Delegating Death: Military Intervention and Government Killing

Jacqueline H.R. DeMeritt

Abstract
Does military intervention affect civilian death tolls? Existing research has focused on international actors’ ability to limit ongoing slaughter but has not examined their ability to prevent the emergence or escalation of such killing. I develop a theory of government killing that accounts not only for the government’s decision to kill civilians but also for the transference of the killing order from leader to perpetrator, and for the perpetrator’s implementation of that order. Focusing on the principal–agent relationship produces new expectations about the effects of military intervention on government killing. I find that international actors are well equipped to limit civilian slaughter: intervention supporting the government decreases the likelihood that a government orders civilians killed. Intervention against the government leads to a decrease in death tolls when killing occurs. Ultimately, supportive intervention is a useful means of preventing government killing, while oppositional intervention limits its escalation once it begins.

Keywords
government killing, repression, human rights, military intervention

In 1948, world leaders came together to adopt the Universal Declaration of Human Rights. In the wake of the Holocaust, the assassination of Mahatma Gandhi, and the

1Department of Political Science, University of North Texas, Denton, TX, USA

Corresponding Author:
Jacqueline H.R. DeMeritt, Department of Political Science, University of North Texas, 1155 Union Circle #305340, Denton, TX, USA.
Email: jdemeritt@unt.edu
introduction of apartheid in South Africa, they defined a set of global values including universal rights to life, liberty, and personal security. More than sixty years later, these rights remain largely unrealized: in 2007, twenty-four countries killed their own citizens, resulting in the deaths of 1,252 noncombatants (Amnesty International 2008). Despite international norms against it, governments continue to kill civilians. It appears that norms alone are not enough to constrain leaders who are intent on implementing murderous policies. If the international community wants to protect human life, it must do more. This article evaluates the effectiveness of one possible avenue: military intervention. I ask, “Does military intervention affect civilian death tolls?”

Scholars of intervention have generally studied its effects on the onset, duration, or termination of civil war (e.g., Cunningham 2006; Findley and Teo 2006; Regan and Aydin 2006). One result is that questions relating these interventions to other violent political events remain largely unasked. I begin to fill this void by focusing on one such event: government killing. Government killing is defined as the intentional, extralegal killing of civilians by governments. It is one of the set of physical integrity rights that also include torture, disappearance, and political imprisonment (Poe and Tate 1994; Cingranelli and Richards 1999). To my knowledge, only three quantitative studies examine the impacts of intervention on these rights over time and space. Meernik, Poe, and Shaikh (2006, 171) find that US military intervention has no “desirable impact on human rights,” while Melander (2009) and Murdie and Davis (2010) find that peacekeeping interventions prevent mass killing and reduce physical integrity abuse, respectively. Only one quantitative study examines the specific effects of military intervention on government killing: Krain (2005) studies the impact of intervention on the severity of state-sponsored mass murders. His work suggests that interventions that directly challenge murderous governments or aid the target of the murderous policy increase the likelihood that civilian slaughter can be slowed or stopped. As a result of this research, we have some insight into intervention’s effects on state repression in general and mass killing in particular. However, we know nothing about why some (but not all) killing events escalate to mass murder in the first place. Does military intervention explain why some government killing campaigns become widespread while others do not?

To answer this question, we must address two lacunae in current theories of state terror and killing. First, existing work focuses exclusively on one part of the process: the government’s decision to repress (e.g., kill) civilians. A theory that also accounts for the transference of the killing order from government to perpetrator, and for the perpetrator’s implementation of that order, may produce new insights into the process of civilian slaughter. Second, existing work tends to explain the government’s decision to kill civilians and subsequent variance in death tolls by focusing solely on the structural conditions of countries (regime type, levels of poverty, presence of war, and so on; Rummel 1997; Harff 2003) or on the political benefits to be gained by executing civilians (quelling dissent, etc.; e.g., Krain 2000; Valentino 2004; Midlarsky 2005; Kalyvas 2006; Downes 2008). This work builds on an implicit
assumption that governments make decisions based on their political environments. Although not unreasonable, the assumption is restrictive in that leaders cannot be influenced by their immediate self-interest (e.g., desires to avoid sanctions or prosecution).

I address these lacunae by conceptualizing government killing as the outcome of a process of strategic interaction between two rational actors: the government that orders civilians killed and the set of perpetrators that implements the order. I argue that government killing is a principal–agent (P-A) problem. Building on existing research on principals and agents, I develop a theory of government killing and derive expectations about the effects of intervention on civilian death tolls. Empirical results support extant findings (Krain 2005) and support new insights based on this conceptualization of government killing: new hypotheses about the government’s ability to coerce perpetrators to kill civilians, and about intervention’s ability to moderate that coercion, are empirically supported and substantively meaningful. Results also support the insight that self-interest matters: governments may consider killing civilians a rational policy, but nonetheless refrain from sending the order to kill.

**Principals, Agents, and Government Killing**

In a simple world, the individual responsible for making a policy would have the resources to implement that policy. In practice, however, policy implementation is often too complicated or costly to do alone. Thus, the policy maker (the principal) is obliged to hire others with specialized skills (the agent) to perform the desired task. The agent has her own motivations, interests, and incentives. She may deviate from the principal’s orders in pursuit of her own interests, and the principal must account for this possibility when issuing her orders (e.g., Ferejohn 1986).¹

The political economy literature on delegation focuses on P-A problems between governments that design policies and bureaucrats who implement them (e.g., Bawn 1995; Epstein and O’Halloran 1999b). The puzzle is how principals grant discretion to agents with divergent preferences. The observation motivating this work is that “making policy involves more than decisions by elected legislators and the president” (McCubbins, Noll, and Weingast 1987, 243). Instead, public bureaucracies implement most government policy initiatives. In short, governments are administrative bodies.

Governments and bureaucrats administer to their populations by making and implementing policies that structure everyday life. One particularly brutal policy is the decision to murder civilians. The logic of government killing maps readily onto the canonical P-A story: there is one principal, a government, and one agent, a set of perpetrators. The principal identifies the civilian population he or she wishes to kill and transmits that information to the agent.² The agent decides whether to obey or ignore the order to kill. If the agent ignores, no civilians die. If the agent obeys, he or she begins killing and produces an observed civilian body count.
This interaction builds on a logic of delegation modeled, for example, by Huber and Shipan (2002) and Staton and Vanberg (2008). I make a clear distinction between a policy and an outcome: a policy is spelled out in legislation (e.g., the number of civilians ordered killed), while an outcome obtains in the real world after policy adoption and implementation (e.g., the number of civilians who die). I assume that actors are motivated by outcomes and that their preferences may diverge. During civil war, for example, the government may want rebels entirely exterminated, while the perpetrators may want to kill just enough to end the violence. Like Staton and Vanberg (2008), my principal faces a core trade-off between obtaining desired outcomes and maintaining legitimacy and control in an uncertain environment.

