the long-term hostility dampening effect of impartial interventions, reducing the likelihood of escalation to low values within the span of several years.

The results presented in model 1 and exemplified in the subsequent tables and figure are largely supported by models 2 and 3. In an effort to limit the number of variables accounted for in each model, model 2 displays the effect of troop commitments by the various intervention types and the size of the military at the disposal of the perpetrators. In this model, only *Neutral Troops* is significant, negatively affecting the violence. This result supports our argument that neutral interventions are capable of addressing the two critical dimensions motivating the violence. These results continue to be robust in a fully specified model 3. Even when accounting for multiple characteristics of intervention, the expected relationships remain intact. While the short-term pro-target and pro-government variables are insignificant, their coefficients are in the expected direction. *Neutral Intervention Short-Term* continues to be positive and significant indicating that there is an increase in genocidal violence upon the entry of a neutral intervener. However, over time, the level of violence abates as the neutral third party remains committed. The effect of *Neutral Troops* also remains negative and significant, indicating that greater troop

commitments from neutral third parties decrease the violence. Finally, pro-government interventions that persist in supporting the regime increase the magnitude of hostilities.¹⁴

Discussion and Conclusion

The results presented above have provided strong support for our hypotheses. First, we find that in the short-term, impartial and pro-target interventions exacerbate the violence of the conflict. Pro-government interventions also appear to have this effect, but this result is not significant. Second, we find support for our hypothesis noting that neutral interventions diminish violence over time. In addition, we report that pro-government intervention worsens hostilities with time. Preliminary results for pro-target interventions also point to an exacerbating effect.

These results are interesting for a variety of reasons. First, they suggest that intervention produces an immediate increase in violence, supporting related research on intervention in civil wars. However, previous research has taken the somewhat generic approach of dichotomizing the presence of an intervener. The analysis of an intervention's presence is treated similarly to the effect of an experimental medical treatment for an illness. It would of course be interesting to know whether a medicine has a positive or negative effect on disease severity. However, dichotomizing intervention is analogically similar to conducting a medicinal treatment without considering such important issues as the type of medicine used or the amount of time the medicine remains in a person's system. It is unlikely that third parties consider their involvement as a simple dichotomous treatment of genocidal ills. Rather, we find that the temporal investment of interveners is critical to understanding intervention's effect.

The short-term spike in severity is an important finding. Intervention threatens changes to the domestic environment. Genocidaires view intervention, especially the impartial and pro-target types, as inhibiting their policies, undermining their political hegemony. The third party alters the strategic landscape, increasing the threat perception of the perpetrator. In some cases,

third parties may embolden opposition groups to launch counteroffensives, in others they may expose the regime to further international scrutiny, opening the door for greater diplomatic pressures, economic sanctions, or further interventions. These changes increase the incentives for the regime to ramp up the violence to fulfill its policy before the intervention can take effect or to achieve a better bargaining position should the regime eventually be forced to negotiate. In addition, by immediately ramping up its campaign, the regime can effectively test the resolve of the third party, thus increasing the intervener's cost calculus for moderating the hostilities. Third parties that are not truly committed to conflict resolution will be effectively scared off as they reconsider their willingness to pay the long-term price of achieving stability. Policymakers must bear this in mind when making their intervention decisions.

Withstanding this initial spike in violence, however, can pay dividends for third parties seeking to lessen the hostilities. We tested whether intervention supporting the victims produces a long-term diminution of violence. Yet, this intervention type produced inconsistent results, potentially exacerbating the hostilities. We thus question the value of this strategy. On the other hand, neutral interveners were found to have a long-term negative effect on genocide severity. These results support the idea that neutral third parties provide the mechanisms necessary for conflict management (e.g. Diehl et al. 1996). Given time to demonstrate commitment, neutral interveners are able to provide credible security assurances, create frameworks for negotiation, offer unbiased information, and monitor activities, thereby altering the perpetrator's cost calculus and its threat perception. It is unreasonable to expect immediate and positive changes in the security environment because these mechanisms only evolve after the resolve of the intervening force has been established. The long-term presence of an impartial intervention force is reflective of this commitment. Biased interventions are unlikely to achieve the same legitimacy. Past work has theorized that legitimacy is important to intervention in promoting stability (Ratner 1996).

Interventions that challenge the regime are unlikely to employ the mechanisms that mitigate the regime's threat perception. That is, if the regime perceives intervener bias, the regime's threat perception will increase, making it unwilling to pursue more peaceful options. Consequently, the regime will be inclined to continue the conflict to its conclusion, sustaining the bloodshed.

