The Turnover Trap: New Leaders, Reputation, and International Conflict

Scott Wolford Emory University

A formal model of crisis bargaining in the shadow of leadership turnover is analyzed where (1) successive leaders of the same state may differ in their resolve, (2) their resolve is private information, and (3) the probability of leadership turnover depends on bargaining behavior and conflict outcomes. The model provides novel answers to a number of questions about the relationship between an incumbent's time in office, the prospects of losing office, the anticipated behavior of future *leaders, and the current probability of conflict. Taken together, these results add further weight to recent claims that leaders, not states, should be considered the fundamental units of analysis in international relations.*

What is the relationship between leadership turnover and international conflict? In particular, how does the emergence of a new leader, as well as expectations over the behavior of future leaders, affect bargaining behavior in international crises? International relations scholarship has begun to ask these questions only recently in the shift from states to leaders as units of analysis. For example, incumbents are more likely to participate in conflicts early in their tenure than late (Chiozza and Goemans 2003, 2004a; Gaubatz 1991; Gelpi and Grieco 2001), and they develop reputations that affect the subsequent probability of conflict (Chiozza and Choi 2003). However, much of the theoretical work in this tradition attributes leaders' decisions to potential consequences for political survival (Bueno de Mesquita and Siverson 1995; Bueno de Mesquita, Siverson, and Woller 1992; Bueno de Mesquita et al. 2003; Downs and Rocke 1994; Goemans 2000; Smith 1998; Tarar 2006), which does not address how the incentives for conflict change over the course of an incumbent's tenure in office.

Consider the Vienna summit of 1961, which sheds light on each of these findings and raises some additional questions. Newly elected President Kennedy worked to appear firm in the face of aggressive demands by Soviet premier Khrushchev over the status of Berlin (Dallek 2003; Khrushchev 2000; Taubman 2003), but why did Khrushchev allow the issue to lie dormant after the crisis of 1958, in the waning years of the Eisenhower administration, only to initiate a fresh crisis over the issue in his first meeting with a new president? For Kennedy's part, why was he so concerned that Khrushchev might believe him weak and easily "pushed around" (Dallek 2003, 413–14) when the American position on Berlin had been established by his predecessors?

It appears that Khrushchev believed Kennedy's resolve might differ from his predecessor Eisenhower's and that these expectations over the future affected his bargaining with Eisenhower (Khrushchev 2000). Kennedy seemed to have understood Khrushchev's uncertainty and felt the need to bolster his reputation for resolve in the face of aggressive challenges at Vienna. However, previous leader-centric research—as well as the state-centric literature to which it arose as a challenge—has assumed that successive leaders of the same state do not vary in their resolve, or their willingness to use military force, in international crises.

To that end, this article analyzes a formal model of crisis bargaining in the shadow of leadership turnover that relaxes this assumption, allowing an incumbent and a successor in a protagonist state to hold private information over their individual resolve. In equilibrium, the leadership of an antagonist state has an incentive to challenge new incumbents in order to gauge their resolve, while new incumbents share an incentive to demonstrate resolve in the face of the antagonist's uncertainty in order to earn a reputation that produces better bargaining

Scott Wolford is a Ph.D. candidate in political science, Emory University, 327 Tarbutton Hall, 1555 Dickey Drive, Atlanta, GA 30322 (mwolfor@emory.edu).

Thanks to Cliff Carrubba, Terry Chapman, Valeria Palanza, Eric Reinhardt, Dan Reiter, Toby Rider, Emily Ritter, Amy Yuen, participants at the 2006 Michigan EITM-V workshop, and four anonymous reviewers for helpful comments and suggestions.

American Journal of Political Science, Vol. 51, No. 4, October 2007, Pp. 772–788

 ISSN 0092-5853

outcomes in future crises. This process is risky, however, because crisis outcomes determine prospects for political survival, incumbents must survive in office in order to benefit from the reputations for which they fight, and leadership turnover brings to power a successor leader of potentially different resolve. Thus, leadership turnover represents a kind of informational trap in which incumbents and their antagonists share incentives to take actions that increase the probability of conflict.

Comparative statics analysis of equilibrium behavior provides some novel answers to these open questions about leaders, turnover, and international conflict. First, reputational incentives render incumbents most prone to conflict early in their tenure. Second, increasing expected gains from bargaining with an incumbent's successor increases the probability of conflict when the distribution of power favors the antagonist but decreases the probability of conflict when the distribution of power favors the incumbent. Third, an incumbent's ability to survive in power after military contests increases the probability of conflict, the probability of survival following a peaceful bargain decreases the probability of conflict, and both are conditional on the distribution of power and, under some conditions, the shadow of the incumbent's likely successor.

In addition to accounting for existing findings in the growing leader-centric literature, the model makes several additional contributions. First, by relaxing the assumption that leaders in the same political system are equally resolute, it identifies novel explanatory factors that have not emerged from either state-centric or existing leader-centric research, such as the shadow of the successor, the conditional effects of losing office, and the dependencies of each on the distribution of power. Second, the strategic relationships between these causal factors can greatly improve the specification of empirical tests of leader-centric theories, especially as variables at the levels of leader, state, and international system interact to produce outcomes. Third, it has broad implications for the study of reputations for resolve, suggesting both a new unit of analysis (leaders, not states) and dependent variable (the distributive consequences of crises, not the occurrence of conflict). Finally, it provides one of the first explicit accounts of when and how private information and incentives to misrepresent it emerge in international relations and ties that story to an explicit empirical referent: leadership turnover. Taken together, these results add further weight to recent arguments that leaders, not states, should be considered the fundamental units of analysis in international relations.

Characterizing a Leader-Centric World

In order to examine the consequences of leadership turnover for international crisis bargaining, the analyst must treat national leaders explicitly as the primary actors, isolating three important factors: (1) individual differences in resolve, (2) the relationship between crisis behavior and political survival, and (3) the anticipated behavior of an incumbent's potential successor. This deviates from most formal models of conflict, where uncertainty exists over the distribution of military power or the costs of war and not over the resolve of individual leaders (Fearon 1995; Filson and Werner 2002; Morrow 1989; Powell 1999, 2004; Slantchev 2003). If successive leaders in a state are equally resolute, this is unproblematic, and there should exist no relationship between leadership turnover and conflict, as new incumbents would differ in no systematic ways from their predecessors.

Recent scholarship, however, indicates otherwise. First, new leaders appear to differ from longer-serving leaders in a way that increases their chances of conflict involvement as both challenger and target (Chiozza and Goemans 2003, 2004a; Gaubatz 1991; Gelpi and Grieco 2001). Second, individual leaders can form reputations in the present that affect the subsequent probability of conflict (Chiozza and Choi 2003).[1] Finally, the risk of losing office, which is determined in part by conflict outcomes, also affects conflict behavior in the present (Bueno de Mesquita et al. 2003; Chiozza and Goemans 2003, 2004a; Goemans 2000). A model that (1) assumes incumbents to be identical to their predecessors and their successors and (2) makes no allowances for leadership turnover cannot account for these results, because it systematically omits relevant variables like a leader's time in office, reputation, and anticipated risks of losing office.[2]

Failing to model these leader-specific dynamics can produce misspecified theories and biased empirical tests. Since leadership changes more frequently and more

[1]Guisinger and Smith (2002) provide a theoretical exposition of leader-based reputations for honesty, which differ in important ways from reputations for resolve and can have quite different implications for the observed probability of conflict (see also Sartori 2005). While it is certainly reasonable to attach reputations for honesty to individual leaders in the framework presented here, it is beyond the scope of this article.

[2]Horowitz, McDermott, and Stam (2005) uncover an interactive relationship between leaders' biological age, domestic institutions, and conflict initiation. Their argument, however, is primarily psychological and unrelated to the kind of strategic dynamics examined here.

rapidly than the usual state-level variables—like military capabilities or domestic institutions—the distinction between state- and leader-specific sources of uncertainty is nontrivial. Rates of leadership turnover—as well as their relationship to conflict outcomes—vary across different states and regime types, from the relatively short tenures of prime ministers, around two years and eight months, to the longer spells in power enjoyed by autocrats, on average about seven years (Chiozza and Goemans 2004b). In contrast, observable measures of state-level sources of private information, like military power, change only rarely or incrementally (Bennett and Stam 2004), and omitting relevant variables measured on leaders can both mask the effects of these processes and introduce bias into inferences on state-level factors, especially when the effects are interactive across leader and state-level variables.

For example, the choice between leader-centric and state-centric approaches is especially important for testing theories of reputation and credibility (see Guisinger and Smith 2002; McGillivray and Smith 2006; Mercer 1996; Press 2005; Sartori 2005; Schelling 1966). If leaders, not states, develop reputations, then tests of reputational theories at the level of the state are misspecified and likely subject to bias. Longitudinally, observations on a state may be contaminated by the rise and fall of multiple leaders, each of whom takes office without a reputation and acts to develop one, and the effects of reputation will appear nonexistent. However, if leaders *are* the locus of reputations, then the state is simply the wrong unit of analysis.[3]

The following section specifies a model designed to answer these questions. First, leaders of the same state may differ individually in their resolve, which accounts for the effects of turnover. Second, their resolve is private information, which, combined with incentives to misrepresent, allows for the formation of reputations.[4] Finally, in order to account for the relationship between conflict outcomes and political survival, the probability of political survival is endogenous to crisis behavior. Failing to do so would impose an exogenous, or random, pattern of leadership turnover, but recent scholarship has shown that political survival is very likely endogenous to conflict outcomes (see Bueno de Mesquita and Siverson 1995; Bueno de Mesquita, Siverson, and Woller 1992; Bueno de Mesquita et al. 2003; Chiozza and Goemans 2004b; Colaresi 2004a).

Why might leaders differ in their resolve? Even if two leaders make decisions for the same state and both pursue political survival through their foreign policy (Bueno de Mesquita et al. 2003), they may differ in their assessment of the costs of pursuing international objectives through the use of military power. It is possible to identify two broad sources of such differences. First, rational individuals may hold different underlying beliefs about the nature of the world and thus learn from or interpret the same information differently (Fey and Ramsay 2006; Smith and Stam 2004). Second, personal histories—for example, in a leader's rise to power (Goldgeier 1994), relationship with her party (Schultz 2005), or military and educational experience (Gelpi and Feaver 2002)—can produce divergent patterns of learning about effective bargaining strategies or the best response to political constraints (Clark and Nordstrom 2005). As a result, leaders differ in their assessments of the costliness of conflict.