To apply this P-A interaction to the process of government killing, I make four additional assumptions. First, I assume that governments want to retain power. Second, I assume that both governments and perpetrators are concerned with protecting their own freedoms. Next, I assume that all humans (including leaders and perpetrators) value their own lives above the lives of others. Finally, I assume that the decision to kill is riskier than other policies, since its potential consequences (prosecution, exile, execution, etc.) carry higher stakes. The key consequence of these assumptions is that actors are influenced by their desires to retain power and freedom as well as by the benefits of implementing their preferred policy.

Evidence of this P-A dynamic operating in killing events is available throughout history. In Anatolia and West Armenia between 1915 and 1923, Armenians were cast as an inferior race and the decision made to slaughter them all. However, orders to kill the Armenian population were not uniformly obeyed. The Committee of Union and Progress (CUP) made provisions to ensure successful implementation; “Young Turk Party members were entrusted by the central leaders with extraordinary power in situations requiring the disciplining of local authority. Disobedient governors were removed from their posts, and CUP partisans with more reliable records were assigned to carry out the state’s policies in these districts” (Adalian 2009, 65). Below, I use the delegation framework and assumptions to derive insights into the effects of military intervention on civilian death tolls. The theory is developed formally in this article’s online supplement.

The Impacts of Intervention

Scholars have implicitly assumed that killing, like all state repression, is instrumental: leaders violate citizens’ rights when it helps them achieve desired political goals (e.g., quiescence; Lichbach 1987; Gurr 1988; Moore 2000; Davenport and Armstrong 2004; Davenport 2007a). As a result, we know something about the conditions and incentives that lead governments to consider killing civilians: democracy, dissent, civil and international war, guerrilla tactics, civilian support for rebels, and identity conflict all impact the likelihood that killing is a desired policy (e.g., Krain 2000; Valentino, Huth, and Balch-Lindsay 2004; Midlarsky 2005). Yet as the delegation literature correctly observes, policy outcomes are not simple
government choices. Does the logic of delegation explicated above, with its focus on implementation, reveal new influences on civilian killing?

Distinguishing between policies and outcomes and acknowledging actors’ self-interest suggest that a leader’s decision to kill does not lead inevitably to mass murder. Instead, it leads actors to consider the consequences of that killing for their own futures (De Swann 1977). This presents an opportunity for the international community: governments have positive incentives for killing civilians. If the international community is to limit civilian death tolls, it must provide countervailing negative incentives.

This strategic logic of government killing reveals two opportunities for military intervention to make killing costly. First, intervention may influence the likelihood that a government does not order killing despite its attractiveness as a policy option. Governments want to retain power, and one crucial measure of control is a monopoly on the legitimate use of force (Weber 1994). If a government sends a killing order and it is subsequently ignored, the government may (appear to have) lost its coercive monopoly. Thus, governments must consider not only the benefit of a successful policy but also the cost—real or perceived lost power—of an unsuccessful one. They must consider the conditions under which perpetrators may ignore the order to kill civilians. When they expect perpetrators to shirk, a government should avoid sending the order to protect its control of the state.

This suggests that one way to lower the likelihood that a government orders killing is to incentivize perpetrators to shirk the order to kill. Perpetrators (by assumption) want to protect their own lives and liberties. Since the Fourth Geneva Convention explicitly forbids the willful killing of civilians, the international community is well equipped to challenge those freedoms if perpetrators turn to murder. That challenge may be physical, or it may be legal. Physical punishment involves a military response by a third party against the murderous state. For example, North Atlantic Treaty Organization (NATO) forces responded to Libyan attacks on civilians by launching airstrikes against troops loyal to Qaddafi.

Perpetrators are also vulnerable to international legal punishment for killing. Historically, subordinate actors accused of atrocities on an international stage have defended themselves on the grounds that they were following orders and are therefore immune to international prosecution (e.g., Goldensohn 2005). Yet the international community has taken steps to invoke personal responsibility regardless of subordinate status. Article 7 of the Updated Statue of the International Criminal Tribunal for the former Yugoslavia, for example, deals with individual criminal responsibility. In part, it holds that “the fact that an accused person acted pursuant to an order of a Government or a superior shall not relieve him of criminal responsibility.” (UNSC 1993, 6)

Perpetrators become war criminals when they obey the order to kill civilians. If they expect to be punished as such, they are unlikely to obey. Repression research suggests that international actors call attention to repressors, which can increase expectations of punishment. Human rights norms spread through the international
human rights treaty regime; once adopted by a critical mass of states, they lead civil society to demand basic rights and call attention to actors who refuse to provide them (e.g., Finnemore and Sikkink 1998; Keck and Sikkink 1998). Expectation of punishment also comes through international advocacy campaigns. Organized by governments, international organizations (IOs), and the media, they use negative publicity to pressure abusers to better respect human rights (e.g., Ron, Ramos, and Rodgers 2005; Lebovic and Voeten 2006; Hafner-Burton 2008). International human rights organizations (HROs) on the ground may also increase actors’ expectations by focusing attention on abuse, both directly and by amplifying the effect of norms and advocacy (Murdie 2009; Murdie and Davis 2012).

Does military intervention similarly increase actors’ individual expectations of punishment and thereby encourage them shirk the order to kill? Like norm diffusion, international advocacy, and HROs, military intervention focuses outsiders on and places them at the scene of the crime against humanity. When interveners oppose to the state, they introduce a positive probability that individual perpetrators will be identified and punished. The presence of a hostile military intervention should therefore decrease the likelihood that perpetrators would obey the order to kill civilians. Knowing this and wanting to retain a coercive monopoly, governments should be less willing to order killing in the presence of an unfriendly military intervention than in its absence.

**Hypothesis 1**: Ceteris paribus, international military intervention against the state decreases the likelihood of government killing.