From our findings the policy community should first conclude that interventions be seen as long-term projects if they expect their involvement to reduce human rights abuses. While acting impartially yields a short-term spike in violence, this spike is corrected thereafter. Indeed, we find that the likelihood of escalation drops substantially from the first year (.553) to the second (.238) of neutral intervention, a 57% reduction which more than offsets the initial 37% increase. In addition, as Figure 1 shows, this reduction continues subsequently. Policymakers thus cannot assume that intervention is a quick fix. Rather, such endeavors only pay dividends in the long-run. As a result, when deciding to intervene to halt mass murders, third parties should plan to commit for the long haul or refrain from intervention altogether. This recommendation may appear problematic as few states will be interested in committing troops for long periods. As such, it is likely that calls for intervention will go unheeded. However, the alternative is short-term intervention that worsens an already brutal situation. If interventions are to succeed they must be seen as long-term commitments rather than band-aid approaches to genocide.

Second, if states are interested in stemming the violence, they should focus on neutral strategies. Third parties may be drawn to support the target in an effort to give victims a fighting chance, but such strategies do not appear to be effective. Instead, impartial interventions are the only long-term tool that moderates the violence. It may be that the regime views even neutral third parties as an impediment. We thus recommend that interveners ensure that the public mandates of intervening forces clearly stipulate goals of conflict resolution that are explicitly nonthreatening to the regime. Impartial third parties must develop strategies that clearly build

their legitimacy as peace brokers in the eyes of both the regime and the victims. Failure to do so may result in sustained violence rather than peaceful conclusions to mass killings.

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Table 1: Magnitude Equivalent of Genocide/Politicide Death Estimates

Genocide/Politicide Magnitude	Genocide/Politicide Deaths Estimate Per Country-Year
0.0	Less than 300
0.5	300 – 1,000
1.0	1,000 – 2,000
1.5	2,000 – 4,000
2.0	4,000 – 8,000
2.5	8,000 – 16,000
3.0	16,000 – 32,000
3.5	32,000 – 64,000
4.0	64,000 – 128,000
4.5	128,000 – 256,000
5.0	256,000 +

Table 2: The Short- and Long-Term Effect of Intervention in Mass Killing, 1955 – 2005

Variables	Model 1	Model 2	Model 3
Neutral Intervention, Short-Term	1.01 (.51)**	--	1.48 (.98)*
Neutral Intervention, Long-Term	-0.39 (.14)***	--	-0.28 (.09)***
Pro-Target Intervention, Short-Term	0.74 (.35)**	--	0.61 (.55)
Pro-Target Intervention, Long-Term	0.08 (.05)**	--	-0.05 (.12)
Pro-Govt Intervention, Short-Term	0.38 (.52)	--	0.24 (.57)
Pro-Govt Intervention, Long-Term	0.11 (.05)***	--	0.11 (.05)**
Neutral Troops	--	-0.48 (.21)***	-0.58 (.30)**
Pro-Target Troops	--	0.12 (.13)	0.05 (.20)
Pro-Govt Troops	--	0.08 (.12)	-0.05 (.15)
Genocidaire Troops	--	0.00 (.00)	0.001 (.00)**
Mass Killing Magnitude _(t-1)	0.73 (.18)***	0.92 (.25)***	0.90 (.24)***
Mass Killing Duration	-0.10 (.03)***	-0.07 (.04)**	-0.10 (.04)***
Population (ln)	0.09 (.10)	-0.14 (.06)***	-0.10 (.07)*
GDP/Capita (ln)	-0.64 (.22)***	-0.48 (.22)**	-0.57 (.25)***
Regime Type	0.02 (.06)	0.01 (.06)	0.03 (.06)
Executive Constraints	-0.04 (.16)	0.01 (.16)	0.01 (.15)
Civil War	1.01 (.39)***	1.34 (.37)***	1.25 (.41)***
Cold War	-0.85 (.59)*	-0.68 (.68)	-0.86 (.81)
Ancillary Parameters			
Cut 1	-5.12 (2.19)	-5.30 (2.12)	-6.06 (2.39)
Cut 2	-4.36 (2.14)	-4.55 (2.04)	-5.27 (2.31)
Cut 3	-3.77 (2.14)	-3.90 (2.07)	-4.59 (2.31)
Cut 4	-3.22 (2.13)	-3.27 (2.11)	-3.94 (2.33)
Cut 5	-2.81 (2.08)	-2.82 (2.09)	-3.48 (2.29)
Cut 6	-2.16 (2.02)	-2.15 (2.07)	-2.79 (2.23)
Cut 7	-1.21 (2.00)	-1.22 (2.07)	-1.80 (2.16)
Cut 8	0.24 (2.08)	0.10 (2.12)	-0.45 (2.22)
Cut 9	1.28 (2.08)	1.21 (2.16)	0.64 (2.25)
Cut 10	2.34 (2.03)	2.10 (2.26)	1.53 (2.29)
Observations	273	238	238
Wald X^2 (17)	225.17***	109.03***	628.36***
Log pseudo-likelihood	-542.54	-473.52	-466.43

Estimated using ordered logit with White robust standard errors and clustering on the genocide state.