If leaders hold private information over their resolve, they may have an incentive to manipulate their adversaries' uncertainty. Return to the exchanges between Kennedy and Khrushchev at the 1961 Vienna summit. After three days of challenges in which the Soviet leader threatened to sign a unilateral peace treaty with East Germany that would forfeit Allied rights in Berlin, Kennedy felt that "he needed to convince Khrushchev that he could not be pushed around" and feared that Khrushchev believed him to be "an irresolute and inexperienced president who could be bullied into concessions on Germany and Berlin" (Dallek 2003, 413–14). Indeed, Khrushchev suspected that Kennedy's youth, inexperience, and personal politics might have made him a less resolute bargainer than Eisenhower, and he exploited an opportunity at Vienna to gauge whether this was the case (Taubman 2003). Importantly, this incentive to learn about the resolve of new incumbents, who have their own incentive to demonstrate resolve, appears to recur each time a new leader takes office.

In addition to offering answers to the questions about turnover and conflict left open by the extant theoretical literature, this approach accords with Huth's (1997) suggestion that the concept of reputation be disaggregated into more useful theoretical constructs that correspond to the locus of the reputation, and it expands on other theories of leader-specific reputations in the international relations literature (e.g., Guisinger and Smith 2002). The following section uses these insights to specify more formally

[3] Maoz and Mor (1996) find evidence of the role played by leadership turnover on the dynamics of enduring rivalries, identifying it as a shock to the strategic environment that goes unmodeled in an approach that considers states to be unitary actors. The consequences of misspecification bias in the rivalry context are analogous to the examination of state-level reputations that do not account for the independent role of leaders in the process.

[4] Some researchers have conceptualized leadership turnover as a commitment problem (Gartzke and Gleditsch 2004; McGillivray and Smith 2004), which produces inefficient outcomes in the absence of private information, but this does not account for the formation of reputations, since fully informed actors have nothing of which to be convinced.

the assumptions behind and the specification of the model.

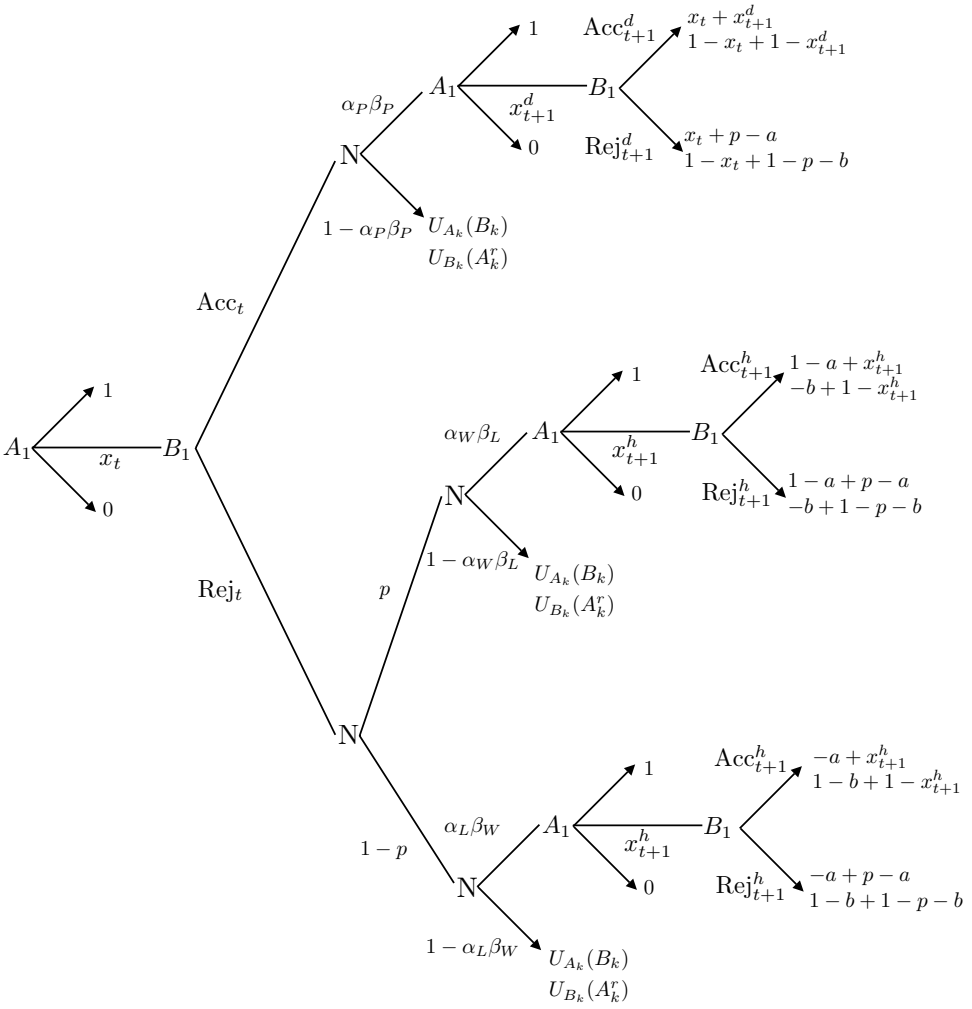
The Model

Figure 1 presents the structure of the game, in which successive leaders $k = \{1, 2\}$ of two states $J = \{A, B\}$ bargain in two sequential crises that end in costly military contests if no peaceful settlements are reached. Let A_k represent a leader of state A, the *antagonist* who makes proposals, and let B_k represent a leader of state B, the *protagonist* who accepts or rejects them. For ease of exposition, I refer below to the incumbent and successor antagonists as A_1 and A_2 and to the incumbent and successor protagonists as B_1 and B_2.

The protocol is similar to other models of bargaining under asymmetric information, in which an uninformed player makes a series of offers to an informed player who has the option of accepting or rejecting them (Filson and Werner 2002; Powell 1999, 2004). This model distinguishes itself, however, by allowing for the turnover and replacement of individually different leaders between crises: each state begins with its incumbent J_1 in office, but after the first crisis there exists some probability that the successor J_2 replaces the incumbent.

Three assumptions inform the model. First, conflict is costly, and, regardless of the outcome, belligerents would be better off ex post had they been able to strike a bargain ex ante that avoided these costs (Fearon 1995). If a crisis ends in a military contest, the winner receives all of the disputed good, whose value is normalized to one, and the

FIGURE 1 Bargaining in the Shadow of Leadership Turnover



loser receives zero. Each leader weights these outcomes by the probabilities of winning and losing, and each pays some costs for fighting, regardless of the outcome. For example, the incumbent antagonist (A_1) wins a military contest with probability p and pays costs a, so the single-period payoff from a military contest is given by $p(1) + (1 - p)(0) - a$, or $p - a$. Both protagonist leaders (B_k) win with probability $1 - p$, so their expected utility is $1 - p - b$.

Second, leaders can differ in their resolve, operationalized by allowing the costs of conflict to vary by leader. The costs of conflict are a common way of modeling resolve (i.e., Powell 1999), as they affect in a simple, linear fashion the willingness to engage in a military contest, independent of the probability of winning. This is attractive both for its ease of interpretation—the more resolute a leader, the more willing she is to fight in a military contest—and for its separability from the state-level concept of the distribution of military power, which determines the probability of victory (p). It also accords with the argument that different leaders may make different assessments of the costliness of possible conflicts.

To state it formally, the incumbent (B_1) and the successor (B_2) in the protagonist state each receive independent random draws from the uniform distribution $\theta^b \sim \mathrm{U}[\underline{b}, \bar{b}]$ to determine their costs for conflict. The resulting value, b, constitutes leader B_k's *type*. When b is low, the costs of conflict are low, and a leader is *resolute*, because she has a greater expected utility for a military contest than an *irresolute* leader, for whom b is high. The antagonist begins play against both protagonists B_k uncertain over their types, though he knows the probability distribution, θ^b, from which types are drawn. This informs the antagonist's prior beliefs, θ^b_t, over each protagonist's type. Let the antagonist's costs (a) be fixed and known to both the incumbent and the successor in the protagonist state.

Finally, each incumbent J_1's probability of political survival is determined by the outcome of the first crisis. The relationship between conflict behavior and the risk of losing office depends on domestic institutions, conflict outcomes, the international threat environment, and strategic behavior by leaders to manipulate the risk of turnover (Bueno de Mesquita et al. 2003; Chiozza and Goemans 2004b; Colaresi 2004a; Schultz 2001). The model uses a flexible representation of the probability of political survival that allows a number of possible assumptions over the relationship. Let the incumbent protagonist (B_1) survive the first crisis with probability β_i, where $i = \{W, L, P\}$. β_W is the probability of remaining in office after winning a military contest; β_L after losing a military contest; and β_P after remaining at peace. In each case, the incumbent B_1 loses office with probability $1 - \beta_i$. Let the incumbent antagonist (A_1) survive the first crisis with probability α_i, where $i = \{W, L, P\}$, while it is replaced by the successor (A_2) with probability $1 - \alpha_i$. For each leader J_1, assume that political survival is most likely after a military victory, slightly less so after remaining at peace, and still less after a military defeat (i.e., $\beta_L < \beta_P < \beta_W$ and $\alpha_L < \alpha_P < \alpha_W$).[5]

The game begins with the protagonist (B_k) in control of two disputed goods, the values of which are each normalized to one. The antagonist (A_k) has preferences for each good that are strictly opposed to the protagonist's (B_k). In other words, the antagonist wants as much of each good as possible, and the protagonist wants to keep as much of each good as possible. In his first move, the antagonist (A_1) proposes a division of the first good in which he gets x_t and the protagonist (B_1) keeps $1 - x_t$ if she accepts. If the protagonist (B_1) rejects the proposal, a military contest occurs that the antagonist (A_1) wins with probability p and the protagonist (B_1) wins with probability $1 - p$. Both leaders receive their payoffs from this first crisis before play continues.

Before bargaining occurs at time $t + 1$ over the second disputed good, Nature determines whether each incumbent J_1 survives in power or is replaced by a successor J_2. In Figure 1, the survival of both incumbents J_1 is represented by the probability that both survive, or $\alpha_i\beta_i$. The probability that at least one incumbent is replaced is $1 - \alpha_i\beta_i$, in which case payoffs are specified in reduced form as given in the figure and discussed below.