Hostile military intervention should decrease the likelihood of government killing but is unlikely to reduce the probability to zero. A second possible international influence is that such intervention may limit the intensity of killing if the order is issued. This may happen because intervention affects leaders’ and perpetrators’ expectations of international prosecution for killing. First, political leaders want to protect their own lives and liberties. The international community has proven willing and able to physically punish leaders for targeting civilians (e.g., NATO’s 1999 campaign over Kosovo). It has also proved willing and able to prosecute political leaders for crimes against humanity (e.g., the Nuremberg Trials, the International Criminal Tribunal for Rwanda). Even intervention that does not threaten the government’s monopoly on coercion may threaten the lives of individual leaders. As discussed previously, governments realize that atrocities can attract international attention, condemnation, and punishment. They must consider the risk of punishment against their desire to achieve political objectives. One way to limit killing, then, may be to increase governmental expectations about the likelihood of punishment for enacting a widespread murderous campaign. This should mitigate leaders’ willingness to execute large numbers of civilians.

Second, I assumed previously that the perpetrator is a unitary actor. In reality, militias and police forces are groups. Each group may be as small as a single individual or as large as a national military. Whatever its size, the group gathers...
information from its environment to determine the expected probability of international punishment for killing civilians. As the information environment changes, each individual’s expectation also changes. Resultantly, as the national information environment reports a higher likelihood of punishment for executing civilians, each individual’s willingness to kill should decrease. This should decrease the overall rate of killing. My second expectation, then, follows from the observations that hostile military intervention should—like norm diffusion, international advocacy, and the presence of HROs—mitigate the government’s willingness to kill civilians en masse and that it should depress each individual agent’s killing rate.

**Hypothesis 2:** Ceteris paribus, international military intervention against the state decreases observed civilian death tolls.

Intervention may have deterred killing through the threat of punishment in East Timor in 1999. On arrival, Australian-led interveners “adopted a high visibility approach. . . . The Australians calculated that the physical presence of this brigade would instill a sense of security and reinforce the idea that they were a force capable of protecting people” (Bellamy and Williams 2010, 3). Despite a lack of physical engagement, civilian killing was stemmed.

Of course, intervention is not always hostile. It may also be supportive of the state or neutral. Supportive interventions may provide a buffer between would-be abusers and the international community. Assume that the supportive intervener shares the state’s goal and that killing is a rational policy designed to pursue that goal. In this case, the intervening state has little incentive to condemn or publicize the policy and may prefer to prevent it from becoming public. Reporting atrocities perpetrated by an ally in pursuit of a shared goal is, quite simply, counterproductive. Leaders know this and may be more likely to order killing in the presence of supportive intervention than in its absence. Similarly, perpetrators know that supportive forces are unlikely to report killing and may be more likely to obey the killing order in their presence than otherwise.

**Hypothesis 3:** Ceteris paribus, international military intervention supporting the state increases the likelihood of government killing.

**Hypothesis 4:** Ceteris paribus, international military intervention supporting the state increases observed civilian death tolls.

In this framework, hostile intervention threatens domestic actors while supportive intervention protects them. Neutral interveners (e.g., peacekeeping forces) have no clear incentives to vilify or insulate would-be killers, and thus, the theory provides no expectations about their effects on actors’ incentives to kill.

**Other Influences on Killing**

International actors are only one possible influence on the government killing process. I argue that both governments and perpetrators have incentives to adjust
behavior in the presence of hostile or supportive intervention. Given hostile intervention, domestic actors face incentives to avoid killing civilians. When the government transmits a killing order to perpetrators, then, it must account for the possibility that the perpetrator could ignore the order. To understand how governments compel obedience, I return to the delegation literature. That work argues that the government’s best option is to alter the agent’s incentives to obey through a combination of monitoring the agent and a system of rewards and punishments. Of these, monitoring is the more critical condition to coerce perpetrators to kill civilians. As McCubbins, Noll, and Weingast (1987, 253) explain, “extensive monitoring makes detection of noncompliance more likely and sharpens the incentive effects of sanctions by allowing political actors to impose them in more exact proportion to the probability and magnitude of noncompliance. Consequently, shirking and malfeasance are going to be less attractive to agencies than they would be in the absence of monitoring and sanctions.”

The government should attempt to monitor its perpetrators in order to compel them to obey. Perpetrators have beliefs about how effective the state is at monitoring their actions, and leaders differ in their abilities to keep tabs on citizens, including potential agents of death. Within autocracies, for example, institutional differences impact how closely the leader can monitor the populace (e.g., Gandhi and Przeworski 2006). Single-party regimes tend to have “large nonmilitary intelligence organizations with far-reaching tentacles into society” (Fjelde 2010, 200; Brooker 2000; Lai and Slater 2006). Personalist dictators develop short chains of command based on loyalty: “Officers are promoted and given choice commands because of their loyalty to the supreme leader rather than their skills as soldiers. They report to the dictator rather than through the chain of command. . . . Multiple security forces and intelligence units proliferate” (Peceny, Beer, and Sanchez-Terry 2002, 18). In both cases, leaders’ penetration of society grants them a window into individual-level behavior. Differently, military regimes “are weak in terms of the organizational reach into society that would allow them to monitor and identify subversive activity,” including disobedient perpetrators (Fjelde 2010, 200). They are more poorly equipped than other autocracies to monitor agents and thus compel desired behavior.

Leaders are differently able to monitor the populace, use intelligentsia to watch its activities, and access loyalists who report on others’ actions. As they believe that monitoring capacity increases, perpetrators increasingly expect to be caught disobeying the order to kill civilians. As a result, they are increasingly likely to shirk and increasingly likely to kill. Governments know that increasing monitoring capacity should increase perpetrators’ willingness to kill. They expect increasing compliance and are increasingly likely to order civilians killed as monitoring capacity increases.

Hypothesis 5: Ceteris paribus, the likelihood of government killing covaries positively with the government’s monitoring capacity.
Hypothesis 6: Ceteris paribus, civilian death tolls covary positively with the government’s monitoring capacity.

Hypothesis 2 suggests that the presence of hostile international forces should decrease perpetrator’s willingness to kill civilians, while Hypotheses 5 and 6 suggest that increasing domestic monitoring capacity should increase the likelihood and severity of that killing. This juxtaposition reveals a third opportunity for the international community to limit or prevent civilian death tolls: in addition to directly decreasing the government’s willingness to consider killing civilians and perpetrators’ willingness to enact murderous policies, hostile intervention may limit the government’s ability to coerce perpetrators to kill. If so, death tolls should decrease as perpetrators are dissuaded from targeting civilians.

Hypothesis 7: Ceteris paribus, international military intervention against the state decreases the positive relationship between government monitoring ability and the expected civilian death toll.