*** Significant at $p < .01$, one-tailed test; robust standard errors in parentheses.

** Significant at $p < .05$, one-tailed test.

* Significant at $p < .1$, one-tailed test.

Table 3: Short-Term Effect of Intervention Type on Mass Killing, 1955 – 2005 (Model 1)

Mass Killing Magnitude	No Interventions	Short-Term Neutral Intervention	Short-Term Pro-Target Intervention	Short-Term Pro-Government Intervention
0.0	.077	.046	.037	.051
0.5	.072	.044	.038	.049
1.0	.087	.059	.050	.065
1.5	.111	.080	.073	.088
2.0	.094	.076	.069	.080
2.5	.156	.141	.133	.146
3.0	.190	.215	.219	.205
3.5	.151	.222	.252	.210
4.0	.040	.071	.079	.065
4.5	.014	.027	.031	.025
5.0	.009	.018	.019	.017

Effect on Magnitude	No Interventions	Short-Term Neutral Intervention	Short-Term Pro-Target Intervention	Short-Term Pro-Government Intervention
Likelihood of Decreased Magnitude	.441	.305	.267	.333
Likelihood of No Change (2.5 Mag)	.156	.141	.133	.146
Likelihood of Increased Magnitude	.404	.553	.600	.522

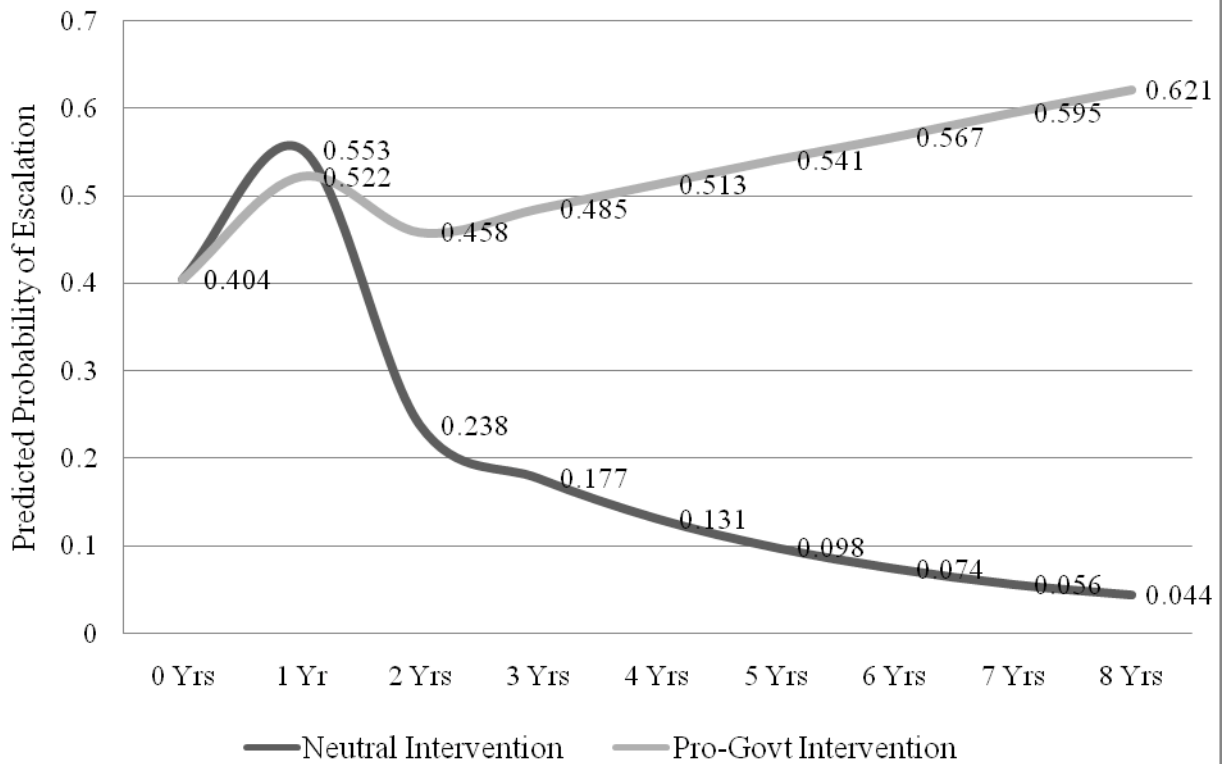
Columns 3, 4, and 5 change the short-term intervention variables from 0 to 1, representing a change from no intervention to the first year of an intervention's presence in the genocide state. Since the short-term intervention variables only take a value of 1 when their corresponding long-term variables also take a value of 1, we also increase each long-term variable value from 0 to 1 in each of these columns.