If the incumbent protagonist (B_1) survives in office, the antagonist leader (A_k), whether incumbent or successor, makes a second proposal for a division of another disputed good.[6] If B_1 has rejected the initial proposal and survived in office, play occurs on the "hawk" path, and if B_1 has accepted the initial proposal, this occurs on the "dove" path. If B_1 rejects a proposal, she behaves in a *hawkish* manner, showing a willingness to incur the

[5] While the literature on the effects of conflict outcomes on political survival does not always agree on the relative magnitudes of the probabilities specified here (i.e., Colaresi 2004a), the comparative statics derived below are robust to all orderings among β_i and α_i except when $\beta_i = \alpha_i = 0$. Additionally, assumptions about relative magnitudes are distinct from observed post-conflict survival rates, which may be subject to strategic selection that obscures true relative magnitudes. As such, the assumed relationship here is reasonable to the extent that it can predict patterns in post-conflict survival similar to those in the empirical record.

[6] Note that this implies that a leader's resolve travels across issues—i.e., there is some enduring quality about the incumbent and her preferences over the use of force in general. For a discussion about the nature of enduring reputations, see Sartori (2005) and Mercer (1996, 2005). I also assume that, should A_2 take office, he knows what information was revealed in the previous crisis. In other words, crises are public events, and incumbents' past crisis behavior is public knowledge.

costs of conflict, and if the incumbent accepts a proposal, she behaves *dovishly*. The paths are labeled in order to provide more intuition over the reputation-building discussed later: since fighting demonstrates resolve, those protagonists trying to earn a reputation for resolve will reject proposals and move onto the hawk path, while those unable to do so will accept proposals and move onto the dove path.

Definition 1. A *hawk* is an incumbent protagonist (B_1) who rejects the initial proposal.

Definition 2. A *dove* is an incumbent protagonist (B_1) who accepts the initial proposal.

If both incumbents J_1 survive, A_1 makes a second proposal x^r_{t+1}, where $r = h$ on the hawk path and $r = d$ on the dove path. B_1 can then accept the proposal, which results in a peaceful division of this second disputed good, or reject it, which leads to another military contest. In each case, the protagonist's decision ends the game.

If B_1 does not survive in power but A_1 does, the successor (B_2) takes office, and her type is determined by a fresh draw from the distribution θ^b. The antagonist (A_1) proposes x^S_{t+1}, which the successor can accept or reject. Again, acceptance results in a peaceful division of the good with A_1 receiving x^S_{t+1} and B_2 receiving $1 - x^S_{t+1}$, while rejection again leads to a military contest. B_2's choice ends the game.[7] When an incumbent loses office, he or she receives a payoff of zero.[8]

Each incumbent J_1's payoffs for bargaining with successors (J_2) are given in reduced form in order to ease interpretation of the results for the substantive discussions that follow. Thus, $U_{A_1}(B_2)$ represents A_1's expected utility for bargaining with B_2 in the second crisis. $U_{B_1}(A^r_2)$ represents B_1's expected utility for bargaining with A_2 in the second crisis, where $r = \{h, d, S\}$ and again indicates whether the incumbent's reputation is hawkish, dovish, or identical to a successor at time $t + 1$, which occurs if the antagonist has been unable to update beliefs after the first crisis.[9]

Perfect Bayesian Equilibrium

The game has a unique Perfect Bayesian Equilibrium (PBE).[10] The discussion begins with a formal statement of equilibrium strategies, followed by a more intuitive discussion of the strategic dynamics underlying them. But for a brief technical exposition of equilibrium strategies and beliefs, mathematical notation is kept to a minimum and the remaining formalities left for the appendix.

In this *semiseparating* equilibrium, some types of B_1 accept A_1's first proposal and others reject it. Thus, relatively resolute types act like hawks and earn reputations for resolve, while irresolute types accept and reveal themselves as doves. Critically, a number of types that may prefer accepting the proposal to fighting in the first crisis will reject and behave like hawks, because they can go on to receive better bargains in the second crisis. Since some, but not all, types of B_1 can act like hawks, pure separation of types does not occur, hence the label "semiseparating." Returning to the discussion of the Vienna summit, this equilibrium captures the antagonist's (i.e., Khrushchev's) incentive to test new incumbents and the protagonist's (i.e., Kennedy's) incentive to demonstrate resolve for future interactions.

Perfect Bayesian Equilibrium. At time t, A_1 believes $\theta^b_t \sim \mathrm{U}[\underline{b}, \bar{b}]$ and proposes $0 < x_t \leq 1$. B_1 accepts when $b > b_t$ and rejects when $b \leq b_t$. If B_1 accepts x_t and both J_1 survive, A_1 believes $\theta^{bd}_{t+1} \sim \mathrm{U}[b_t, \bar{b}]$ and proposes $x_t \leq x^d_{t+1} < 1$. B_1 then accepts x^d_{t+1} when $b \geq b^d_{t+1}$ and rejects when $b < b^d_{t+1}$. If B_1 rejects x_t and both J_1 survive, A_1 believes $\theta^{bh}_{t+1} \sim \mathrm{U}[\underline{b}, b_t]$ and proposes $0 < x^h_{t+1} < x_t$. B_1 then accepts x^h_{t+1} when $b \geq b^h_{t+1}$ and rejects when $b < b^h_{t+1}$. If B_1 does not survive and A_1 survives, A_1 believes $\theta^b \sim \mathrm{U}[\underline{b}, \bar{b}]$ and proposes x^S_{t+1}. B_2 accepts when $b \geq b^S_{t+1}$ and rejects when $b < b^S_{t+1}$.

In equilibrium, A_1 makes an initial screening proposal that the most resolute types of B_1 reject and that less resolute types accept. Rejection moves the game onto the hawk path, and, since the antagonist believes that only

[7] I impose a two-period limit on game play for tractability, but there is no reason to believe that the addition of subsequent stages of tenure for incumbent or successor will change the results in any substantive way, as information revelation continues with repeated play until, in the limit for some fixed costs, the game becomes one of complete information and incentives to bluff disappear endogenously. In that sense, strategies defined ought to mimic stationary strategies of an infinitely repeated game. Assuming that leaders are finitely lived is also attractive substantively if we consider that leaders believe themselves to be in either the early or the latter stages of their time in office.

[8] Goemans (2000) argues persuasively that the prospects of postwar punishment after losing office can affect war termination decisions, and while I abstract away from this in the present model, it is an interesting avenue for further research.

[9] Since the semiseparating equilibrium discussed below is unique, B_1 never enters the second crisis with a reputation where $r = S$.

[10] A PBE specifies for each player a set of sequentially rational strategies and consistent beliefs that are updated according to Bayes' Rule wherever possible.

the most resolute types would have rejected, the incumbent B_1 earns a reputation for resolve. Acceptance moves the game onto the dove path, where B_1 has a reputation for being irresolute. On each path, A_1 makes a subsequent proposal that can reduce the probability of conflict, because he makes a better judgment about which offers B_1 will accept or reject and, as a result, makes an offer that is often more likely to be accepted peacefully (the following section explains the "often" qualification).

If A_1 survives, he makes a new proposal in the second crisis based on updated beliefs over B_1's resolve. On the hawk path, knowing that he faces a resolute incumbent, he makes a more generous proposal than he does on the dove path, where he knows that B_1 is irresolute. Formally, A_1 believes that B_1's type falls within the range $[\underline{b}, b_t)$ on the hawk path and within the range $[b_t, \bar{b}]$ on the dove path. These optimal offers are $x^d_{t+1} = \frac{1}{2}(2p + \bar{b} - a)$ and $x^h_{t+1} = \frac{1}{2}(p + b_t - a)$.

Note that the upper bound of A_1's beliefs over B_1's type determines the size of each offer, $\bar{b}$ and b_t. Since $\bar{b} > b_t$, the proposal on the dove path is always more aggressive than the hawk path proposal.[11] Accepting an offer on the dove path, as well as rejecting it, is worse than doing so on the hawk path, because doves pay greater costs for conflict than hawks. Incumbents with a reputation for resolve, then, achieve better bargaining outcomes over time than incumbents with a reputation for being irresolute. This creates an incentive to appear as resolute as possible, which B_1 can do by rejecting the initial proposal and fighting.

Lemma 1. *Incumbent protagonists* (B_1) *with a reputation for resolve will achieve better bargaining outcomes over time than incumbent protagonists with a reputation for being irresolute.*

How does this incentive to dissemble affect B_1's behavior? Call all types of B_1 that have a higher expected utility for fighting than for accepting the current proposal *resolute*. Formally, $1 - p - b > 1 - x_t$, which is true when B_1's costs for conflict are sufficiently low, or when $b < x_t - p$. In equilibrium, all resolute types reject the offer. Let any type of B_1 that receives at least as much from the value of the proposal than from fighting in the current period, or $b \geq x_t - p$, be *irresolute*. If an irresolute type accepts the initial offer, she moves to the dove path with a reputation for being irresolute, and the antagonist makes a more aggressive proposal that leaves the incumbent worse off than she would be if she were able to receive the more generous proposal on the hawk path.

Rejecting proposals is costly, so not all irresolute types can afford to reject in order to mask their type. However, because A_1 makes a more generous proposal on the hawk path in the next period, some irresolute types of B_1 are willing to run the risks of conflict in the present in order to receive this more generous proposal. Those irresolute types for which rejecting the initial proposal is too expensive, despite the downstream benefits of better bargains, still accept the first proposal. Like the resolute types that reject the initial proposal, these types respond *honestly*.

Some irresolute types of B_1 do not pay such high costs for moving onto the hawk path and earning a reputation for resolve. If the resolute types fall below $b_r = x_t - p$, then irresolute types that reject the initial proposal fall in the range $[b_r, b_t)$ where b_t denotes the type of B_1 that is indifferent over accepting and rejecting the first proposal. Since types in this range are irresolute yet still reject the initial offer, they *bluff* in order to appear more resolute for the next crisis. That is, they act like a truly resolute type, fighting in the present in order to demonstrate resolve.

Definition 3. When an irresolute incumbent protagonist (B_1) rejects the initial proposal in order to appear more resolute for the next crisis, she *bluffs*.

Definition 4. When an incumbent protagonist (B_1) does not bluff, she responds *honestly*.

