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Regime Type, the Fate of Leaders, and War

ALEXANDRE DEBS *Yale University*
H.E. GOEMANS *University of Rochester*

We propose and test a formal model of war and domestic politics, building on recent evidence on the relationship between regime type, the effect of war on the probability of losing office, and the consequences of losing office. The less the outcome of international interaction affects a leader's tenure and the less punitive are the consequences of losing office, the more a leader is willing to make concessions to strike a peaceful bargain. We demonstrate that our theory successfully predicts war involvement among nondemocratic regime types. Moreover, our theory offers an intuitive explanation for the democratic peace. Compared to nondemocratic leaders, the tenure of democratic leaders depends relatively little on the war outcome, and democratic leaders fare relatively well after losing office. Thus, democratic leaders should be more willing and able to avoid war, especially with other democrats.

In the past two decades, the field of international relations has witnessed a burgeoning of research on the relationship between regime type and war, as exemplified most clearly in the vast literature on the democratic peace. In this research, scholars have proposed a wide array of regime-type attributes to explain the conflict propensity of different regime types, but little or no consensus has emerged on the importance or predictive power of these attributes. As the field increasingly recognizes the fruitfulness of shifting the explanatory locus to leaders, we introduce a hitherto unexplored set of regime-type attributes, specifically how war and regime type combine to affect the fate of leaders. From these attributes, we build a new theory to explain the conflict propensity of a broad array of potential regime types that generates an intuitive explanation for the democratic peace.

Taking these two features into consideration, our model predicts that peace prevails when the cost of replacing the leader—and therefore his or her survival probability—depends relatively little on the war outcome and when the net gain of staying in office is relatively small. The logic is as follows. Any leader understands that he or she could induce his or her counterpart to prefer peace if he or she makes enough concessions at the bargaining table, but also realizes that such concessions affect his or her own survival. The size of the concessions he or she is willing to make depends on the sensitivity of his or her survival to the share of the pie obtained internationally (either peacefully or through war) as well as on the cost of losing office. Because the evidence suggests that the survival of dictators is more sensitive to the outcome of war than that of democrats and that the consequences of losing office are more punitive for dictators, the model predicts that peace is most likely when two countries are democracies.

We take advantage of the fact that our theory is built on two observable regime characteristics to demonstrate its applicability to a broader array of regime types. To that end, we examine the sample of nondemocracies post World War II, using Cheibub and Gandhi's (2004) classification. We show that although different types of dictators do not systematically differ in their sensitivity to the war outcome, they do differ systematically in their post-exit fate. Civilian dictators fare significantly better after they lose office than do military dictators and monarchs. The theory therefore predicts that civilian leaders should be least warprone, a pattern that is confirmed in the data.

We proceed as follows. The next section reviews the literature on the democratic peace, both theoretical and empirical, and highlights the challenges we face in building a satisfactory explanation of the empirical record. The third section discusses our theoretical approach, focusing on fundamental differences in the cost of replacing leaders by regime type. The fourth section presents an informal discussion of our argument (the formal model is presented in the Appendix). The next section discusses the implications of our model for a variety of regime types, and the final section concludes.

LITERATURE REVIEW

Most of the literature on regime type and war revolves around the democratic peace. To structure our discussion, we use this vast literature as a reference point.

According to Kant (2006), democracies spread a culture of "liberal peace" and are unlikely to fight because citizens, who bear the cost of war, will be careful to avoid war if possible. Following his lead, explanations of the democratic peace typically fall into two camps: cultural/normative and institutional/structural explanations (Maoz and Russett 1993). Cultural/normative explanations stress that leaders should apply the norm

Alexandre Debs is Assistant Professor, Department of Political Science, Yale University, Rosenkranz Hall, Room 311, PO Box 208301, New Haven, CT 06520-8301 (alexandre.debs@yale.edu.)

H.E. Goemans is Associate Professor, Department of Political Science, University of Rochester, 320 Harkness Hall, Rochester, NY 14627 (hgoemans@mail.rochester.edu).

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of peaceful conflict resolution they employ domestically to other states. Democracies tolerate internal opposition peacefully, and so should attempt to solve conflict with other democracies similarly peacefully (Dixon 1994; Doyle 1983; Russett 1993; Weart 1994). Structural explanations argue that democratic leaders should be constrained in their use of force because they must obtain the consent of legislators and, eventually, the electorate (Russett 1993). Put differently, in a democracy, the interests of the population (who bears the cost of war) are aligned with those of the decision maker (Babst 1964; Kant 2006).

Rational choice theorists have made significant process in formalizing institutional/structural arguments, building on the assumption that democratic leaders are more constrained, less biased, and more sensitive to the war outcome (Baliga, Lucca, and Sjostrom 2007; Bueno de Mesquita and Lalman 1992; Bueno de Mesquita et al. 1999, 2003; Filson and Werner 2004; Jackson and Morelli 2007).[1] Arguably the most influential piece in this literature is the seminal work of Bueno de Mesquita et al. (1999, 2003). In their setup, regimes differ by the relative size of their winning coalition (i.e., the set of people who must support a ruler so that he or she remains in power) as a fraction of the selectorate (i.e., the set of people with political power). Leaders offer a mix of private and public goods to their supporters and must thwart the threat of a challenger. Members of the current winning coalition run the risk of losing their access to private goods by supporting the challenger. The bigger is the winning coalition, the more likely they are to be included in the challenger's winning coalition. Therefore, rulers with a larger winning coalition enjoy a smaller incumbency advantage in the provision of private goods and must survive through the provision of public goods. Assuming that the war outcome is a public good, such leaders are reluctant to enter into conflict unless they are certain to win. Moreover, they are unlikely to be chosen as targets because they expend a lot of effort in war. Taken together, Bueno de Mesquita et al. (1999, 2003) claim, these factors explain the democratic peace.