Finally, governments know that perpetrators will be dissuaded from killing civilians in the presence of international intervention. Since sending an order and having it subsequently disobeyed undermines the government’s coercive monopoly, the government should be less likely to initiate a killing campaign when intervention is present than when it is absent.

Hypothesis 8: Ceteris paribus, international military intervention against the state decreases the positive relationship between government monitoring ability and the likelihood of government killing.

I conceptualize death tolls as the outcome of a process of strategic interaction between the government that sends the killing order and the set of perpetrators who set it in motion. This formulation suggests that hostile military intervention may save lives in several ways. By raising expectations about international punishment, such intervention may make killing civilians a decreasingly feasible policy option. Intervention against the state may also dampen the government’s ability to coerce perpetrators to kill. Finally, it may deter perpetrators from implementing the order and thereby prevent civilian death tolls altogether or limit them when a government killing campaign is initiated. Krain (2005) also proposes the direct negative relationship between hostile intervention and government killing; expectations about domestic monitoring and the interaction of monitoring and intervention are unique to the P-A theory developed here. In what follows, I gauge empirical support for these hypotheses.

Research Design

Governments are national-level actors and interventions occur within states. Therefore, my spatial unit of observation is the country. To leverage available country-
level data, I use the year as my temporal unit of observation. The temporal domain of the study covers the five-year period from 1995 to 1999. Spatially, it incorporates a sample of eighty-two states, including twenty that experienced state killing during the relevant time frame.5

**Model Specification**

I focus on the dynamics of government–perpetrator interaction and on the international community’s ability to influence resultant abuse. Elucidating implementation produced new expectations about the process of civilian victimization, identifying factors that limit government’s and perpetrators’ willingness to kill civilians. Yet temporally, this process occurs only after the government identifies civilian killing as a desirable policy. Thus, the factors that affect the leader’s desire to kill are important considerations in any model of civilian victimization: only once killing is desired do the leader and perpetrator engage in the P-A interaction that I develop here. As noted earlier, these factors include a set of conditions (e.g., democracy, violent dissent, and ethnic conflict) and a set of incentives (e.g., wars of attrition or annexation, guerrilla tactics). I incorporate these influences in a sample selection estimation: they affect the likelihood that leaders consider killing civilians, and through this affect both the likelihood that civilians can be killed and the severity of death tolls when they occur. Details, results, and sensitivity analyses for this part of the empirical model are available in the associated supplement.

Next, framing government killing as a P-A interaction suggests that under certain conditions (e.g., in the presence of hostile military intervention) the government may choose not to send the order regardless of the conditions and incentives that favor killing civilians. That is, some country-years will simply never experience killing, regardless of the conditions recommending it to the government. These observations are always zero; the probability that government killing occurs is always and exactly zero. In these cases, government killing will not occur.

In other circumstances (e.g., in the presence of supportive military intervention), governments expect that they can send the killing order, and perpetrators expect that they can implement it, without facing international repercussions. In these cases, governments may consider killing civilians a potential policy option. This does not mean that they will order civilians killed with $p = 1$ or that perpetrators will always obey. Instead, governments order killing with $0 < p < 1$, and perpetrators kill some number of civilians between zero and $\infty$. The probability of government killing in these cases is sometimes but not always zero; the probability that killing occurs varies between zero and one, and the intensity of events varies between zero and $\infty$.

In sum, the theory developed above requires three equations. The first equation must identify the forces that make government killing a desired policy choice. As killing becomes increasingly appealing, the P-A framework suggests that leaders consider two substantive questions with respect to military intervention: Does intervention influence the likelihood that a government does not order civilians killed
despite the fact that it is an attractive policy option? And, does intervention influence the intensity of government killing when the order is issued? The theory points to two sets of influences on the likelihood and intensity of a murderous policy—the forces that influence actors’ expectations about the likelihood of punishment for killing civilians (including the presence/absence of hostile/supportive military intervention) and the forces that influence actors’ expectations about the government’s ability to observe and punish disobedience (including the state’s monitoring capacity).

I investigate these influences using a zero-inflated negative binomial (ZINB) specification. The ZINB model has two stages. The first equation is useful for distinguishing two sets of cases in a sample: those that will never experience an event (“all zeroes”) and those that will sometimes experience an event (“not all zeroes”). This sorting mechanism is unobservable, but one might identify some of the factors that influence whether an observation is in one group or the other. Those factors can then be used as covariates to estimate the likelihood that government killing can occur with some positive probability (e.g., that a given observation is in the “not all zeroes” group). The first stage of the ZINB model is thus an appropriate setting in which to test hypotheses on the likelihood that government killing occurs (Hypotheses 1, 3, 5, and 8).

The theory also speaks to international actors’ ability to influence the severity of government killing when and where it does occur. Hypotheses 2, 4, 6, and 7 highlight influences on the expected death toll. The second equation in the ZINB model estimates influences on the intensity of an event in each observation weighted by the estimated feasibility of killing based on the first stage. The ZINB estimator permits inferences regarding both the likelihood that a government orders civilians killed and the expected civilian death toll. Moreover, I produce unbiased coefficient estimates by considering the factors that lead to inclusion in the sample of interest. Although I cannot parse out the covariates’ effects on governments as opposed to perpetrators (or vice versa), this is a direct test of the impacts of international intervention on government killing in this new dynamic context.

**Operational Indicators**

**Dependent variable.** My dependent variables, presence of state-perpetrated death tolls and number of civilians killed by state actors, come from the Political Instability Task Force’s (PITF) Worldwide Atrocities Data set (Ulfelder and Schrodt 2009). The full data set records civilian casualties between January 1994 and December 2009 in all political and military conflicts and contains 6,000 killing events across 122 countries. This is the population of cases reported in major international press agencies (Agence France Presse, Associated Press, *New York Times*, and Reuters) in which at least five civilians were killed.  

**Independent variables.** Hypotheses 1 through 6 expect that military intervention directly influences the likelihood and severity of civilian death tolls. I measure
intervention using the International Military Interactions data set (Pickering and Kisangani 2009). I create two binary variables to record the presence or absence of purposeful military intervention, defined as “the movement of regular troops or forces (airborne, seaborne, shelling, etc.) of one country inside another” (Pearson and Baumann 1993, 1). The first variable records interventions that explicitly oppose the government and/or support its opposition (hostile interventions), while the second records interventions that explicitly support the government or are against its opposition (supportive interventions). The estimation sample includes twenty country-years involving hostile intervention and fifteen country-years involving supportive intervention. More information on each intervention is presented in Table S12 of the online supplement.