Table 4: Long-Term Effect of Intervention Type on Mass Killing, 1955 – 2005 (Model 1)

Effect on Magnitude	No Interventions	Long-Term Neutral Intervention (25 th %)	Long-Term Neutral Intervention (50 th %)	Long-Term Neutral Intervention (75 th %)	Long-Term Neutral Intervention (Max)
Likelihood of Decreased Magnitude	.441	.627	.778	.873	.924
Likelihood of No Change (2.5 Mag)	.156	.134	.090	.055	.033
Likelihood of Increased Magnitude	.404	.238	.131	.074	.044
Effect on Magnitude	No Interventions	Long-Term Pro-Govt Intervention (25 th %)	Long-Term Pro-Govt Intervention (50 th %)	Long-Term Pro-Govt Intervention (75 th %)	Long-Term Pro-Govt Intervention (Max)
Likelihood of Decreased Magnitude	.441	.346	.265	.199	.150
Likelihood of No Change (2.5 Mag)	.156	.154	.140	.119	.098
Likelihood of Increased Magnitude	.404	.500	.595	.681	.753

Column 2 reports identical values to those reported in Table 3, Model 1: all continuous controls held at their means, all dichotomous controls held at their modal values, and all intervention variables held at zero. Columns 3, 4, 5, and 6 change the long-term neutral and long-term pro-government intervention variables from 0 to their 25th, 50th, 75th, and maximum percentiles, respectively.

Temporal Effect of Intervention on Genocide Escalation, 1955-2005 (Model 1)



For the first year of intervention, both the short- and long-term intervention variables are changed from 0 to 1. In each subsequent year, the short-term intervention variables take a value of 0, and the long-term variables count upward corresponding to the intervention year.

Endnotes

¹ While many studies indicate that third parties extend civil war duration even though intervention is considered a conflict management tool, see Gent (2008), Thyne (2009), and Cunningham (2009) for answers to this puzzle

² Scapegoat theories argue that given a national catastrophe, societies look to place blame for their troubles often on a lone segment of society. Marginalizing the threat in the most effective manner thus becomes necessary for the alleviation of national ills. Such theories of genocide may be more commonly applied to societies with deep social cleavages, where the conjuring of threats and mass violence to remedy them is more readily achievable by leaders. Psychological pathologies and submission to authority are then important not only in the perception of threat but also in the willingness to pursue mass violence as the resolution. State institutions affect the cost calculus of exploiting these psychoses. Where power is highly concentrated, regimes are inhibited by fewer costs for pursuing genocidal policies. While our theoretical account relies most heavily on the strategic approach, each of the above explanations is reliant upon the two factors that we highlight in the text: threat perceptions and the cost of policy implementation.

³ An interesting feature of this informal strategic approach is that the two components may in fact be (and often are) endogenously related. As the cost of rooting out the obstacles to the regime's goals increases, the regime may feel increasingly threatened. This is akin to the argument laid out by Valentino (2004), especially with respect to guerrilla insurgencies. That is, as an insurgency demonstrates its resilience, and as the regime observes (or perceives) high levels of support for the rebels among the civilian population, it is increasingly likely to adopt mass violence as a solution (Valentino et al 2004). Scholars of political terror and repression have made similar arguments. Gurr, for example, argued that the existence of groups perceived as a threat to an incumbent's ability to rule is a necessary condition for state terror (1986, 51).

⁴ This proposition may seem counterintuitive for interventions that back the perpetrator. Yet, even this type may threaten the regime's ability to complete the elimination of its rival. With the addition of another party, the conflict becomes increasingly public, increasing its visibility to the international community, and thus increasing the threat posed to the genocidaires given the international community's opposition to mass killing. This process played out in the Rwandan genocide shortly after France intervened. French involvement sparked an initial escalation. Although the operation's original goal was to restore stability around the Hutu regime, extremists within the regime escalated their elimination of Tutsis while attempting to keep the atrocities from becoming public. Thus, pro-Hutu intervention was perceived as a threat to Hutu extremists. Concrete evidence of the genocide would surely sway

France's and the international community's interests in stabilizing the regime. Consequently, the killings escalated in an attempt to complete the genocide before the operation could be take effect (Kuperman 2001). The exception to this discussion, is in those cases in which third parties share the perpetrator's concern that the victim group poses a threat to the third party's domestic stability and thus support the perpetrator's policy of extermination.