Let us explore this argument in more detail. The timing of their game is as follows: (1) leader of nation A chooses between war and peace and, if war is selected, picks a war effort g_A; (2) leader of nation B observes the leader of nation A's action and chooses how hard to fight (picks g_B); (3) nature determines the outcome of war; and (4) domestic audiences in each country decide whether to retain their leader or defect to a political rival. Then, Bueno de Mesquita et al. (1999, 2003) claim that members of the winning coalition support the incumbent if and only if

$$(1 - g_i)\frac{R_i}{W_i} + \mu_i + V_i(z) \geq c_i + \frac{R_i}{S_i}, \qquad \textbf{(1)}$$

where R_i is the amount of resources in country i, redistributed among the winning coalition (of size W_i) if the leader stays in power and redistributed randomly among the whole selectorate (of size S_i) if the challenger comes to power, c_i is the expected quality of the challenger, μ_i is the performance of the leader on all policy dimensions, and $V_i(z)$ is the utility from the war outcome z. We see that if W_i/S_i is large, the incumbency advantage in the provision of private goods is small and the survival of the leader depends to a large extent on the war outcome z.[2]

This approach raises some difficulties. First, it is debatable whether the war outcome is a public good, and it would be preferable to rely on an explanation that does not make such an assumption. Second, by the time members of the selectorate make their decision, the war effort has already been expended and the war outcome realized. Therefore, in their model, there is no reason why the war should affect the decision to support the ruler for a rational (forward-looking) audience, particularly given that the war outcome is a public good, which is by definition nonexcludable.

Nevertheless, it may be worthwhile to keep the focus on the benefit of keeping victors (and ousting defeated losers). One story would be that victory demonstrates competence, defeat signals incompetence, and a domestic audience cares about keeping competent leaders. This is a sensible approach, but it does not answer why competence should matter more in a democracy, where power is less concentrated in the hands of the leader.[3] We believe that the conventional wisdom really builds on the fact that democrats are "more accountable" (i.e., easier to replace), than dictators. This suggests an approach where, instead of focusing on the benefit of replacing leaders by regime, we should focus on the cost of replacing them.

Taking this approach, we can in fact solve a puzzling fact for standard current theories of the democratic peace: it is difficult to order leaders in terms of their bias toward war. Take Jackson and Morelli (2007), for example. They model the intuition that the bias between a leader and the population may be lower in democracy, which then explains their lower likelihood to wage war. In their model, the "bias" of a country for war "is the ratio of the percentage that the pivotal decision-making agent stands to gain versus what he or she has at risk" from being involved in a war (Jackson and Morelli 2007, 1357–58). Unfortunately, the conventional wisdom does not generate a clear prediction on the relative bias in dictatorships and democracies. Schultz (2001a, 14–15) probably puts it best: "While the lack of institutionalized mechanisms for removing undesired leaders [in dictatorships] means that removal

[1] Other rational choice explanations of the democratic peace emphasize how different regime types generate and process information (Levy and Razin 2004; Patty and Weber 2006).

[2] The conclusion is unchanged if some fraction of the spoils of war are private goods, if that fraction is sufficiently small (Bueno de Mesquita et al. 2004, 367).

[3] Another drawback of such an approach is that it is bound to be complicated. More precisely, if we speak of learning about the competence of a leader, then we are in the framework of a game of incomplete information. Such models are relatively cumbersome and can generate multiple equilibria. Moreover, the competence of a leader on the international scene matters, in a closed model, only if there is a future interaction on the international scene. So the solution would be to write down an infinitely repeated game (of incomplete information) . . . admittedly complicated for a baseline model.

is relatively rare, it also means that the associated punishment can be quite severe. [. . .] Thus, institutions of accountability generate two countervailing effects, and it is not clear which dominates." We address this shortcoming, instead showing that the two forces are not countervailing, but rather reinforcing. Before we present our explanation, we first discuss the evidence in more detail, to make explicit the fundamentals of our explanation.

Who is More Sensitive? The Empirical Record

The fundamental question of whether democrats or autocrats are more sensitive to the war outcome is, of course, an empirical one. Previous research claims to have found that democrats are more sensitive. On closer inspection, however, these claims turn out to be unwarranted.

First, the previous literature fails to distinguish between the unconditional likelihood of losing office and the probability of losing office *conditional on the outcome of a war*. Although it is plausible—and indeed empirically supported (Chiozza and Goemans 2004)—that democratic rulers are more likely to lose office in any year, it does not follow that they are more vulnerable to the outcome of a war.

Second, the current consensus is based on shaky empirical foundations. Scholars who argue that democratic leaders are more sensitive to the outcome of war invariably cite the seminal papers by Bueno de Mesquita, Siverson, and Woller (1992) and, particularly, Bueno de Mesquita and Siverson (1995). The results in those articles, however, do not warrant that inference. For example, the baseline equation estimated by Bueno de Mesquita and Siverson is

$$\begin{aligned}\text{Leader's Postwar-Onset Political Survival} &= a + b_1\text{TenureL} - b_2\text{TenureL} * \text{Demo} - b_3 \\ &\quad \times (\text{Battle Deaths/10K})\text{L} + b_4\text{Win} - \epsilon_i\end{aligned}$$

where TenureL is the logarithm of a leader's total time in office prior to the war (plus 1) and Demo is a dummy variable for democracy.[4]

From this approach, Bueno de Mesquita and Siverson (1995) cannot conclude that democrats are more sensitive to the war *outcome*. Indeed, they impose by assumption that the war outcome has the same impact on the leader of any regime, by including a single variable ("win") that does not interact the war outcome with the regime type. Second, they do not show that democrats are more sensitive to *war*. Indeed, they analyze a sample, including only leaders who have gone to war (with no leader who stayed at peace). By interacting regime type and prior tenure in office, they show only that democrats lose power at a faster rate. This is the unconditional likelihood of losing office, which is independent of the sensitivity to war and, we claim, irrelevant for the decision to go to war.