Next, Hypotheses 5 and 6 expect governments to attempt to compel obedience by increasing their monitoring of potential perpetrators. To test this, I need to measure the government’s ability to observe potential perpetrators. While I developed the argument in part by discussing differences among autocracies, I am interested in testing the hypotheses without reference to regime type. State capacity, conceptualized as a state’s ability to implement public policy, is a useful way to leverage this concept without regards to regime: the better a state is at implementing policy in general, the better I expect it to be at implementing government killing. The state’s ability to implement policy is tied to its ability to “interact with citizens to monitor . . . behavior” (Weller and Ziegler 2008, 13; see also Migdal 1988; Mann 1993), further highlighting its utility as a proxy for government monitoring capacity: the better a state is at monitoring all citizens, the better I expect it to be at monitoring one subset of citizens—perpetrators tasked with killing civilians. Weller and Ziegler (2008) measure a state’s ability to monitor citizens, and thus implement public policy, as the proportion of personal and corporate income taxes to total tax revenue. I use their capacity data, extended through 2000.8.9

A government can also coerce perpetrators to kill by increasing their expectations about how violent the punishment for disobedience will be. Perpetrators develop beliefs on this dimension based on the government’s recent tendency toward violence. I assume that the more willing a state is to use violence in general, the more willing perpetrators expect it to be to use violence to punish disobedience. I measure this willingness to use violence with a lagged two-year moving average of the Cingranelli–Richards (CIRI) index of a government’s respect for its citizens’ physical integrity rights (Cingranelli and Richards 1999).10

Next, I consider other international influences on civilian death tolls. This article asks whether military intervention limits government killing. The international community may also impose economic sanctions on actors who kill civilians. To the extent that potential perpetrators depend on foreign aid, for example, restrictions on that aid limit their ability to fulfill basic needs (Wood 2008). If they anticipate losing the ability to provide for themselves, potential perpetrators may be dissuaded from killing civilians. Perpetrators’ vulnerability to international economic sanctions is in part a function of how much foreign aid enters the country. I capture this
influence with the World Development Indicator’s (WDI) measure of foreign aid per capita. Perpetrators’ vulnerability is also a function of how much incoming aid is likely to reach each individual perpetrator. Money is a private good and is distributed only to members of the government’s winning coalition (Bueno de Mesquita et al. 2003). As the size of the winning coalition increases, the likelihood that a potential perpetrator receives and depends on foreign aid increases. To capture this mediating influence, I weight foreign aid per capita by the size of the winning coalition ($W$).

Another likely influence on this strategic logic of government killing is the presence of widespread violent dissent. Repression becomes an appealing government strategy as a result of broader ongoing conflicts (e.g., Lichbach 1987; Gurr 1988; Harff 2003). These may also affect actors’ incentives for killing civilians, providing an opportunity to blame civilian deaths on the violent context rather than an intentional government policy. I account for this possibility with the presence of civil and/or international war as defined by PRIO/UCDP (Gleditsch et al. 2002).

Finally, Hypotheses 7 and 8 suggest that international intervention against the state modifies the positive relationship between monitoring capacity and killing. To test these expectations, I create a two-way interaction term by multiplying the presence or absence of hostile intervention with state capacity. Extremely high collinearity among interactions and their constituent terms is common, and this case is no exception. Specifically, hostile intervention and its interaction with tax capacity correlate at $r = .907$ in my sample. This is because both intervention and the product term equal zero whenever intervention is absent, and there are relatively few cases of intervention in the data. Consequently, I cannot draw meaning from the interaction of hostile intervention and tax capacity in the multiplicative model (Wooldridge 2003). To test my interactive hypothesis, I use a Wald $\chi^2$ test to determine whether the three variables, taken together, have a statistically meaningful impact on killing (Wooldridge 2003, 143–48). I do this in Table 1, in the row labeled “interaction terms joint test.” Next, I analyze the substantive impact of these variables, taken as a set, in Figure 1. These steps enable me to test my interactive hypotheses, even in the presence of severe multicollinearity.

Results

Results for the sample-selection estimation are presented in this article’s supplemental material. As anticipated, they support the literature’s expectations and capture the conditions and incentives that make killing civilians an attractive polity. By including these results in subsequent analyses, I can incorporate the decision to kill civilians into hypothesis tests relating to the process of government killing.

Stage 1: Influences on the Feasibility of Killing

Table 1 presents the results of the ZINB analyses. Within each set of results, additive and interactive, the first column reports results from the first equation. This first
### Table 1. ZINB Analysis of Influences on Government Killing.

<table>
<thead>
<tr>
<th></th>
<th>Additive model</th>
<th>Interactive model</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pr (all zeroes)</td>
<td>E (death toll)</td>
</tr>
<tr>
<td><strong>International influences</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intervention against</td>
<td>$-33.739^{***}$ (2.215)</td>
<td>$-5.757^{***}$ (1.321)</td>
</tr>
<tr>
<td>Intervention supporting</td>
<td>$15.595^{***}$ (1.331)</td>
<td>$3.968^{***}$ (1.043)</td>
</tr>
<tr>
<td>Foreign aid (weighted)</td>
<td>$-0.0006$ (0.0006)</td>
<td>$-0.0002$ (0.0006)</td>
</tr>
<tr>
<td>Trade openness (weighted)</td>
<td>$-0.007$ (0.006)</td>
<td>$-0.028^{**}$ (0.009)</td>
</tr>
<tr>
<td><strong>Domestic influences</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Monitoring capacity</td>
<td>$-2.040$ (3.736)</td>
<td>$1.184$ (2.816)</td>
</tr>
<tr>
<td>Recent repression</td>
<td>$-1.227^{***}$ (0.380)</td>
<td>$-0.775^{**}$ (0.418)</td>
</tr>
<tr>
<td>In(Population)</td>
<td>$-3.40e^{-6}^{***}$ (1.28e^{-6})</td>
<td></td>
</tr>
<tr>
<td><strong>Interactive influences</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intervene Against × Capacity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Controls</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inverse mills ratio</td>
<td>$2.854$ (2.575)</td>
<td>$2.376^{**}$ (1.204)</td>
</tr>
<tr>
<td>Civil and/or International war</td>
<td>$2.316$ (1.981)</td>
<td>$7.703^{***}$ (0.853)</td>
</tr>
<tr>
<td>Constant</td>
<td>$1.892$ (5.502)</td>
<td>$2.666$ (3.720)</td>
</tr>
<tr>
<td>Interaction terms joint test(^a)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>$N$ (nonzero $N$)</td>
<td>339 (34)</td>
<td></td>
</tr>
<tr>
<td>ln ($\alpha$)</td>
<td>$1.405^{**}$</td>
<td></td>
</tr>
<tr>
<td>Wald $\chi^2$</td>
<td>$263.96^{***}$</td>
<td></td>
</tr>
</tbody>
</table>

Note: Robust standard errors, in parentheses, are clustered by country.