In addition to her resolve, B_1's incentives to bluff also depend on (1) her probability of political survival β_i, (2) A_1's probability of political survival α_i, and (3) B_1's expected utility for bargaining with the successor antagonist $U_{B_1}(A^r_2)$, where $r = \{d, h\}$ and indicates B_1's reputation. As B_1's ability to survive a military contest grows—that is, as β_L and β_W increase—so does her incentive to bluff, because B_1 stands a better chance of remaining in power after fighting to build a reputation for resolve. Accordingly, the incentive to bluff decreases as her probability of survival after remaining at peace, β_P, increases. However, as B_1 expects to do worse against the successor A_2, or as $U_{B_1}(A^r_2)$ decreases, A_1's ability to survive a military contest becomes critical: if fighting hastens the rise of a more resolute successor in A_2, then B_1 is less likely to fight in order to avoid the accession of A_2.

Lemma 2. *All resolute types,* $\underline{b} \leq b \leq b_r$, *of incumbent protagonist* (B_1) *reject the initial proposal and some irresolute types,* $b_r < b < b_t$, *reject. The most irresolute types,* $b_t \leq b \leq \bar{b}$, *accept the initial proposal.*

[11] Recall that the proposal is for the share of the good that B_1 is to transfer to A_1, so larger proposals are more aggressive.

Given B_1's incentives to bluff and A_1's incentives to test B_1's resolve, A_1 makes an initial proposal x_t that screens the most irresolute types onto the dove path, while bluffers take advantage of A_1's uncertainty and move onto the hawk path along with the resolute types. The initial proposal then entails some risk of rejection, because A_1's beliefs support the presence of particularly irresolute incumbents who are willing to accept aggressive proposals. This may explain the high tensions at the U.S.–Soviet Vienna summit in 1961: Kennedy, as the largely unknown incumbent, had reputational incentives to resist a series of threats and challenges from Khrushchev, who had his own interest in learning precisely what type of president he would be dealing with in the future.

Equilibrium behavior reproduces three dynamics that emerge in existing empirical work: turnover-driven cycles of conflict in which new leaders are more prone to conflict than longer-serving leaders (Chiozza and Goemans 2003, 2004a; Gaubatz 1991; Gelpi and Grieco 2001), the development of leader-specific reputations that affect both the probability of conflict and the distributive consequences of bargaining (Chiozza and Choi 2003), and the effects of the probability of political survival on bargaining behavior (Bueno de Mesquita et al. 2003). Thus, the model provides a unified explanation for a number of results in the existing literature where no single theoretical framework existed.

Empirical Implications

This section employs comparative statics analysis to derive some general empirical propositions related to the questions posed at the outset. First, how do new and longer-serving leaders differ in their crisis bargaining and conflict behavior? Second, how do expectations over a potential successor's resolve affect crisis bargaining with the incumbent in the present? Third, how does the probability of political survival affect incumbents' bargaining behavior? Propositions 1–6 provide answers to these questions that confirm a number of empirical claims in existing scholarship, challenge or qualify others, and generate novel predictions about how national leaders "matter" as units of analysis.

Each proposition is stated both formally and intuitively, relating changes in the probability of conflict to changes in the parameter(s) of interest and discussing connections to existing research and questions of research design where relevant.

Proposition 1. *When conflict is sufficiently costly for the antagonist* (A_k), *an increase in the incumbent protagonist's* (B_1) *time in office will decrease the probability of conflict*.

Proposition 1 states that incumbents are most prone to conflict early in their tenure, and the model indicates that this emerges from the dynamics at work between Kennedy and Khrushchev at the Vienna summit. First, new incumbents have an incentive to demonstrate resolve, because, by Lemma 1, they will receive better bargains over time, and when uncertainty is greatest, they can more effectively manipulate an antagonist's beliefs. Second, antagonists have an incentive to issue probing demands designed to test the incumbent's resolve, balancing the probability of rejection against the gains from an irresolute type's acceptance. As the informational asymmetry diminishes over time, both the incumbent's incentives to bluff and the adversary's incentives to learn will diminish, however, and the probability of war will often decline as a result.

To state the case formally, the equilibrium probability of conflict following any proposal is the probability that B_2 rejects. In the first crisis, for example, when A_1 makes the first proposal, the probability of rejection is the probability that b falls below b_t, or that B_1 is sufficiently resolute to reject the offer. Mathematically, this probability is $\frac{b_t - \underline{b}}{\overline{b} - \underline{b}}$. As A_1's uncertainty over B_1's resolve increases, his ability to judge the likelihood of rejection decreases, and the probability of war rises accordingly.[12]

Therefore, A_1 can increase the probability of peaceful acceptance on both the hawk and the dove paths. However, he will make a proposal that reduces the probability of conflict only if conflict is sufficiently costly. When conflict is not too costly for A_1, he cares less about avoiding the costs of conflict and becomes more willing to engage in a military contest. This threshold of costliness, however, differs from the hawk to dove path. When facing a B_1 with a reputation for resolve on the hawk path, A_1 makes a proposal that reduces the probability of conflict when $a \geq a_h$; when facing a B_1 with a reputation for being irresolute on the dove path, A_1 makes a conflict-reducing proposal when $a \geq a_d$.[13]

Since doves accept more aggressive proposals than hawks, it makes sense that this threshold is higher on the dove path—i.e., $a_d > a_h$. Thus, when A_1 is very resolute,

[12] I provide a formal statement of this claim in the appendix. See Equation (A.5).

[13] These cutpoints are derived by solving inequalities comparing the time-t and time-$t+1$ probabilities of rejection on each path. See the appendix for proof.

or when $a \leq a_h$, he never adjusts his second proposal in a way that reduces the probability of conflict; when A_1 is slightly less resolute, or when $a_h < a \leq a_d$, he makes a conflict-reducing proposal on the hawk path but not on the dove path; and when A_1 is least resolute, or when $a > a_d$, he makes a proposal that reduces the probability of conflict on both paths—that is, regardless of B_1's post-crisis reputation.

Proposition 1 requires an additional qualification, as it also assumes that incumbents have the opportunity to demonstrate their resolve through crisis bargaining upon taking office. Since the decrease in the probability of conflict is a function of revealed information, we should expect this hypothesis to hold true only after new incumbents experience their first crisis and take actions that allow antagonists to update their beliefs. Absent such a demonstration of resolve, we should ceteris paribus anticipate no temporal change in the probability of conflict.

This generally conforms with extant findings that associate longer tenure with a reduced probability of conflict (Chiozza and Goemans 2003, 2004a; Gaubatz 1991; Gelpi and Grieco 2001), but the agreement must be qualified with the requirements that (1) an antagonist's resolve leads him to increase the efficiency of proposals and (2) the opportunity to demonstrate resolve is available to new incumbents. Proposition 1 also specifies a single theoretical mechanism—the strategic revelation of private information—where the mechanism is ambiguous in previous work. Gelpi and Grieco (2001), for example, argue that new incumbents are likely to be targeted in crises because antagonists take advantage of initial domestic weakness and an associated willingness to make concessions. This explanation is at odds with further research on the question, however, as new leaders both attract trouble, as they are targeted in crises more often (Chiozza and Goemans 2004a), *and* look for it, initiating crises more often than longer-serving leaders (Chiozza and Goemans 2003).[14]

Proposition 1 also has clear implications for the effect of reputations for resolve in crisis bargaining. First, while incumbents with a reputation for being irresolute certainly receive less generous offers, it is not always the case that they are more susceptible to future conflict, because the size of the antagonist's dove-path offer depends on his own resolve: when conflict is sufficiently costly for the antagonist, even incumbents with a reputation for being irresolute see a reduced probability of conflict. They are exploited in a distributive sense, to be sure, but this occurs peacefully. Previous studies of leader-based reputations (e.g., Chiozza and Choi 2003) have not taken account of this interaction with the antagonist's resolve, which introduces the possibility that the probability of conflict declines over time regardless of the incumbent's reputation. As such, looking for evidence of reputations only with respect to whether conflict occurs—not the distributive consequences of subsequently peaceful bargaining—may bias empirical tests against finding reputational effects.[15]

Second, since the incentives to bluff are a function of both incumbents' (J_1) probabilities of political survival (β_i, α_i), future studies of reputation building must take these additional conditionalities into account. The observable effects of reputation, then, must be judged on how much antagonists know about incumbents, incumbents' incentives to bluff, *and* the antagonists' own resolve.

A number of alternative mechanisms may also account for the conflict behavior of new leaders, including the availability of domestic resources (Boehmer and Sobek 2005; Gelpi and Grieco 2001), the need to shore up domestic support in an unstable environment by creating conflicts (Mansfield and Snyder 1995), and the relative dominance of state over society in democratic systems following elections (Gaubatz 1991). However, to the extent that this model generates additional (and verified) predictions based on its informational dynamics, we can be more confident that the strategic revelation of private information does play an independent role in the relationship between tenure, turnover, and conflict.

Proposition 2. *When the distribution of power favors the antagonist* (A_1), *an increase in* A_1*'s expected gains from the successor*, $U_{A_1}(B_2)$, *will increase the present probability of conflict. When the distribution of power favors the protagonist* (B_1), *an increase in* A_1*'s expected gains from the successor*, $U_{A_1}(B_2)$, *will decrease the present probability of conflict*.

Proposition 2 identifies a novel way in which leadership turnover can affect the probability of conflict: through the anticipated behavior of an incumbent leader's successor. Since B_1's probability of survival depends on how she responds to the initial proposal, A_1 must consider the consequences of potential turnover when choosing how much to demand. Consider A_1's expected utility for

[14]Note that the model here, in which a rejection by B_1 leads directly to a military contest, could add escalatory steps that allow either incumbent J_1 to "initiate" a military contest. Since such a move would not occur after an acceptance—and since A_1 will be indifferent over making no offer and backing down from a proposal if doing so is costless—this model remains consistent with either side being recognized as the initiator.

[15]For discussions of the lack of empirical evidence for state-level reputations, see Huth (1999), Mercer (1996), and Press (2005).

bargaining with the successor protagonist B_2, or $U_{A_1}(B_2)$. Let this represent the amount of a disputed good that A_1 gains in expectation from the second crisis if B_1 does not survive the first crisis.