In more recent research on a sample of all leaders from 1919 to 2003, including both leaders who fought wars and leaders who stayed at peace, Chiozza and Goemans (2004) came to a fundamentally different conclusion, contradicting the earlier claims of Bueno de Mesquita and Siverson (1995). Chiozza and Goemans (2004) provide evidence that war affects the tenure of autocratic leaders—in particular, defeat in war increases the hazard of losing office—but war, no matter whether it ends in victory, defeat, or a draw, does not significantly affect a democratic leader's hazard of losing office.

Rather than rely on competing claims in the earlier literature, we provide our own test of whether and how war affects the hazards of losing office for leaders of different regimes. Table 1 reports the results from a Cox proportional hazard model to empirically examine whether the tenure of leaders of democracies or nondemocracies is more sensitive to the outcome of war. We follow the approach presented in Chiozza and Goemans (2004). Thus, our unit of observation is the leader-year (or leader-year-spell, if there was a change of leader in a given year). We also add a frailty term as an additional unmeasured covariate. The frailty parameter is conceptually analogous to a random effect that assesses whether some leaders are more likely to leave power, all the other measured factors being equal. Two components in the model, therefore, account for the variation in the risk of losing office among leaders, the explanatory variables and frailty, with the frailty term incorporating the unmeasured heterogeneity across units. In our specification, we cluster observations (i.e., leader-years) by country. In other words, the frailty term is assumed to be constant within country groups. We cluster on countries because leaders ruling the same country are likely to have chances of survival that depend in some general way on country-specific factors that go beyond the explanatory variables in the model. In addition, we also extend the Cox hazard model to account for nonproportional hazards (Box-Steffensmeier, Reiter, and Zorn 2003).

With three minor modifications, we also rely on the same independent variables as do Chiozza and Goemans (2004). First, we operationalize trade openness with new, updated data; second, we include a variable that measures how leaders entered office in the first place; and, third, we distinguish democracies from nondemocracies and thus collapse presidential and parliamentary democracies into one category. We estimate how the state-level variables *Democracy* (aggregating presidential and parliamentary democracies), the presence of a *Civil War*, *GDP per capita* (logged), *GDP Growth*, *Trade Openness*, the change in trade openness, *Population* size (logged) as well as the leader-level variables[5] of the leader's *Age* at entry into office, the number of times the executive previously has been in office, and the manner of *Entry* (coded as 0 if by a regular process, as 1 if by an irregular or forcible

[4] In a second estimation, they also control for "Nonconstitutional Overthrow."

[5] The data on leaders come from *Archigos* version 2.9 (Goemans, Gleditsch, and Chiozza 2009); its temporal domain is January 1, 1919–December 31, 2003.

TABLE 1. Conflict Outcomes, Regime Types, and Loss of Office

	Tenure	
Variables	b	Std.Err.
Democracy	0.217	0.273
Democracy × log(*t*)	0.008	0.042
Civil War	0.675**	0.313
Civil War × log(*t*)	−0.053	0.047
GDP per capita	0.043	0.052
GDP Growth	−2.518*	0.362
Trade Openness	0.272	0.714
Tr. Open × log(*t*)	−0.125	0.097
Δ Trade Open	−0.157†	0.082
Population	−0.015	0.039
Age	0.322*	0.009
Age × log(*t*)	−0.047*	0.001
Times in Office	−0.086†	0.046
Entry	3.929*	0.267
Entry × log(*t*)	−0.600*	0.041
Challenger	−0.761*	0.223
Target	0.013	0.145
Inheritor	−0.347	0.244
Democracy Crisis Victory	−0.218	0.266
Democracy Crisis Defeat	0.137	0.369
Democracy Crisis Draw	−0.040	0.276
Nondemocracy Crisis Victory	−0.855**	0.357
Nondemocracy Crisis Defeat	0.460	0.953
Nondemocracy C. Defeat × log(*t*)	−0.028	0.136
Nondemocracy Crisis Draw	−0.467	2.046
Nondemocracy C. Draw × log(*t*)	−0.029	0.275
Democracy War Victory	−0.491	0.558
Democracy War Defeat	0.323	0.554
Democracy War Draw	0.659	0.510
Nondemocracy War Victory	−2.595**	1.184
Nondemocracy War Defeat	0.843**	0.357
Nondemocracy War Draw	−0.653	0.628
No. Obs	9,424	
No. Subjects	1,860	
No. Failures	1,698	
Log-likelihood	−9,885	
LR test	2,708	$p < .001$
Θ	0.405*	

Note: The frailty parameter θ measure the variance of a gamma distribution with mean equal to 1.
*$p < .01$, **$p < .05$, †$p < .1$.

process) affect the tenure of leaders. To examine how conflict affects the tenure of leaders, we rely on the most recent release of the ICB data (Version 7.0) to distinguish whether the leader was a *Challenger* (if so, coded as 1 for the duration of the entire conflict and 0 otherwise), a *Target* (similarly coded), or an *Inheritor*, which is a leader who inherits the conflict from a previous leader who was either a Challenger or a Target, but who was removed during the conflict. Finally, we interact the conflict outcomes with democracy and nondemocracy because these variables can then be easier assessed relative to the excluded category, peace.[6] Because tests revealed that several variables violated the proportional hazard assumption of the Cox model, we interacted these offending variables with log(*t*), as recommended by Box-Steffensmeier, Reiter, and Zorn (2003). Tests revealed that multicollinearity is not a problem.