\(^a\) $\chi^2$ test of $H_0$: Intervention, capacity, and their interaction are jointly insignificant.

\(^*\) $p \leq .1$, \(^**\) $p \leq .05$, \(^***\) $p \leq .01$ (two-tailed).
stage estimates the likelihood that government killing is not chosen, and results model the effect of each independent variable on the likelihood that the observation is in the “all zeroes” group, or that government killing cannot occur. Coefficients for hostile intervention are negatively signed and statistically significant in both the additive and the interactive models. Coefficients for supportive intervention are positively signed and statistically significant in both models. These results fail to

Figure 1. Moderating impact of hostile intervention on the relationship between monitoring capacity and killing.

Source: Table 1, columns 3 (top panel) and 4 (bottom panel).
support Hypotheses 1 and 3. Instead, hostile intervention appears to make killing more feasible, while supportive intervention has the opposite effect.

Next, and as expected, the coefficient on monitoring capacity is negatively signed in both first-stage estimations. However, it is statistically significant in neither. This result fails to support Hypothesis 5, though it remains possible that monitoring capacity has a substantively significant impact on the feasibility of killing civilians (Berry, DeMeritt, and Esarey 2010). Monitoring does have the anticipated conditional impact: the joint test of the interaction and its two constituent terms are statistically significant. This result supports the claim that the coercive impact of monitoring may be mediated by international intervention. Substantive analyses (explained later) will determine whether that mediating impact is as expected by Hypothesis 8.

The coefficient on recent repression is negative and statistically significant, as expected: increasing past repression makes government killing an increasingly feasible policy option. However, not all first-stage results support theoretical expectations. Weighted aid per capita is negatively signed in both first stage estimations and achieves significance in the interactive model. Weighted trade openness is negatively signed in both first stage estimations and achieves significance in neither. In all four cases, the estimated coefficient is incredibly close to zero. Increasing financial dependence appears to have a weak impact on the feasibility of killing civilians in these data; when that impact does exist, dependence makes killing a tiny bit more feasible. Finally, the coefficient on civil and/or international war is positive in both first-stage estimations and but achieves significance in neither. Counter to my expectation, war involvement appears not to impact the feasibility of killing.

### Stage 2: Influences on Civilian Death Tolls

The second and fourth columns of Table 1 model influences on the severity of government killing, weighted by the likelihood that killing can occur. The coefficient on hostile intervention is negative and statistically significant in both specifications. In support of Hypothesis 2, this type of intervention decreases civilian death tolls. The coefficient on supportive intervention is positive and significant in both specifications. In support of Hypothesis 4, intervention against the state increases civilian death tolls.

The coefficient on government monitoring capacity is positively signed (as expected) in the additive specification, but the result is statistically insignificant. In the interactive model, the estimated coefficient is negatively signed and insignificant. These results undermine Hypothesis 6. However, as noted previously, monitoring capacity may yet have a substantively meaningful additive impact on the civilian body count. The joint test of the interaction term and its additive components is significant in these stage-two estimates. Capacity and intervention interact in a way that significantly impacts death tolls. Substantive analyses (explained later) will determine whether that interaction is as expected by Hypothesis 7.

The remaining results also support expectations: involvement in civil or international war leads to increased numbers of dead civilians, while increasing economic...
dependence decreases the body count. Overall, statistical results suggest that intervention affects civilian death tolls while offering mixed support for the theoretical framework. Intervention’s effects on the feasibility of killing are opposite those predicted by the theory, while its effects on civilian death tolls are as expected. Monitoring capacity has no independent statistical impact on either the feasibility of killing or emergent body counts, but influences both outcomes when interacted with hostile interaction. In what follows, I unpack the substantive impacts of intervention, monitoring, and their interaction.\textsuperscript{13,14}

\textbf{Substantive Impacts of Intervention}

First, I consider the predicted effects of increasing state capacity. Considered additively, this variable was statistically insignificant in both stages of the two ZINB estimations. However, Berry, DeMeritt, and Esarey (2010) demonstrate that in a logit model (e.g., the first stage of the ZINB estimator), a statistically significant coefficient is not a necessary condition for substantively meaningful effects. Results reveal that increasing domestic monitoring capacity has a monotonic positive effect on the probability that government killing can occur.\textsuperscript{15} A min–max increase in capacity leads to a statistically significant 6.7 percent increase in the probability that civilians lose their lives, and the probability of killing also responds to less encompassing shifts in state capacity: in this sample, average capacity is .339. This identifies, for example, South Korea in 1999. In this case, the probability that government killing can occur is 6.2 percent. A two standard deviation (SD) increase would bring state capacity to .663 (e.g., Indonesia in 1999) and would increase that probability to 8.8 percent. Thus, a two-SD increase above average capacity leads to a statistically significant 2.6 percent increase in the likelihood that government killing can occur. Here, then, is support for Hypothesis 5: as domestic monitoring capacity increases, the likelihood of killing increases as well.

Increasing monitoring capacity also has a monotonic positive effect on expected civilian death tolls. In this case, a min–max increase in capacity raises the number dead from 1.70 to 10.42, and the coercive impact of increasing capacity on death tolls is also exerted given smaller changes in capacity: an increase from average capacity to two SDs above the mean raises the predicted death toll from 3.40 to 7.43. In 1999, solely in terms of state capacity, becoming less like South Korea and more like Indonesia would have led to four additional civilian deaths. In addition to their substantive importance, these results support Hypothesis 6: as domestic monitoring capacity increases, civilian death tolls also increase.

Next, I engage predicted impacts of hostile intervention. In the absence of this type of intervention, the likelihood that government killing can occur is 4.95 percent. Intervention raises that likelihood to 23 percent. Turning to body counts, results suggest that without intervention, the predicted death toll is 3.10. Intervening against the government drops that number to less than one death. These results echo the findings from Table 1: intervening against the government increases the likelihood that
government killing can occur (undermining Hypothesis 1) but depresses the expected death tolls when they emerge (supporting Hypothesis 2).