⁵ Yet, given the dichotomous nature of most intervention variables, many empirical models of intervention in mass killing implicitly assume that the effect of a third party's intervention strategy is observable only in the short-term.

⁶ While our theoretical focus is on the dimensions discussed above, we are aware of research suggesting that pro-target interventions are effective in reducing hostilities (e.g. Krain 2005). In the short-term, we expect a pro-target intervention to increase the level of violence. However, it is possible that pro-target intervention could reduce genocidal violence in the long-term, as such interventions bring resources to bear that weaken the perpetrator's ability to carry out its liquidation policies, thus requiring the genocidaires to divert their efforts away from killing noncombatants. A more effective defense against the genocidaires may increase the regime's interest in a peaceful resolution. These factors may lead one to expect an increasing duration of pro-target interventions to decrease the severity of the killing. Although we test this argument in our analyses, it does not account for the regime's threat perception dimension and therefore does not match our theoretical expectations.

⁷ This is a continuous count variable. When an intervener withdraws from the conflict state for a period of six months, subsequent involvement is considered a new intervention. We adopt the short- and long-term coding rubric for several reasons. First, it is difficult to conceptualize a short-term effect of an intervention lasting more than a single year given the ability of regimes to update their expectations quickly. We therefore consider one year to be conservative. As a practical check, we separately included atheoretical dummy variables for intervention years two through five. Only the first year of intervention produced significant results. Second, we also ran models including dummies for every year of intervention. This is not an ideal test, as it over-specifies the models. Still, it is useful as a robustness check. We found that the coefficients for each intervention variable changes sign as intervention moves from the first to second year in the expected direction, indicating that the effect of intervention changes after the first year of involvement, as we have theorized. In a third check, we employed sequential lag models. Cranmer (2007) suggests this technique in which independent variables are lagged in a sequence of models to observe the effect of variables over time. Specifying lag lengths up to five years, we found that a generic intervention variable yielded increased violence in the first year. Disaggregating the intervention variable into its three types, we found that

neutral intervention had a negative and significant effect on genocide magnitude over the long-term, starting in the second year. These results are congruent with those reported in our models.

⁸ The White estimator of robust standard errors corrects for heteroskedasticity, and accounts for the fact that yearly observations are unlikely to be independent within genocide states but are likely to be independent across them.

⁹ Other model specifications were employed to test robustness. We added measures of state failure from PITF data (Marshall et. al. 2002), ethnic heterogeneity from Sambanis (2000), and interstate war from the Armed Conflict Data (Gleditsch et. al. 2005). These variables were routinely insignificant, and the results on our intervention variables were very similar. Given our limited observations, we removed these variables to avoid over-specifying the models.

¹⁰ In a check of these results, the short-term intervention types were collapsed into a single variable noting the first year of any intervention type. The coefficient produced by this variable was positive and significant at the .01 level.

¹¹ The predicted probabilities were generated using Clarify software (Tomz et. al. 2001).

¹² Since this variable was insignificant in our model, readers should be wary of predicted probabilities it generates.

¹³ It should be noted that this negative effect of long-term neutral interventions is not a product of any one rather long intervention. The longest neutral intervention was removed from the dataset, and the results remained the same.

¹⁴ We recognize the potential for selection effects in these analyses that could bias the results reported. If neutral interveners are systematically choosing to intervene in “easy” cases in which there is an ex ante expectation that violence will abate on its own, then our results may be less valuable. To test for this possibility, we ran several Heckman selection models for each intervention type. Upon predicting the type of intervention in the first stage using several independent variables, most importantly including the lagged magnitude variable to represent the violence level, the second stage sought to calculate the effect of the short- and long-term intervention variables along with the controls reported in model 1. However, in each model, the selection parameter was insignificant, indicating that a selection model was statistically inappropriate and that the separate intervention types were not systematically selecting themselves in/out of easy/hard cases of genocide. Still, it is worth noting that the long-term neutral intervention variable was negative and significant in the second stage of the Heckman model addressing neutral interventions, and both short- and long-term pro-government interventions produced positive and significant effects on mass killing severity in the model for pro-government interventions.