Because the effects of Civil War, GDP per capita, GPD Growth, Trade Openness, change in trade openness, Population size, the leader's Age at entry, and the number of times the leaders previously had held office in Table 1 basically reproduce the results in Chiozza and Goemans (2004), we skip the discussion of the country and leader-level variables. For our purposes here, our main interest lies in the effect of war on the tenure of democratic and nondemocratic leaders. We separate crises and wars because crises are less costly than Wars and less likely to affect the leader's time in office. To exclude them, however, could be argued to bias results in our favor.

In Table 1, we find that the outcome of a crisis—be it victory, defeat, or a draw—does not affect the tenure of democratic leaders. Although victory in a crisis significantly decreases the risks of losing office for nondemocratic leaders, the difference between victory and defeat is not statistically significant. Draws have a similar but more temporally circumscribed effect on the tenure of nondemocratic leaders. During their first 2.5 years in office, as well as after about ten years in office, a draw does not affect the tenure of nondemocratic leaders. In the interim, however, a draw significantly increases their tenure. Notably, the overall effect of the outcome of a crisis is not significantly different for democratic and nondemocratic leaders.

When we switch to our main focus, war, Table 1 reveals that victory in war decreases the hazard of losing office, whereas defeat in war increases the hazard of losing office for nondemocratic leaders. However, neither victory nor defeat in war significantly affects the tenure of democratic leaders. Wald tests show that the difference between victory and defeat is statistically significant for nondemocratic leaders ($p < .010$), but not for democratic leaders ($p < .570$), and that the difference between victory and defeat is significantly greater for nondemocratic than for democratic leaders ($p < .078$). When we execute a joint test and compare all three potential outcomes (victory, defeat, or draw), we again find that the fate of nondemocratic leaders is indeed significantly more sensitive to the outcome of war than democratic leaders ($p < .099$).

Of course, the consequences of losing office should also matter for leaders and there is reason to believe that they differ significantly by regime type. Anecdotally, democratic leaders, especially in modern times, can look forward to a profitable retirement. As President Bush put it when asked about his plans after he leaves the White House, "I'll give some speeches, just to replenish the ol' coffers" ("In Book, Bush Peeks Ahead

[6] An Appendix with full details on the operationalization of these variables is available on the Web. http://www.rochester.edu/college/faculty/hgoemans/research.htm

TABLE 2. Regime Type and Post-exit Fate of Leaders

	Okay	Exile	Jail	Killed	Total
Nondemocracy	622 (59%)	242 (23%)	123 (12%)	72 (7%)	1,059 (58%)
Democracy	713 (93%)	21 (3%)	20 (3%)	10 (1%)	763 (42%)
Total	1,335 (73%)	263 (14%)	143 (8%)	82 (5%)	1,823 (100%)

Note: Pearson $chi^2(3) = 272.4$. $p < .001$.

to His Legacy," *New York Times*, September 2, 2007, p. 1).[7] In contrast, nondemocratic leaders such as Saddam Hussein can and indeed do anticipate significant punishment when they lose office. Yet, previous research has not documented this information rigorously and has failed to incorporate it in their explanation of the democratic peace. We take a step in this direction, examining the relationship between regime type and the posttenure fate of leaders between 1919 and 2004 using the *Archigos* data set, version 2.9 (Goemans, Gleditsch, and Chiozza 2009).[8]

Table 2 confirms the intuition that autocrats face more severe punishment after leaving office. Only a few democrats (7%) but many autocrats (41%) suffered significant punishment in the year after they lost office. Additional tests (difference of means and ANOVA) show that the difference between nondemocratic and democratic leaders is statistically highly significant ($p < .001$).[9]

Summing up, we conclude that autocrats are more sensitive to the war outcome and that they face more severe punishment than democrats after leaving office. On the first point, we note that the similar earlier results from Chiozza and Goemans (2004) have not been taken at face value. To the contrary, these results have been argued to indicate that democratic leaders are *more* sensitive to the outcome of war because of selection effects. The current literature seems to suggest two arguments to explain away the insignificant coefficients of the outcomes of war for democratic leaders. We find neither of these counterarguments convincing.

First, Reiter and Stam (2002) argue that democratic leaders select wars that they are likely to win. This would indeed introduce bias in our estimation, but it would bias the estimate of the underlying probability of victory in war, *not* the sensitivity of the leader's survival to the war outcome. In other words, if leaders pick wars that they are likely to win, then we would observe "too many victories," but conditional on a war having been fought, we can still estimate the effect of the war outcome on the survival of leaders without any bias.

Second, it could be argued that leaders select themselves into wars based on how the outcome of war affects their tenure and that for some reason democratic leaders are better at this than nondemocratic leaders. Then, to paraphrase Schultz (2001b, 32), strategic choice implies that the probability of observing such effects on the tenure of leaders is a function of their value. In other words, the greater the tenure punishment is for defeat, the less likely we would be to observe it, which might explain the insignificant coefficient of war defeat for democratic leaders. However, we should also be more likely to observe tenure rewards from victory. After all, if democratic leaders are somehow good at selecting themselves into wars, then they should select wars that would bring them increased tenure. Yet, the coefficient for war victory for democratic leaders is small and nowhere near significant. This finding casts significant doubt on any simple and straightforward selection mechanism.[10] Thus, to be convincing, those who would use a selection effects argument to reject our conclusion that democratic leaders are less sensitive to the outcome of war would need to offer two explanations. First, they would need to explain how democratic leaders pick their wars and why nondemocratic leaders cannot do the same. Second, they would need to explain why democratic leaders do not gain time in office as a result of victory, whereas nondemocratic leaders do. Until then, we believe that a relatively simple line of argument offers the most convincing explanation of these patterns. We present such an explanation, focusing on a fundamental difference in the process of replacing leaders by regime type: it is violent in dictatorships and nonviolent in democracies.