The predicted effects of supportive intervention show that in its absence, killing is 6 percent likely to occur. Intervening to support the state lowers that likelihood, bringing it to 3 percent. Turning to death tolls, in the absence of such intervention, the expected body count is 2.34. Intervening to support the would-be killers raises the death toll to 11.85 civilians. As above, these findings echo statistical results: supportive intervention decreases the probability that killing can occur (undermining Hypothesis 3) but increases expected death tolls when they emerge (supporting Hypothesis 4).

Hostile intervention is expected to moderate the positive relationship between a government’s monitoring capacity and killing. Conditionalities are best interpreted by examining their substantive effects (Brambor, Clark, and Golder 2006), which are presented in Figure 1. The top panel captures the effects of monitoring capacity and hostile intervention on the likelihood that killing, when desired, can occur. When intervention is absent, increased monitoring capacity increases the probability that civilians can lose their lives. Hostile intervention modifies this relationship, and the nature of the conditionality depends on the level of monitoring capacity. When monitoring capacity is low (less than .28), intervention against the state significantly increases the likelihood of killing. Of the 341 cases, 149 (43.7 percent) fall into the range where .06 ≤ capacity ≤ .28 and are subject to the counterproductive impacts of intervention against the state. Once the capacity reaches .28, the effect flips and intervention against the state significantly decreases the likelihood of government killing. Of the 341 cases, 192 (56.3 percent) fall into the range where .28 ≤ capacity ≤ .80 and are subject to the pacifying impacts of intervention against the state.

These results support the insight that hostile intervention moderates capacity: where personal and corporate income taxes make up at least 28 percent of all tax revenue, hostile intervention dampens the government’s ability to coerce killing and lowers the probability that government killing can occur to zero. And in states where personal and corporate income taxes compose less than 28 percent of tax revenue, these interventions lead to a massive increase in the probability that civilians can lose their lives. However, these results do not support Hypothesis 8, which expects the appeal of shirking to be greatest—and the likelihood of killing to be lowest—where monitoring capacity is weak and hostile intervention occurs.

Finally, the bottom panel of Figure 1 presents the modifying impact of intervention against the government on the positive relationship between state capacity and civilian death tolls. In support of Hypothesis 7, intervention modifies the relationship between capacity and the severity of government killing such that civilian death tolls are always significantly lower when hostile intervention is present than when it is absent.

**Discussion**

A focus on the dynamics of government–perpetrator interaction produces new insights into the process by which civilians are repressed. One key insight is that the
decision to kill is made and subsequent body counts emerge as a result of different processes. A focus on the impacts of military intervention produces expectations for both stages. Empirical results support these expectations vis-à-vis the severity of killing, suggesting that the P-A framework is a useful one for elucidating this process: hostile intervention decreases civilian death tolls, while supportive intervention increases the same. Hostile intervention also moderates the positive relationship between state capacity and killing such that death tolls are always lower in intervention’s presence than in its absence.

The predicted effects of intervention on the decision to kill are not empirically supported. Instead, influences on the feasibility of killing are in the opposite direction of those anticipated by the theory: hostile intervention makes killing more likely, while supportive intervention decreases its feasibility. And hostile intervention moderates the positive relationship between state capacity and the likelihood of killing, but does so in a way the theory did not foresee. While it is helpful for understanding the process by which body counts mount, the P-A framework cannot explain the process by which killing begins. Instead, this set of results suggests an alternative explanation for the decision to kill.

Killing civilians is one particularly risky tool leaders use to achieve desired political goals (Krain 2005; Midlarsky 2005, chap. 2). Consider intervention’s effects on state strength and, therefore, on the set of policy options available to the leader. Hostile intervention weakens the state by bringing resources to bear against it. In these cases, the state has fewer available options by which to pursue its goals, and it is more likely to order civilians killed (since it has fewer feasible options in its arsenal and is less likely to achieve its goals in other, less risky ways). On the other hand, supportive intervention strengthens the state by bringing resources to bear in pursuit of its goals. In these cases, the state has newly available options and is less likely to order civilians killed (since it has other feasible options in its arsenal and is able to achieve its goals in less risky ways).

This framework also explains the interactive effect of capacity and hostile intervention on the likelihood of repression (including killing). As a state’s capacity decreases, it is increasingly able to implement preferred policies (Migdal 1988; Mann 1993). And as discussed previously, hostile intervention further reduces the set of available options. Thus, when state capacity is low and hostile intervention occurs, states take the only option left: government killing. As state capacity increases, the state is increasingly able to implement all policies. When this occurs in the presence of a hostile intervention, the threat of international punishment is heightened and the state is increasingly likely to choose another, less risky policy. The likelihood of government killing declines as a result.

Like intervention, the results for civil and/or international war follow a differential pattern: war involvement makes killing less feasible but increases the expected number of civilian deaths. These results, too, can be explained in the current context. A war campaign relies on the same resources (soldiers, guns, etc.) as killing. Killing during war requires those resources be diverted, thereby weakening the war effort.
Thus, killing is less likely during war than at other times, when relevant resources are not already in use. If a leader fighting a war decides to kill nonetheless, a coercive apparatus is already in place—soldiers are deployed, guns loaded, and so on. Thus, a murderous policy can be implemented more quickly and fully during war than at other times, and death tolls are higher as a result.

In addition to its impacts on actors’ expectations about punishment for killing, intervention has immediate physical effects on a state’s strength and on its ability to implement preferred policies. These effects produce expectations about the government’s propensity to order killing and perpetrators’ ability to obey the order, and those expectations oppose the ones emerging from my P-A framework. The same story applies to the effects of war. With respect to influences on the decision to kill, the evidence supports this alternative theory. With respect to influences on civilian death tolls, the evidence supports the P-A theory developed herein.

**Conclusion**

This study conceptualizes state repression, particularly killing, as a P-A problem. I model civilian death tolls as the outcome of a strategic interaction between governments and potential perpetrators. That insight produces new hypotheses about variance in civilian death tolls across time and space, and empirical results support these expectations. Results support the argument that death tolls vary even when conditions and incentives to kill do not, because the actors care not only about the policy consequence of their interaction (dead civilians), but also about its consequences (punishment by an external actor) for their own lives and liberties.