The effect of A_1's expected gains from facing B_2 depends upon his probability of winning a military contest, p, or the state-level distribution of military power. When A_1's probability of victory is high, an increasing expectation of gains from B_2 increases the probability of conflict, but when A_1's probability of victory is low, the probability of conflict decreases in these expected gains. The value of p at which the effect changes direction from positive to negative, p_2, is determined by the relative sizes of each incumbent's (J_k) probabilities of political survival after remaining at peace, winning, and losing, such that $p_2 = \frac{\alpha_P(1-\beta_P)-\alpha_L(1-\beta_W)}{\alpha_W(1-\beta_L)-\alpha_L(1-\beta_W)}$.[16]

While A_1's probability of victory determines the direction, or sign, of the effect, his beliefs over B_1's type determine the magnitude. As A_1's beliefs about the difference between the least resolute and most resolute type of B_1, or $(\bar{b} - \underline{b})$, shrink, he knows more about B_1 and is better able to judge whether or not B_2 will be a more pliant bargainer. Thus, the overall effect grows either more positive or more negative, because A_1 can make better judgments about how the future might differ from the present. On the other hand, as the difference $(\bar{b} - \underline{b})$ grows, the magnitude of the effect shrinks, since A_1 is increasingly unable to guess how B_1 and B_2 may differ.

How does this affect the probability of conflict? A_1 knows that his own victory can hasten B_1's replacement, an outcome he may actively seek if he expects to get more from B_2 than from B_1. However, when the distribution of power does not favor A_1, his chances of victory are sufficiently low that conflict only increases B_1's ability to survive in office, since she is most likely to survive after a victory. A_1 then makes a less aggressive proposal and simply waits for a potentially irresolute B_2 to take office before the second crisis, since B_1 is less likely to survive in office after remaining at peace than after a military victory. When the distribution of power favors A_1, though, he has an incentive to make aggressive proposals that increase the probability of conflict. This, in turn, renders B_1 more likely to lose office, since she is least likely to survive after a defeat.

This dynamic may have played a role in the decision to launch Operation Allied Force, the 12-week NATO bombing campaign designed to compel Serbian forces to withdraw from the separatist region of Kosovo in the former Yugoslavia. Had NATO been less confident in achieving eventual compellence—in terms of the model, had its probability of victory been lower—the fear of handing Slobodan Milosevic a victory that strengthened his hand at home might have made Operation Allied Force less attractive.

The opposite holds true as A_1 expects to gain less from bargaining with B_2 than from B_1. At high probabilities of victory, A_1 moderates his proposals in order to increase B_1's ability to remain in office, since a conflict—which A_1 is likely to win—may see B_1 replaced with a more resolute B_2. This mirrors the logic of the Israeli leadership's careful bargaining with the Palestinian Authority through much of the 1990s; demanding too much of Arafat might have destabilized his hold on authority only to bring to power a more resolute successor such as Hamas or militant elements of Fatah (Samuels 2005).

Without relaxing the assumption that incumbents and successors in the same state do not differ in their resolve, we cannot account for how the anticipated behavior of likely successors may affect an incumbent's conflict behavior in the present. This adds further weight to the argument that national leaders—not states—should be considered the primary actors in crisis bargaining. In particular, A_1's expected gains from bargaining with B_2 interact with the distribution of military power and with A_1's beliefs about B_1 to affect the probability of conflict in ways that, if omitted from empirical models, may seriously weaken inferences about the effects of both leadership tenure and the distribution of power on the probability of conflict.

Proposition 3. *An increase in the protagonist's* (B_1) *probability of political survival following a military victory will increase the probability of conflict. This effect is strongest when the distribution of power favors* B_1.

Proposition 4. *An increase in the protagonist's* (B_1) *probability of political survival following a military defeat will increase the probability of conflict. This effect is strongest when the distribution of power favors* A_1.

Proposition 5. *An increase in the protagonist's* (B_1) *probability of political survival following a peaceful settlement will decrease the probability of conflict. This effect is strongest when the distribution of power favors* A_1.

Propositions 3, 4, and 5 characterize the predicted relationships between B_1's conditional probabilities of

[16] A special case occurs when the probability of turnover is exogenous to play of the game: the numerator of the partial effect of $U_{A_1}(B_2)$ on the probability of conflict as given by Equation (A.6) in the apppendix is zero. A_1 can do nothing to affect B_1's probability of survival, and thus A_1's expected gains from bargaining with B_2 have no effect on the probability of conflict.

survival β_i and the probability of conflict.[17] B_1's probability of survival drives two dynamics of the model. First, it determines the value to A_1 of information revealed about B_1—i.e., how long that information remains useful. Second, it determines the incentives of irresolute types of B_1 to bluff, because only those that survive into the future can benefit from earning a reputation for resolve. As the probability of surviving a military contest, win or lose, decreases, bluffing becomes more costly, because, again, the costs of fighting cannot be recovered unless B_1 survives.

Begin with B_1's probability of survival after winning a military contest (β_W), which Proposition 3 states is positively associated with the probability of conflict. When A_1's probability of victory is low, B_1's incentives to reject any proposal increase, because her costs of fighting are outweighed by the benefits of remaining in office and the high probability of winning a military contest. As A_1's probability of victory increases, however, this effect decreases in magnitude, because B_1 is simply unlikely to win and discounts β_W and any benefits that accrue from postvictory survival.

Proposition 4 states that, while B_1's probability of survival after losing a military contest (β_L) is positively associated with the probability of conflict, the magnitude of the effect depends on the distribution of power. As is the case with β_W above, any increase in B_1's ability to survive a conflict in office makes fighting more attractive, which accounts for the positive sign of the effect. Additionally, the magnitude of the effect increases as a military defeat becomes more likely, or as p approaches 1, since β_L is the most likely survival probability.

While the ability to survive a conflict in power makes fighting more attractive for B_1, Proposition 5 states that the probability of survival after striking a peaceful bargain (β_P) decreases the probability of conflict. As this probability increases relative to β_W and β_L, B_1's potential gains from fighting—i.e., winning the first crisis and earning a reputation for resolve—are simply not worth the risk. In fact, as B_1 becomes increasingly likely to lose a military contest, or as p approaches 1, the benefit of fighting continues to fall and the magnitude of β_P's effect grows even stronger.

Extant studies of the relationship between an incumbent's probability of political survival and the probability of conflict have accounted for neither (1) how survival probabilities differ across conflict outcomes nor (2) interactions with the distribution of power. Failing to disaggregate the probability of survival has produced findings suggesting that the probabilities of survival and conflict increase together (Chiozza and Goemans 2003, 2004a), but such a specification may be problematic. Proposition 5, for example, states that security in office can have a *negative* effect on the probability of conflict. This need to account for multiple survival probabilities and interactive effects with the distribution of power should cast some doubt on previous work, but these comparative statics suggest a solution.

The model is also quite flexible in representing a variety of threats to political survival. Consider again the Berlin Crisis of 1961. Kennedy, despite not facing reelection until 1964, undoubtedly kept his ability to survive that election in mind during the crisis, especially if any concession to the Soviets might have looked like overcooperation with a rival (Colaresi 2004b). It is also not unprecedented that presidents, like Kennedy himself during the Cuban Missile Crisis (May and Zelikow 1997) and George H.W. Bush before the 1991 Gulf War (Powell 1995), have feared impeachment following crises if they failed to take action. Thus, while Kennedy's *immediate* survival prospects following the Berlin Crisis might have been high, the threat of impeachment and elections in the future likely ensured that the survival consequences of his decisions were foremost in both his mind and Khrushchev's.[18] But what if an incumbent's security in office is truly unaffected by crisis outcomes?

Proposition 6. *Let each incumbent's* (J_1) *probability of political survival be unaffected by crisis outcomes. When the antagonist* (A_1) *is secure in office, an increase in the protagonist's* (B_1) *probability of survival will increase the probability of conflict. When* A_1 *is insecure in office and* B_1 *expects small gains from* A_2, B_1*'s probability of political survival will increase the probability of conflict. When* A_1 *is insecure in office and* B_1 *expects large gains from* A_2, B_1*'s probability of political survival will decrease the probability of conflict*.

A special case occurs when both incumbents' (J_1) probabilities of political survival remain the same regardless of the outcome of the first crisis (i.e., $\beta_L = \beta_P = \beta_W$ and $\alpha_L = \alpha_W = \alpha_P$). In other words, the occurrence of leadership turnover is *exogenous* to the model. This renders each incumbent (J_1) unable to manipulate the probability of survival. Proposition 6 characterizes the probability of conflict as a function of B_1's probability of survival, and this relationship is conditional on both

[17] Note that comparative statics are only examined with respect to B_1's probabilities of survival, because the substantive interest of this study is A_1's uncertainty over B_1's type.

[18] I thank an anonymous reviewer for pointing out Kennedy's high probability of political survival immediately following the crisis of 1961.

A_1's probability of survival and B_1's expected utility for bargaining with A_2.

When A_1 is sufficiently likely to survive in office after the first crisis, or when $\alpha > \alpha_E$, an increase in B_1's probability of survival β increases the probability of conflict for three reasons.[19] First, bluffing no longer affects B_1's security in office. Second, A_1 is sufficiently secure in office to press harder to learn about an incumbent B_1 that he knows will remain in office with high probability. Third, given A_1's security in office, B_1 worries less about the likely outcome of a crisis with A_2 than with building a reputation that will help her against A_1 in the second crisis.

This positive relationship between β and the probability of conflict also holds when A_1 is not secure in office ($\alpha \leq \alpha_E$) as long as B_1 does not expect to gain too much more from bargaining with A_2 than from A_1 in the second crisis, or when $U_{B_1}(A_2^h)$ is not too high. (Recall that, should B_1 bluff, she earns a reputation for being resolute, hence the appropriate payoff here requires $r = h$.) Thus, when A_2 will not differ too much from his predecessor A_1, B_1's optimal bluffing behavior differs very little regardless of which antagonist A_k is in office for the second crisis.

However, when A_1 is insecure in office and B_1 expects to gain sufficiently more from A_2 than A_1 in the second crisis, the probability of conflict *decreases* in B_1's probability of survival. As B_1 becomes more secure in office, she is likely to bluff when she knows that a reputation for resolve will benefit her even more against A_2. However, A_1 knows that his own low probability of survival will prevent him from realizing sufficient gains in the future relative to provoking a fight now with B_1. Thus, as B_1's incentives to bluff increase, A_1 makes increasingly more generous proposals in an effort to avoid conflict.[20]

The positive end of the relationship in Proposition 6 is consistent with the results of recent monadic studies of the relationship between political survival and conflict (Chiozza and Goemans 2003, 2004a). However, introducing both A_1's and B_1's probabilities of survival and the likely behavior of A_2 reveals that a leader's own chances of survival can also *decrease* the probability of conflict precisely because the incentives to fight are so great.