REGIME TYPE AND THE COSTS OF REPLACEMENT

Previous research on leaders and the democratic peace focused on the different benefits of replacing rulers in different regimes. In contrast, we focus on the different

[7] Bush added, "I don't know what my dad gets—it's more than 50–75" thousand dollars a speech, and "Clinton's making a lot of money." In their tax filings for the 2008 presidential campaign, the Clintons revealed they had made more than $109 million since 2000, (*New York Times*, April 5, 2008, "Clintons Made $109 Million in Last 8 Years"). For a broader discussion of the prospect of retiring leaders, see "Into the Sunset. How Ex-Leaders Adjust to Life with Less Power." *Financial Times*, Thursday, December 27, 2007, p. 7.

[8] See also Goemans (2008), which looks at the relationship between war, regime type and the process of ouster, whether regular or irregular.

[9] As a further check, we collapsed all three levels of punishment into one and regressed this on democracy, as well as on democracy and a host of other variables. In all cases, democracy was negatively and highly significantly ($p < .001$) associated with punishment. This result was also obtained when we coded punishment as 0 when leaders were "okay" or exiled, and as 1 when leaders were imprisoned or killed.

[10] It might be argued that the coefficient for war victory for democratic leaders is insignificant because their nondemocratic opponents would select themselves out of those fights. However, then democratic leaders would have incentives to bluff, and we would expect punishment for failed bluffs and defeats, which we do not find. Moreover, the effect of war defeat then should not be significant for nondemocratic leaders, but it is.

costs. We argue here that such an approach is in line with previous work on democratic theory and that it produces a simple theory that accords with the empirical evidence.

A Defining Feature of Democracy

The idea that the costliness of replacing rulers is a significant, if not the most significant, difference between dictatorship and democracy is not new. For example, Popper (1963, 124) states,

> For we may distinguish two main types of government. The first type consists of governments of which we can get rid without bloodshed—for example, by way of general elections; that is to say, the social institutions provide means by which the rulers may be dismissed by the ruled, and the social traditions ensure that these institutions will not easily be destroyed by those who are in power. The second type consists of governments which the ruled cannot get rid of except by way of a successful revolution—that is to say, in most cases, not at all. I suggest the term "democracy" as a short-hand label for a government of the first type, and the term "tyranny" or "dictatorship" for the second.

It is clear that the "competitive struggle for the people's votes," as emphasized in the traditional Schumpeterian definition of democracy, would be meaningless if candidates were not protected against the arbitrary power of the state (Schumpeter 1950). Riker (1982, 6, 7) argues,

> Almost everything [. . .] that we think of as civil liberties (the rights of a speedy trial, habeas corpus, and security against unreasonable search and seizure, for example) originated to protect politicians who feared prosecution if and when they lost office. Thus the historic purpose of these fundamental democratic liberties has been not to provide freedom as an end in itself, but to render effective both political participation and the process of choice in voting.

In the same spirit, Przeworski et al. (2000, 15) adopt a Schumpeterian definition of democracy and emphasize that regimes with no regularized competition among conflicting views enjoy a monopoly of power "buttressed by the threat or actual use of force."

This defining feature of democracy, central in our model, was also emphasized by the early students of the democratic peace. Weart (1994) states, "If required to reduce it all to a single statement, we could isolate anocratic and authoritarian regimes as those where demands for loyalty are so concentrated on a leader (or family or clique) that any citizen who works to have the leader replaced is risking severe punishment" (308). Maoz and Russett (1993) argue that, empirically, the treatment of political opponents (i.e., the annual number of violent political deaths and the number of political executions) is the single most important factor to explain the democratic peace, along with the "stability" of a regime (i.e., the length of that a political system or regime existed without fundamental change). This leads them to favor normative accounts of the democratic peace.[11] No rational choice theory of the democratic peace, however, has fully exploited this distinctive feature.

Sensitivity of Replacement Costs to the Outcome of War

Focusing on the cost of replacing leaders easily suggests why the survival of an autocrat is more, not less, sensitive to the war outcome. The process whereby a democratic leader loses office is well institutionalized and does not fundamentally depend on the outcome of conflict. Typically, democratic leaders lose office through elections and term limits. The length of a term of office and the timing of election are by and large exogenously determined and do not depend on the outcome of war.[12] Moreover, a wide range of factors other than the outcome of war typically plays an important role in democratic elections. Thus, even after Turkish Prime Minister Ecevit (Cyprus), British Prime Minister Churchill (WW II) and U.S. President George H.W. Bush (Gulf War I) led their countries to victory and supposedly signalled their foreign policy competence, all three lost the following elections.

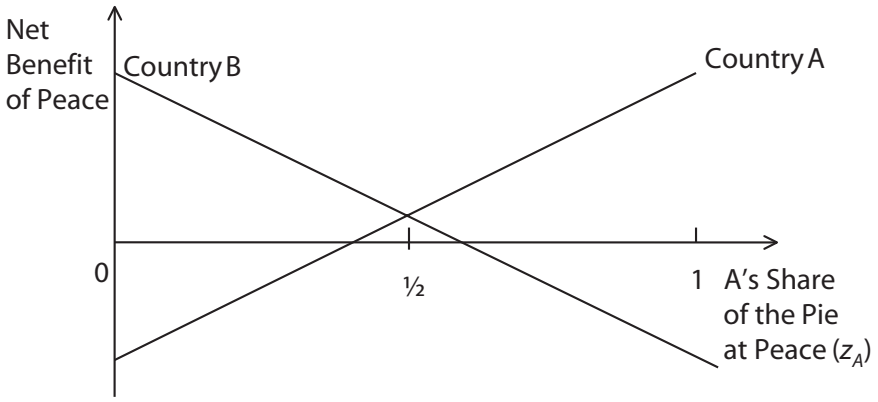
In sharp contrast, nondemocratic leaders often lose office through violent means [rebellions, civil wars, and coups (Goemans 2008)]. In such cases, the outcome of conflict can fundamentally affect the process whereby nondemocratic leaders are removed from office by several paths. First, defeat in war affects the efficacy of the leader's repressive apparatus, and thereby diminishes his or her grip on power, making any attempt to overthrow the leader more likely to succeed. Second, defeat in war can affect attempts to coordinate the opposition. In case of (major) defeat, opponents of the current leader may expect that others will support them in an attempt to overthrow the leader, not just because of demonstrated incompetence, but because of a widespread belief that sufficient numbers will rise and protest will not be punished. The outcome of conflict can thus "tip" a largely passive populace into a mass uprising or coup attempt (Kuran 1991). Similarly, victory makes such coordination less likely and thereby diminishes the nondemocratic leader's probability of losing office.