Empirical analyses also support extant findings with respect to intervention and suggest that international military intervention is capable of both preventing and limiting the escalation of low-level killing. Intervention supporting the government is an effective means of dissuading governments from sending the order to kill civilians. It is, however, counterproductive for limiting death tolls once the order is sent and implementation begins. This suggests that the best chance of success for a supportive intervention is before killing begins. In the context of an ongoing killing event, this type of intervention is unlikely to prevent escalation and may lead to increased loss of life.

Differently, intervention against the government is counterproductive before the order is sent: it raises the likelihood that the order can go out. However, hostile intervention is quite effective at limiting death tolls once killing begins, decreasing expected body counts by as much as 99 percent. Similar findings apply to intervention’s ability to moderate the positive relationship between government monitoring capacity and killing: the better a government can monitor its perpetrators, the more civilians will die. International intervention against the state affects this positive relationship in three ways. First, in weak states (where less than 28 percent of tax revenue comes from personal or corporate income taxes), it compounds the problem by increasing the probability that the killing order is sent. Second, in capable states
(where at least 28 percent of tax revenue comes from personal and corporate income taxes), it makes the order to kill civilians less likely to go out. Finally, regardless of the level of state capacity, death tolls are lower in the presence of intervention than in its absence.

Overall, military intervention appears to be an important tool for international actors interested in preventing or limiting state killing. The direction of the intervention matters, but both supportive and hostile interventions save lives: Intervention supporting the government decreases the likelihood that the killing order goes out and therefore prevents a murderous campaign from ever beginning. Once killing has begun, intervention against the government is a more effective choice, since it drastically limits implementation and thereby prevents the murderous campaign from escalating.

This work also provides promising directions for future research. First, influences on the feasibility of killing suggested by the P-A framework are not supported by empirical analysis. Instead, these results can be explained by focusing on the effect of intervention on state capacity. Hostile intervention weakens states while supportive intervention strengthens them, and these changes affect the range of policies available to states pursuing political and/or military goals. When options less risky than killing are available, states become less likely to kill. Empirical support for this alternative explanation suggests that the decision to kill is affected by the feasibility of policies other than government killing. One profitable avenue for future research may identify the full set of available options, and the conditions (i.e., changes in state capacity) under which each is preferred.

Next, I have assumed that perpetrators may be members of the military, police, or other societal elements. They have no instrumental preferences or loyalties, and their utility derives solely from the uniform consequences of their choices. Do those consequences vary across agents? Are military regimes better equipped to monitor and sanction military perpetrators, while single-party regimes are better able to monitor and sanction police? When do leaders order the military to kill, and when do they prefer police or death squads? Do perpetrators kill without orders or at unexpected levels? Future research might investigate how abuse varies as different agents are tasked with murder.

Finally, I argue that fear of international punishment affects actors’ calculations about the consequences of repression. Does the potential for domestic punishment exert similar influence? Respect for physical integrity rights and responsiveness to international laws vary with the effectiveness of domestic judiciaries (e.g., Cross 1999; Keith 2002; Apodaca 2004). Effective judiciaries improve respect for international human rights because citizens are likely to seek redress when their rights are violated, and legitimate courts are likely to provide that redress (Powell and Staton 2009). Do states with effective judiciaries increase perpetrators’ expectations of punishment for killing, or leaders’ willingness to send the killing command? Future work might investigate the impact of domestic judiciaries on actors’ tendencies to send and obey the order to kill.
Acknowledgment
The author thanks Andy Beger, Courtenay Conrad, Matt Golder, Sona Golder, Danny Hill, Ashley Leeds, Sara Mitchell, Will Moore, Jeff Staton, and Joe Young for generous help and feedback.

Author Notes
Files to reproduce all results are available at http://jcr.sagepub.com; these and an online supplement are also available at the author’s website.

Declaration of Conflicting Interests
The author declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding
The author received no financial support for the research, authorship, and/or publication of this article.

Notes
1. Mitchell (2004) also uses this setup to explain human rights abuse. His largely qualitative study is more narrowly focused on mass killing during civil wars. This formal, quantitative effort builds on and broadens his work.
2. As is typical in the political economy literature on delegation, I assume that the agent is a unitary actor (e.g., Epstein and O’Halloran 1999a; Huber and Shipean 2002).
3. The impact of cascading human rights norms on state behavior has been questioned by, for example, Hafner-Burton (2008).
4. Davenport (2007b) finds that military regimes rely on overt terror to maintain internal order. The distinction between the need to repress (for which I control empirically) and the ability to repress (on which I focus here) is critical: single-party regimes with the capacity to compel appear less repressive not because they are less coercive, but because they need not display such overt violence.
5. Ideally, the data would have broader coverage. Limitations on valid, reliable, and available data result in an estimation sample of 341 country-years. While readers should be aware of the potential limits of generalizability resulting from this somewhat modest sample size, reported results are extremely robust to alternate specifications and modeling strategies and appear to capture valid systematic relationships. All included country-years are listed in Table S1 of the online supplement.
7. For a longer discussion of the data and their use here, see the associated supplement.
8. The data are based on information from the World Development Indicators (WDIs) that stopped reporting personal and corporate income taxes in 1997. After that date, these data record the proportion of taxes on goods and services relative to total tax revenue. I thank both authors for sharing their data, and Nick Weller and Cameron Thies for their guidance.
9. As with many studies seeking to quantitatively test unobservable forces, this is not a perfect measure. In the online supplement, I conduct a sensitivity analysis using a second proxy—military spending—for the state’s monitoring ability. Results are robust to including this alternative measure of monitoring capacity.

10. The index includes information on killing as well as torture, disappearances, and imprisonment. I reconstruct it to exclude killing, and reverse the coding so that increasing values indicate an increasing tendency to repress.

11. Table S13 in the online supplement presents in-sample correlations among all independent variables.

12. Hostile intervention remains negative across the additive and interaction specifications, suggesting that the estimated interaction—not the constituent term—is adversely affected by this multicollinearity.

13. Substantive results are in-sample predictions. Rather than fix all variables at central values, I fix the variable of interest and allow all others to vary as they do in the full sample. The results are comparable to those generated using CLARIFY (King, Tomz, and Wittenberg 2000). CLARIFY assumes normality, while I make no assumptions about the underlying distribution of the coefficients.

14. Additive results are presented as figures in the associated supplement.

15. To ease interpretation, results are inverted from the first-stage predictions, which estimate substantive effects on the likelihood that killing cannot occur.

Supplementary Material
The online [appendices/data supplements/etc] are available at http://jcr.sagepub.com/supplemental.

References