In order for Proposition 6 to hold, incumbents must be unable to manipulate each other's probability of political survival. This may be true for disputes over goods of very little value, in which case an incumbent may win a military contest but see few survival benefits because of it, or for certain domestic institutions in which leaders are difficult to remove from office. However, the complex relationships between the probability of survival and the distribution of power that exist when conflict behavior *does* affect an incumbent's security in office (as stated in Propositions 3, 4, and 5) require that future empirical analysis attempt to distinguish crises in which turnover is endogenous to the play of the game from those in which it is exogenous.[21]

Conclusion

This study began with a series of questions about leadership turnover and international conflict yet to be answered by the growing leader-centric literature on international relations. The model offers answers to these questions by assuming that successive leaders of the same state can differ in their willingness to use force. Since incumbents have private information over their resolve, they have an incentive to build a reputation that guarantees better crisis bargaining outcomes over time. At the same time, antagonists have an incentive to test incumbents' resolve through crisis bargaining. This process of reputation building occurs in the shadow of leadership turnover, which itself is a function of an incumbent's bargaining behavior, and which brings to power a successor with new private information. Thus, each leader who takes office begins the cycle anew, and the incentives of both incumbents and antagonists effectively trap them into taking actions that increase the probability of conflict.

The cycles of reputation building and conflict resulting from this *turnover trap* explain the occurrence of international conflict as a function of (1) a leader's time in office, (2) expectations over the behavior of potential successors, and (3) the anticipated probability of political survival. While some effects of tenure and political survival have emerged from extant empirical studies, they lack a unifying, strategic explanation that the model here provides (Chiozza and Choi 2003; Chiozza and Goemans 2003, 2004a; Gelpi and Grieco 2001). Several propositions also uncover additional, strategic conditionalities

[19] See the appendix for a derivation of α_E.

[20] Note that, while the shadow of A_2 plays a role here, the shadow of B_2 does not. A_1 has no attendant concern over B_2 in this case because a is revealed to all players at the beginning of the game. Since A_1 has nothing to reveal about itself to B_k, $U_{A_1}(B_2)$ is not a function of behavior in the first crisis.

[21] A special case occurs in democratic systems when, for example, a leader approaches the end of an imposed term limit (i.e., a lame duck). In this case, the probability of survival following a crisis may very well be $\beta = 0$. In this case, when no incentive to bluff exists (because there is no future in which to recoup the costs of fighting), we should expect lame ducks to be less prone to conflict than incumbents with a positive probability of survival. Thus, the model is quite flexible in generating predictions over a number of distinct leadership selection institutions.

with an antagonist's resolve and the state-level distribution of power. Previous empirical work has not accounted for these potential sources of strategic misspecification and bias, which may cast doubt on some of their findings.

Further, the effects of a successor's anticipated behavior on the present probability of conflict, as characterized by Propositions 2 and 6, are novel hypotheses that emerge directly from the assumption that leaders may differ individually in their resolve. In addition to linking the emergence of a successor in the future to the current state-level distribution of power (i.e., the antagonist's probability of victory), these results add further weight to recent arguments for a leader-centric approach. By assuming that incumbents and their successors are identical in their resolve, previous scholarship systematically omits the effects of the shadow of the successor on the present. For example, an antagonist's incentives to hasten or forestall an incumbent's replacement by a successor can lead, respectively, to otherwise unexpected cases of deterrence success (when the successor is expected to be resolute) and deterrence failure (when the successor is expected to be irresolute). In the first case, incumbents may be dragged into otherwise avoidable conflicts by their successors, and in the second, they may effectively free ride on the threat posed by their successors to deter otherwise unavoidable conflicts. The shadow of the successor may, for example, improve the specification of and explain anomalies in empirical models of deterrence and crisis escalation.

Thus, the model can also be used to build a microfoundationally sound research design that takes into account the interaction of variables and strategic choices at multiple levels of analysis, avoiding the potential misspecification identified in previous research. For example, when the unit of analysis is the national leader, the relevant independent variables are measured with respect to the leader's characteristics (time in office, reputation, shadow of the successor) and constraints at both domestic-institutional (the risks of losing office) and international levels (the distribution of power). Such a design can avoid the pitfalls of assuming that incumbents and successors do not differ in their resolve, because it can account for changes in relevant variables at *all* levels of analysis, from leader to state to the international system.

Finally, the identification of leadership turnover as a source of private information contributes to the development of the formal study of international conflict. Most formal models of conflict that examine asymmetric information as a cause of war assume its existence without accounting for its origins, which is unsatisfying in terms of testing such models empirically; since they assume the presence of private information, they are most appropriately tested when the analyst can identify those cases in which private information is likely to exist. Failing to account for such a critical condition of a theoretical model in an empirical test can lead to misspecified models and, of course, faulty inferences.

The model presented here provides a novel solution to this problem by suggesting that private information is introduced each time a new leader takes office and that uncertainty may decrease over time through crisis bargaining behavior. In that way, the model tells an explicit story about how and when the private information and incentives to misrepresent that may generate conflict arise in international relations, and it provides one of the first explicit empirical referents for the presence of private information: the accession of new national leaders. Thus, the approach here can also improve the specification and predictive power of empirical models of international conflict by identifying what is in effect a new potential correlate of war.

Appendix

Proofs

In the unique Perfect Bayesian Equilibrium of the game, all resolute types of B_1 defined by $1 - x_t < 1 - p - b$ reject proposal x_t, some irresolute types reject and some accept, and A_k proposes x^r_{t+1} based on updated beliefs θ^{br}_{t+1} where $r = \{d, h, S\}$ and indicates whether B_k's reputation is dovish, hawkish, or absent (i.e., if B_1 is replaced by B_2 or if B_1 developed no reputation at time t).

Consider any crisis at time $t+1$ for which A_1 remains in office. A_1 proposes x^r_{t+1}, which B_k accepts or rejects to end the game. B_k accepts when $1 - x^r_{t+1} \geq 1 - p - b$ and rejects when $1 - x^r_{t+1} < 1 - p - b$. Let $b^r_{t+1} = x^r_{t+1} - p$ denote the type of B_k for which $U_{B_k}(\text{Acc}^r{}_{t+1}) = U_{B_k}(\text{Rej}^r{}_{t+1})$.

A_1's utility for proposing x^r_{t+1} is based upon updated beliefs θ^{br}_{t+1}, the support of which is $[b_t, \bar{b}]$ if $r = d$, $[\underline{b}, b_t]$ if $r = h$, and $[\underline{b}, \bar{b}]$ if $r = S$, where b_t is the type of B_1 for which $U_{B_1}(\text{Acc}_t) = U_{B_1}(\text{Rej}_t)$. For example, A_1's expected utility for proposing x^S_{t+1} is

$$U_{A_1}\left(x^S_{t+1}\right) = \int_{\underline{b}}^{b^S_{t+1}} (p - a)\theta^b \, db + \int_{b^S_{t+1}}^{\bar{b}} x^S_{t+1}\theta^b \, db$$

A_1's optimal x^S_{t+1} given $U_{A_1}(x^S_{t+1})$ must satisfy $U'_{A_1}(x^S_{t+1}) = 0$ when $U''_{A_1}(x^S_{t+1}) < 0$, or $x^S_{t+1} = \frac{2p + \bar{b} - a}{2}$. Given the support of A_1's beliefs when $r = \{d, h\}$, A_1 optimizes over $U_{A_1}(x^r_{t+1})$ in similar fashion and proposes $x^d_{t+1} = \frac{2p + \bar{b} - a}{2}$ and $x^h_{t+1} = \frac{2p + b_t - a}{2}$.

Recall that b_t denotes the type of B_1 for which $U_{B_1}(\text{Acc}_t)=U_{B_1}(\text{Rej}_t)$, subject to the constraint that $1-p-b_t<1-x_t$, which ensures that the choice is over bluffing and responding honestly. Since

$$U_{B_1}(\text{Acc}_t)=1-x_t+\beta_P(\alpha_P(1-p-b_t)+(1-\alpha_P)(1-p-b_t)) \tag{A.1}$$

and

$$U_{B_1}(\text{Rej}_t)=p\big(-b_t+\beta_L\big(\alpha_W\big(1-x^h_{t+1}\big)+(1-\alpha_W)U_{B_1}\big(A^h_2\big)\big)\big)+(1-p)(1-b_t+\beta_W\big(\alpha_L\big(1-x^h_{t+1}\big)+(1-\alpha_L)U_{B_1}\big(A^h_2\big)\big)\big),$$

where $U_{B_1}(A^h_2)$ is B_1's expected utility for bargaining with A_2 on the hawk path,

$$b_t=\frac{1}{2(1-\beta_P)+p\alpha_W\beta_L+(1-p)\alpha_L\beta_W}\times\big(2(x_t-\beta_P-p(1-\beta_P))+p\beta_L\big(2U_{B_1}\big(A^h_2\big)(1-\alpha_W)+\alpha_W(2(1-p)+a)\big)-(1-p)\beta_W\big(2U_{B_1}\big(A^h_2\big)(1-\alpha_L)+\alpha_L(2(1-p)-a)\big)\big).$$