We therefore argue that a theory based on the cost of replacing leaders gives a simple explanation of the sensitivity of rulers to the war outcome. We now explain how the sensitivity of leaders to the war outcome affects the likelihood of the outbreak of war.

[11] See also Ray (1995), who takes the historical precedent of a peaceful transfer of power as one of two criteria for a state to be democratic, along with suffrage for more than half the population.

[12] A handful of democracies allows for the endogenous timing of elections. Even among those, only Thatcher's calling of elections after Britain's victory against Argentina in the Falklands/Malvinas War would suggest that Thatcher called the election early because of her victory. Even in that case, however, Thatcher would have had to call elections soon, no matter the outcome, because she approached the end of her term.

FIGURE 1. Net Benefit of Peaceful Settlement as a Funtion of A's Share of the Pie: Unitary, Risk-neutral Countries



The net benefit schedules are as follows:
Country A: $z_A - p + c_A$
Country B: $(1-z_A)-(1-p)+c_B$
where $p=1/2$, $c_i=1/20$

DISCUSSION OF OUR ARGUMENT

In this section, we sketch the logic of our argument, with full details available in the Appendix. Our starting point is the canonical model of Fearon (1995), the building block of a large literature on rational explanations for war. Assume that two countries, A and B, divide a pie of size 1, either peacefully or through war. War is an inefficient alternative to peaceful settlement, imposing costs on both countries, where the winning country extracts the full pie. Given this setup, the natural question is: why would countries rationally decide to go to war, when it is known to be an inefficient alternative to peaceful bargaining? Fearon answers the question as follows: war should be avoided if countries are unitary actors, they are risk neutral (or risk averse), and there are no bargaining frictions (more specifically, players are fully informed and there is no commitment problem).[13]

Let us illustrate the statement mathematically and graphically. Write $u_i(z_i)$ as the utility of player i from getting a share z_i of the international pie. War corresponds to a lottery where country A wins the full pie with probability p, and country B wins it with probability $1-p$. This lottery imposes a cost c_i to country i. Therefore, the utility of country A (B) for a peaceful settlement where he gets a share of the pie z_A is $u_A(z_A)$ ($u_B(1-z_A)$), and the expected utility from war is $pu_A(1)+(1-p)u_A(0)-c_A$ for A ($pu_B(0)+(1-p)u_B(1)-c_B$ for B). Throughout this analysis, we assume that each decision maker wants to maximize his or her expected utility. The canonical model of Fearon (1995) considers the following case:

Case 1 *(unitary countries, either risk neutral or risk averse).* $u_A(.)$ *and* $u_B(.)$ *are continuous, increasing, and weakly concave.*

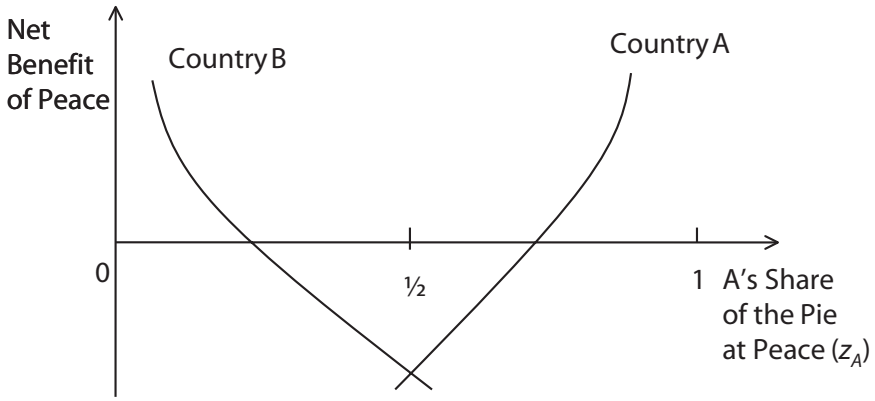
Figure 1 illustrates this case, plotting the net benefit of a peaceful settlement, where country A gets z_A (and B gets $1-z_A$). By net benefit, we mean the difference between the utility at a peaceful settlement and the expected utility of war ($u_A(z_A)-(pu_A(1)+(1-p)u_A(0)-c_A)$ for A, $u_B(1-z_A)-(pu_B(0)+(1-p)u_B(1)-c_B)$ for B).[14] The net benefit for country A is increasing in z_A, while for country B it is decreasing in z_A. The logic is simple. Getting a greater share of the pie at peace makes peace more attractive, relative to war. We now ask whether a peaceful bargain can be struck. This depends on where the net benefit schedules intersect. If they intersect above zero, there is a peaceful bargain that both countries prefer to war because there is at least one peaceful settlement that gives both countries a positive net benefit of peace. If they would cross below zero, then there would be no such peaceful settlement. Any bargain that country A prefers to war (i.e., relatively high values of z_A) would be worse than war for country B, and vice versa. In the case of unitary countries, either risk neutral or risk averse, the net benefit schedules always cross above zero. Therefore, if there is no bargaining friction, then countries should be able to avoid war (Fearon 1995).