Note that, in Equation (A.1), B_1 does not receive $U_{B_1}(A^d_2)$ because it knows that, as the most resolute type that plays on the dove path, it will reject x^d_{t+1}. If type b_t will be forced to reject at time $t+1$, why not simplify bluff at time t? If all types of B_1 pool on rejection, then at time $t+1$, A_1 retains naive priors $\theta^{bS}_{t+1}=\theta^b_t$ and makes a proposal identical to x^S_{t+1}. This is a sufficient deterrent against pooling when $U_{B_1}(\text{Acc}_t\mid b_t)\geq U_{B_I}(\text{Rej}_t\mid b_t,\,S)$ where S indicates that all types have rejected and b_t forms no reputation since A_k cannot update its beliefs. Since

$$U_{B_I}(\text{Rej}_t\mid b_t,\,S)=p\big(-b_t+\beta_L\big(\alpha_W\big(1-x^S_{t+1}\big)+(1-\alpha_W)U_{B_1}\big(A^S_2\big)\big)\big)+(1-p)\big(1-b_t+\beta_W\big(\alpha_L\big(1-x^S_{t+1}\big)+(1-\alpha_L)U_{B_1}\big(A^S_2\big)\big)\big),$$

pooling is unsustainable, because $U_{B_1}(\text{Acc}_t\mid b_t)<U_{B_I}(\text{Rej}_t\mid b_t,\,S)$ iff

$$\begin{aligned}U_{B_1}\big(A^S_2\big)&>\frac{1}{\left(\begin{array}{l}(p\beta_L(1-\alpha_W)+(1-p)\beta_W(1-\alpha_L))\\ \quad\times(4(1-\beta_P)+p\alpha_W\beta_L+(1-p)\alpha_L\beta_W)\end{array}\right)}\\&\times\big((4U_{B_1}\big(A^h_2\big)(1-\beta_P)(p\beta_L(1-\alpha_W)+(1-p)\beta_W(1-\alpha_L))\big)\\&+(p\alpha_W\beta_L+(1-p)-\alpha_L\beta_W)\\&\times(a-U_{A_1}(B_2)(p\alpha_W(1-\beta_L)+(1-p)\alpha_L-\alpha_P))\\&+\beta_P+\bar{b}(1-\beta_P)-\alpha_P\beta_P(a-p+U_{A_1}(B_2))\\&-p(\alpha_W\beta_L+\beta_P)-\alpha_L\beta_W\\&+\alpha_L\beta_W(p+(1-p)U_{A_1}(B_2))).\end{aligned} \tag{A.2}$$

Inequality (A.2) holds iff $U_{B_1}(A^S_2)$ is sufficiently larger than $U_{B_1}(A^h_2)$, which is untrue (i.e., B_1 can do no worse on the hawk path than on a path with no reputation). Therefore, pooling on Rej_t is unsustainable in equilibrium, because B_1's threat to do so is incredible ($U_{B_1}(\text{Acc}_t|b_t)\geq U_{B_I}(\text{Rej}_t|b_t,\,S)$).

A_1's utility for x_t is

$$\begin{aligned}&U_{A_1}(x_t)\\&=\int_{\underline{b}}^{b^h_{t+1}}(p(1-a+\alpha_W(\beta_L(p-a)+(1-\beta_L)U_{A_1}(B_2)))\\&\quad+(1-p)(-a+\alpha_L(\beta_W(p-a)\\&\quad+(1-\beta_W)U_{A_1}(B_2))))\theta^b\,db\\&\quad+\int_{b^h_{t+1}}^{b_t}\big(p\big(1-a+\alpha_W\big(\beta_L x^h_{t+1}+(1-\beta_L)U_{A_1}(B_2)\big)\big)\\&\quad+(1-p)\big(-a+\alpha_L\big(\beta_W x^h_{t+1}+(1-\beta_W)U_{A_1}(B_2)\big)\big)\big)\theta^b\,db\\&\quad+\int_{b_t}^{b^d_{t+1}}(x_t+\alpha_P(\beta_P(p-a)+(1-\beta_P)U_{A_1}(B_2)))\theta^b\,db\\&\quad+\int_{b^d_{t+1}}^{\bar{b}}\big(x_t+\alpha_P\big(\beta_P x^d_{t+1}+(1-\beta_P)U_{A_1}(B_2)\big)\big)\theta^b\,db.\end{aligned} \tag{A.3}$$

A_1 solves $U'_{A_1}(x_t)=0$ where $U''_{A_1}(x_t)<0$ for x_t to determine its optimal proposal.

$$
\begin{aligned}
x_t = {} & \frac{1}{2(4(1-\beta_P)+p\alpha_W\beta_L+(1-p)\alpha_L\beta_W)} \\
& \times(-4a+8p-4pU_{B_1}(A_2^h)\beta_L \\
& -4p\alpha_W\beta_L-6ap\alpha_W\beta_L+10p^2\alpha_W\beta_L \\
& +4pU_{B_1}(A_2^h)\alpha_W\beta_L-ap^2\alpha_W^2\beta_L^2+2p^3{\alpha_W}^2{\beta_L}^2 \\
& +4\beta_P+4a\beta_P-12p\beta_P+4a\alpha_P\beta_P \\
& -4p\alpha_P\beta_P+4pU_{B_1}(A_2^h)\beta_L\beta_P+4p\alpha_W\beta_L\beta_P \\
& +4ap\alpha_W\beta_L\beta_P-8p^2\alpha_W\beta_L\beta_P-4pU_{B_1}(A_2^h)\alpha_W\beta_L\beta_P \\
& +2ap\alpha_P\alpha_W\beta_L\beta_P-2p^2\alpha_P\alpha_W\beta_L\beta_P-4{\beta_P}^2 \\
& +4p{\beta_P}^2-4a\alpha_P{\beta_P}^2+4p\alpha_P{\beta_P}^2 \\
& -2(1-p)(2U_{B_1}(A_2^h)(1-\alpha_L)(1-\beta_P) \\
& +\alpha_L(2+3a-5p+(a-2p)p\alpha_W\beta_L \\
& +(-2(1+a-2p)+(p-a)\alpha_P)\beta_P))\beta_W \\
& -(a-2p)(1-p)^2{\alpha_L}^2{\beta_W}^2 \\
& -2U_{A_1}(B_2)(p\alpha_W(\beta_L-1)+\alpha_P(1-\beta_P) \\
& -(1-p)\alpha_L(1-\beta_W))(2+p\alpha_W\beta_L-2\beta_P \\
& +(1-p)\alpha_L\beta_W)+\bar{b}(2+p\alpha_W\beta_L \\
& -2\beta_P-(-1+p)\alpha_L\beta_W)^2) \qquad \text{(A.4)}
\end{aligned}
$$

Comparative Statics Analysis

Comparative statics over the probability of conflict at time t, denoted Pr(Conflict), require the probability that B_1 rejects x_t, which is the probability that $b < b_t$, as indicated by Equation (A.3). Since $\theta^b \sim \mathrm{U}[\underline{b}, \bar{b}]$ is uniformly distributed, $\Pr(\text{Conflict}) = \frac{b_t-\underline{b}}{\bar{b}-\underline{b}}$.

Proof of Proposition 1: While the proper measure of A_1's uncertainty in the model is the difference $(\bar{b}-\underline{b})$, Equation (A.4) shows that its equilibrium offer x_t is not a function of the minimum support of its beliefs $\underline{b}$. Therefore, the proper comparative static for the effects of uncertainty on the probability of war is the partial derivative over $\bar{b}$ stated below.

$$
\begin{aligned}
& \frac{\partial \Pr(\text{Conflict})}{\partial \bar{b}} \\
& = \frac{1}{(4(1-\beta_P)+p\alpha_W\beta_L+(1-p)\alpha_L\beta_W)(\bar{b}-\underline{b})^2} \\
& \times(2(a(1-\alpha_P\beta_P)+p(\alpha_P\beta_P-\alpha_W\beta_L) \\
& +(1-p)\beta_P+U_{A_1}(B_2)(-p\alpha_W(1-\beta_L) \\
& +\alpha_P(1-\beta_P)-\alpha_L(1-p)(1-\beta_W)) \\
& -(1-p)\alpha_L\beta_W+U_{B_1}(A_2^h)(-p\beta_L(1-\alpha_W) \\
& -\beta_W(1-p)(1-\alpha_L))+\underline{b}(1-\beta_P))) \qquad \text{(A.5)}
\end{aligned}
$$

Changes in the probability of conflict from time t to $t+1$ along each path are derived by solving $\frac{b_t-\underline{b}}{\bar{b}-\underline{b}} = \frac{b_{t+1}^d-b_t}{\bar{b}-\underline{b}}$ for a_d and $\frac{b_{t+1}^h-b_t}{\bar{b}-\underline{b}} = \frac{b_{t+1}^d-b_t}{\bar{b}-\underline{b}}$ for a_h. Their values are $a_d = \frac{\bar{b}^2-4\bar{b}b_t+2b_t^2+\bar{b}\underline{b}}{\bar{b}-\underline{b}}$ and $a_h = \frac{\bar{b}b_t-2b_t^2-2\bar{b}\underline{b}+3b_t\underline{b}}{\bar{b}-\underline{b}}$. □

Proof of Proposition 2:

$$
\begin{aligned}
& \frac{\partial \Pr(\text{Conflict})}{\partial U_{A_1}(B_2)} \\
& = \frac{2(p\alpha_W(1-\beta_L)+(1-p)\alpha_L(1-\beta_W)-\alpha_P(1-\beta_P)}{(p\alpha_W\beta_L+(1-p)\alpha_L\beta_W+4(1-\beta_P))(\bar{b}-\underline{b})} \\
& p_2 = \frac{\alpha_P(1-\beta_P)-\alpha_L(1-\beta_W)}{\alpha_W(1-\beta_L)-\alpha_L(1-\beta_W)} \quad \text{solves} \\
& \frac{\partial \Pr(\text{Conflict})}{\partial U_{A_1}(B_2)} = 0 \qquad \text{(A.6)}
\end{aligned}
$$