The Fearon (1995) framework has given birth to a large literature, which attempts to explain wars by relaxing one or more of its assumptions. One natural candidate is to assume that countries are actually risk loving. In that case, countries may be willing to pay the cost of destruction so that they can run the risk of winning (and losing) the full pie. Mathematically, this

[13] Fearon (1995) also suggested that the indivisibility of the pie could generate war. For a (convincing) critique of that claim, see Powell (2006).

[14] In Figure 1, we let $p=1/2$, $u_i(z_i)=z_i$, and $c_i=1/20$ for any i.

FIGURE 2. Net Benefit of Peaceful Settlement as a Funtion of A's Share of the Pie: Unitary, Risk-loving Countries



The net benefit schedules are as follows:
Country A: z_A^2-p+c_A
Country B: $(1\text{-}z_A)^2$-$(1\text{-}p)$+ c_B
where p=1/2, c_i=1/20 for any i

model is represented as follows:

Case 2 *(unitary, risk-loving countries).* $u_A(.)$ *and* $u_B(.)$ *are continuous, increasing, and strictly convex.*

Figure 2 illustrates this case, showing that the net utility schedules may cross below zero.[15] Thus, even without bargaining friction, war may ensue. The challenge for this approach, however, is to justify general assumptions about the risk preferences of countries.

Instead, we relax the assumption that the state is a unitary actor and unpack the process by which the leader is removed from office. More precisely, we assume that after the outcome of the international interaction is realized, domestic audiences decide whether to replace the incumbent. Specifically, we focus the analysis on the consequences of losing office and the effect of the international interaction on the cost of removing the leader.

We proceed as follows. First, we model the direct cost of war as the leader's psychological or physical cost associated with the chaos of war [we write this cost $c_{L(i)}$]. Second, we unpack the leader's benefit of war into direct and indirect benefits. Directly, the leader of country i values the share of the international pie obtained by his or her country at rate $v_{L(i)}$. It corresponds to the rents he or she extracts from his or her country's share of the pie if it is a private good or the valuation that he or she places on his or her country's share of the pie if it is a public good. Indirectly, the leader values his or her country's share of the pie through its effect on his or her likelihood of staying in office. Let $I(t(i))$ be the utility of remaining in office for the leader of country i of regime type $t(i)$ and $O(t(i))$ be the utility of being ousted for the leader of country i of regime type $t(i)$. We assume that the leader prefers to remain in office rather than being ousted $(I(t(i)) > O(t(i)))$.

[15] In this example, we let $p = 1/2$, $u_i(z_i) = z_i^2$, and $c_i = 1/20$ for any i.

Second, we assume that a greater share of the pie (z_i) obtained on the international scene, everything else equal, increases the domestic cost d that the audience has to pay to remove the leader. d represents any effort expended and any personal risk incurred by the population in removing the ruler, as well as any economic loss produced in the transition from one ruler to the next. We assume that this domestic cost is increasing in z_i. For example, more favorable terms could mean that the leader has more resources to expend in ensuring his or her survival or that he or she benefits from increased legitimacy. To gain traction, compare regime types and discuss the important dimensions of a leader's "accountability" for war involvement, we impose the following functional form:

$$d(z_i, t(i), I^w) = \alpha(t(i)) + \beta(t(i))\delta(z_i, I^w), \qquad \textbf{(2)}$$

where $\alpha(t(i))$ and $\beta(t(i))$ are positive parameters and $\delta(z_i, I^w)$ is differentiable and increasing in z_i. Everything else being equal, a greater $\alpha(t(i))$ means that there is a greater cost to replace the leader in regime $t(i)$. A greater $\beta(t(i))$ means that the cost of replacement is more sensitive to the outcome of international bargaining in regime $t(i)$.

In its decision to remove the leader, the population compares the cost of replacement to the benefit of supporting the challenger. We assume that this benefit follows a uniform distribution on $[0, 1]$, and this benefit is unaffected by the outcome of international bargaining. This benefit captures the fact that there are other political dimensions (e.g., the economy) on which the challenger may appear more attractive than the incumbent. Naturally, the population keeps the incumbent in office if and only if the benefit of supporting the challenger is less than the cost of replacing the incumbent. As a result, the probability that the leader of country i remains in office when he or she obtains a

share z_i of the pie through war or peace is

$$\Pr(z_i, t(i), I^w) = d(z_i, t(i), I^w). \quad \textbf{(3)}$$

Taking stock, this model can be represented as follows:

Case 3 *(nonunitary countries)***.** *Leaders bargain over the division of a pie in the shadow of domestic accountability. The utility for the leader of country i who receives a share z_i of the pie is*

$$u_i(z_i) = z_i v_{L(i)} + O(t(i)) + [I(t(i)) - O(t(i))] \Pr(z_i, t(i), I^w) - c_{L(i)} I^w. \quad \textbf{(4)}$$

As we had before, we see that the net benefit of peace for any leader is increasing in his or her country's share of the pie at peace. In this new setup, the argument underlying this relationship is richer. First, there is a direct benefit in that the leader enjoys having a greater pie (this is the first term in (4). Second, there is now an indirect effect, in that having more favorable terms increases the likelihood that the leader remains in office (this is the third term in (4). We now want to ask whether there is a peaceful division of the pie that both leaders prefer to war.[16]