□

Proofs of Propositions 3, 4, and 5:

$$
\begin{aligned}
& \frac{\partial \Pr(\text{Conflict})}{\partial \beta_W} \\
& = \frac{1}{(p\alpha_W\beta_L+(1-p)\alpha_L\beta_W+4(1-\beta_P))^2(\bar{b}-\underline{b})} \\
& \times(2(1-p)(\alpha_L(4+a+\bar{b}-U_{A_1}(B_2) \\
& \times(p\alpha_W-(1-p)\alpha_L-4+\alpha_P))) \\
& +\alpha_L\beta_P(3+p+\bar{b}-4U_{A_1}(B_2) \\
& +\alpha_P(a-p+U_{A_1}(B_2))) \\
& -U_{B_1}(A_2^h)(4(1-\beta_P)+p\alpha_W\beta_L \\
& -\alpha_L(p\beta_L+4(1-\beta_P))))
\end{aligned}
$$

$$\frac{\partial \Pr(\text{Conflict})}{\partial \beta_L}$$
$$= \frac{1}{(p\alpha_W\beta_L + (1-p)\alpha_L\beta_W + 4(1-\beta_P))^2(\bar{b}-\underline{b})}$$
$$\times (2p(\alpha_W(4 + a + \bar{b} - U_{A_1}(B_2)$$
$$\times (4 + (1-p)\alpha_L - \alpha_P + p\alpha_W) - \beta_P(3+p)$$
$$- \beta_P(\bar{b} - 4U_{A_1}(B_2) + \alpha_P(a - p + U_{A_1}(B_2)))))$$
$$+ U_{B_1}\left(A_2^h\right)(4(1-\alpha_W)(1-\beta_P)$$
$$+ \beta_W(1-p)(\alpha_W - \alpha_L)))$$

$$\frac{\partial \Pr(\text{Conflict})}{\partial \beta_P}$$
$$= \frac{1}{(4(1-\beta_P) + p\alpha_W\beta_L + (1-p)\alpha_L\beta_W)^2(\bar{b}-\underline{b})}$$
$$\times (2(-4(1 + a - p) + p\left(4B_1\left(A_2^h\right)\right.$$
$$+ \left(3 + p + \bar{b} - 4U_{B_1}\left(A_2^h\right)\right)\alpha_W)\beta_L$$
$$+ (1-p)\left(4U_{B_1}\left(A_2^h\right) + \left(3 + p + \bar{b} - 4U_{B_1}\left(A_2^h\right)\right)\alpha_L\right)\beta_W$$
$$+ (a-p)\alpha_P(4 + p\alpha_W\beta_L + (1-p)\alpha_L\beta_W)$$
$$+ U_{A_1}(B_2)(p\alpha_W(4 - \beta_L(4-\alpha_P))$$
$$+ (1-p)\alpha_L(4 - \beta_W(4-\alpha_P))))) \qquad \square$$

Proof of Proposition 6: The partial effect of an exogenous probability of turnover is given by substituting β and α for all β_i and α_i into the relevant equations above.

$$\frac{\partial \Pr(\text{Conflict})}{\partial \beta}$$
$$= \frac{2\begin{pmatrix} -4a + 5a\alpha - 4p\alpha - 4(1-p-\alpha) \\ + \alpha\bar{b} + 4U_{B_1}\left(A_2^h\right)(1-\alpha) \end{pmatrix}}{(4 - \beta(4-\alpha))^2(\bar{b}-\underline{b})}$$

$\alpha_E = 1 - \frac{a+\bar{b}}{4(1-p-U_{B_1}(A_2^h))+5a+\bar{b}}$ solves $\frac{\partial \Pr(\text{Conflict})}{\partial \beta} = 0$ when $U_{B_1}(A_2^h) < 1 - p + a$. $\square$

References

Bennett, D. Scott, and Allan C. Stam. 2004. *The Behavioral Origins of War*. Ann Arbor: University of Michigan Press.

Boehmer, Charles R., and David Sobek. 2005. "Violent Adolescence: State Development and the Propensity for Militarized Interstate Conflict." *Journal of Peace Research* 42(1): 5–26.

Bueno de Mesquita, Bruce, and Randolph M. Siverson. 1995. "War and the Survival of Political Leaders: A Comparative Study of Regimes and Political Accountability." *American Political Science Review* 89(4): 841–55.

Bueno de Mesquita, Bruce, Randolph M. Siverson, and Gary Woller. 1992. "War and the Fate of Regimes: A Comparative Analysis." *American Political Science Review* 86(3): 638–46.

Bueno de Mesquita, Bruce, Alastair Smith, Randolph M. Siverson, and James D. Morrow. 2003. *The Logic of Political Survival*. Cambridge, MA: MIT Press.

Chiozza, Giacomo, and Ajin Choi. 2003. "Guess Who Did What: Political Leaders and the Management of Territorial Disputes, 1950–1990." *Journal of Conflict Resolution* 47(3): 251–78.

Chiozza, Giacomo, and Hein E. Goemans. 2003. "Peace Through Insecurity: Tenure and International Conflict." *Journal of Conflict Resolution* 47(4): 443–67.

Chiozza, Giacomo, and Hein E. Goemans. 2004a. "Avoiding Diversionary Targets." *Journal of Peace Research* 41(4): 423–43.

Chiozza, Giacomo, and Hein E. Goemans. 2004b. "International Conflict and the Tenure of Leaders: Is War Still *Ex Post* Inefficient?" *American Journal of Political Science* 48(3): 604–19.

Clark, David H., and Timothy Nordstrom. 2005. "Democratic Variants and Democratic Variance: How Domestic Constraints Shape International Conflict." *Journal of Politics* 67(1): 250–70.

Colaresi, Michael. 2004a. "Aftershocks: Postwar Leadership Survival, Rivalry, and Regime Dynamics." *International Studies Quarterly* 48(4): 713–27.

Colaresi, Michael. 2004b. "When Doves Cry: International Rivalry, Unreciprocated Cooperation, and Leadership Turnover." *American Journal of Political Science* 48(3): 555–70.

Dallek, Robert. 2003. *An Unfinished Life: John F. Kennedy, 1917–1963*. New York: Little, Brown and Company.

Downs, George W., and David M. Rocke. 1994. "Conflict, Agency, and Gambling for Resurrection: The Principal-Agent Problem Goes to War." *American Journal of Political Science* 38(2): 362–80.

Fearon, James D. 1995. "Rationalist Explanations for War." *International Organization* 49(3): 379–414.

Fey, Mark, and Kristopher W. Ramsay. 2006. "The Common Priors Assumption: A Comment on 'Bargaining and the Nature of War.' *Journal of Conflict Resolution* 50(4): 607–13.

Filson, Darren, and Suzanne Werner. 2002. "A Bargaining Model of War and Peace: Anticipating the Onset, Duration, and Outcome of War." *American Journal of Political Science* 46(4): 819–38.

Gartzke, Erik, and Kristian Skrede Gleditsch. 2004. "Why Democracies May Actually Be Less Reliable Allies." *American Journal of Political Science* 48(4): 775–95.

Gaubatz, Kurt Taylor. 1991. "Election Cycles and War." *Journal of Conflict Resolution* 35(2): 212–44.

Gelpi, Christopher, and Joseph M. Grieco. 2001. "Attracting Trouble: Democracy, Leadership Tenure, and the Targeting of Militarized Challenges, 1918–1992." *Journal of Conflict Resolution* 45(6): 794–817.

Gelpi, Christopher, and Peter D. Feaver. 2002. "Speak Softly and Carry a Big Stick? Veterans in the Policymaking Elite and the American Use of Force." *American Political Science Review* 96(4): 779–93.

Goemans, Hein E. 2000. *War and Punishment: The Causes of War Termination and the First World War*. Princeton, NJ: Princeton University Press.

Goldgeier, James M. 1994. *Leadership Style and Soviet Foreign Policy: Stalin, Khrushchev, Brezhnev, Gorbachev*. Baltimore: Johns Hopkins University Press.

Guisinger, Alexandra, and Alastair Smith. 2002. "Honest Threats: The Interaction of Reputation and Political Institutions in International Crises." *Journal of Conflict Resolution* 46(2): 175–200.

Horowitz, Michael, Rose McDermott, and Allan C. Stam. 2005. "Leader Age, Regime Type, and Violent International Relations." *Journal of Conflict Resolution* 49(5): 661–85.

Huth, Paul K. 1997. "Reputations and Deterrence." *Security Studies* 7(1): 72–99.

Huth, Paul K. 1999. "Deterrence and International Conflict: Empirical Findings and Theoretical Debates." *Annual Review of Political Science* 2: 25–48.

Khrushchev, Sergei N. 2000. *Nikita Khrushchev and the Creation of a Superpower*. University Park: The Pennsylvania State University Press.

Mansfield, Edward D., and Jack Snyder. 1995. "Democratization and the Danger of War." *International Security* 20(1): 5–38.

Maoz, Zeev, and Ben D. Mor. 1996. "Enduring Rivalries: The Early Years." *International Political Science Review* 17(2): 141–60.

May, Ernest R., and Philip Zelikow, eds. 1997. *The Kennedy Tapes: Inside the White House During the Cuban Missle Crisis*. Cambridge, MA: Belknap Press.

McGillivray, Fiona, and Alastair Smith. 2004. "The Impact of Leadership Turnover on Trading Relations Among States." *International Organization* 58(3): 567–600.

McGillivray, Fiona, and Alastair Smith. 2006. "Credibility in Compliance and Punishment: Leader Specific Punishments and Credibility." *Journal of Politics* 68(2): 248–58.

Mercer, Jonathan. 1996. *Reputation and International Politics*. Ithaca, NY: Cornell University Press.

Mercer, Jonathan. 2005. "Rationality and Psychology in International Politics." *International Organization* 59(1): 77–106.

Morrow, James D. 1989. "Capabilities, Uncertainty, and Resolve: A Limited Information Model of Crisis Bargaining." *American Journal of Political Science* 33(4): 941–72.

Powell, Colin L. 1995. *My American Journey*. New York: Random House.

Powell, Robert. 1999. *In the Shadow of Power*. Princeton, NJ: Princeton University Press.

Powell, Robert. 2004. "Bargaining and Learning While Fighting." *American Journal of Political Science* 48(2): 344–61.

Press, Daryl G. 2005. *Calculating Credibility: How Leaders Assess Military Threats*. Ithaca, NY: Cornell University Press.

Samuels, David. 2005. "In a Ruined Country." *The Atlantic Monthly* 296: 60–91.

Sartori, Anne E. 2005. *Deterrence by Diplomacy*. Princeton, NJ: Princeton University Press.

Schelling, Thomas C. 1966. *Arms and Influence*. New Haven, CT: Yale University Press.

Schultz, Kenneth A. 2001. "Looking for Audience Costs." *Journal of Conflict Resolution* 45(1): 32–60.

Schultz, Kenneth A. 2005. "The Politics of Risking Peace: Do Hawks or Doves Deliver the Olive Branch?" *International Organization* 59(1): 1–38.

Slantchev, Branislav. 2003. "The Principle of Convergence in Wartime Negotiations." *American Political Science Review* 47(4): 621–32.

Smith, Alastair. 1998. "International Crises and Domestic Politics." *American Political Science Review* 92(3): 623–38.

Smith, Alastair, and Allan C. Stam. 2004. "Bargaining and the Nature of War." *Journal of Conflict Resolution* 48(6): 783–813.

Tarar, Ahmer. 2006. "Diversionary Incentives and the Bargaining Approach to War." *International Studies Quarterly* 50(1): 169–88.

Taubman, William. 2003. *Khrushchev: The Man and His Era*. New York: W. W. Norton.