From the previous discussion, we know that, absent any effect of the international interaction on the likelihood that the leader remains in office, peace would always prevail. The key variable of interest is the function $\Pr(.,.,.)$, which tells us how the outcome of international bargaining affects a leader's survival. We want to compare the probability that a leader remains in office for a peaceful settlement where $z_A = p$ to the probability that he remains in office after going to war because it is a natural candidate for a peaceful settlement and equates the direct benefit of war and peace (to $p v_{L(i)}$). War produces a greater likelihood of remaining in office for A than the peaceful bargain where he or she receives p if $p \Pr(1, t(A), 1) + (1-p) \Pr(0, t(A), 1) > \Pr(p, t(A), 0)$ or, using Equations (2) and (3),

$$p\delta(1,1) + (1-p)\delta(0,1) > \delta(p,0). \quad \textbf{(5)}$$

War produces a greater likelihood of remaining in office for B than the peaceful bargain where he or she receives $1-p$ if $p \Pr(0, t(B), 1) + (1-p) \Pr(1, t(B), 1) > \Pr(1-p, t(B), 0)$ or, using Equations (2) and (3),

$$p\delta(0,1) + (1-p)\delta(1,1) > \delta(1-p,0). \quad \textbf{(6)}$$

Whether Equations (5) and (6) hold is difficult to tell empirically, given how little we know about the technology of leadership removal.

To make progress, we impose a few conditions. First, we assume that the technology of leadership removal is *symmetric*, so that whenever two countries A and B interact, either both Equations (5) and (6) hold or neither condition holds.[17]

If neither Equation (5) nor Equations (6) holds, then it is clear that both leaders prefer a peaceful settlement where $z_A = p$. At that settlement, peace offers the same direct benefit as war for both leaders, and it now offers strictly greater indirect benefits than war because it generates a greater probability of remaining in office. If both Equations (5) and (6) hold, war may occur.[18] Both conditions hold, for example, if the marginal cost of replacing the leader is increasing in the share of the pie that he obtains on the international scene.[19] When Equations (5) and (6) hold, it is impossible to produce a peaceful division of the pie where each leader gets the same probability of staying in office as he would get from going to war. Leaders must compromise. Can they find such a compromise? They want to avoid the direct cost of war ($c_{L(i)}$), but making concessions means that peace generates smaller indirect benefits, reducing the leader's probability of staying in office.[20] The consequences of making a concession depend on the magnitude of the stakes of remaining in office ($I(t(i)) - O(t(i))$) and the sensitivity of the cost of replacement to the share of the pie obtained internationally ($\beta(t(i))$). As each increases, holding everything else constant, the greater are the consequences of making a concession (i.e., the faster the leader's net benefit of peace decreases), either because the consequences of losing office are worse or the probability of ouster increases faster.

Graphically, as represented in Figures 3 and 4, the net utility schedule becomes steeper as either quantity increases, pivoting around the point (Pt) that provides the same probability of staying in office as going to war[21] Therefore, holding everything else constant, the schedule of net utilities cross at a lower point, and may cross below zero (meaning that no peaceful division

[16] This setup certainly takes a reduced-form approach to domestic politics, but we believe that it is a useful and simple starting point that can capture differences across regime types. We could reinterpret the current model as a reduced-form version of a richer model. For example, we could let the leader and the challenger compete for the population's support in promising different shares of the direct benefits of war if they constitute a private good that has not yet been consumed (e.g., competing over $v_{P(i)}$, if $v_{P(i)} = 1 - v_{L(i)}$). We discussed such a model in the second section. We conjecture, in our context, that the leader and the challenger would be driven to be as generous as possible with the population (as in Bertrand competition), so that there would not be any difference in their offers in equilibrium. As a result, as long as the share of the pie obtained internationally affects the cost of replacing the leader, the population's decision would be the same as in our current model.

[17] As we previously argued, the net benefit schedule for country A (B) is increasing (decreasing) in z_A, but the shape of the function depends on whether Equations (5) and (6) hold.

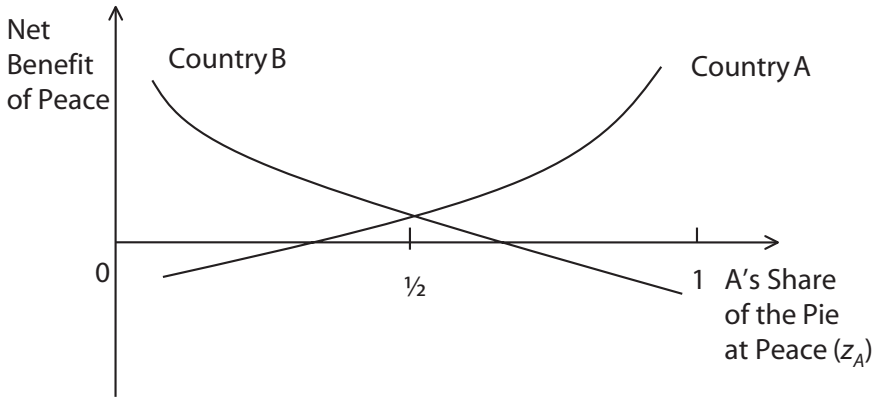
[18] In other words, this is the only case that does not produce a trivial prediction of peace. Assuming symmetry, i.e., either Equations (5) and (6) hold, or neither Equation (5) nor (6) holds, we get the comparative statics in our main claim. Equations (5) and (6) may be interpreted as describing the leader's "institutionally induced" risk preferences (Goemans and Fey 2008). However, note that assuming that Equations (5) and (6) hold is weaker than assuming that $\Pr(.,.,.)$ is convex.

[19] Figure 3 uses the following parametrization: $p = 1/2$, $v_{L(i)} = 1/3$, $I(t(i)) - O(t(i)) = 1$, $\beta(t(i)) = 1/20$, $\delta(z_i, I^w) = z_i^2 - \frac{1}{100} I^w$, $c_{L(i)} = 1/20$, for any i.

[20] It also generates smaller direct benefits, but because we do not have good proxies for $v_{L(i)}$, we do not discuss the comparative statics with respect to that parameter.

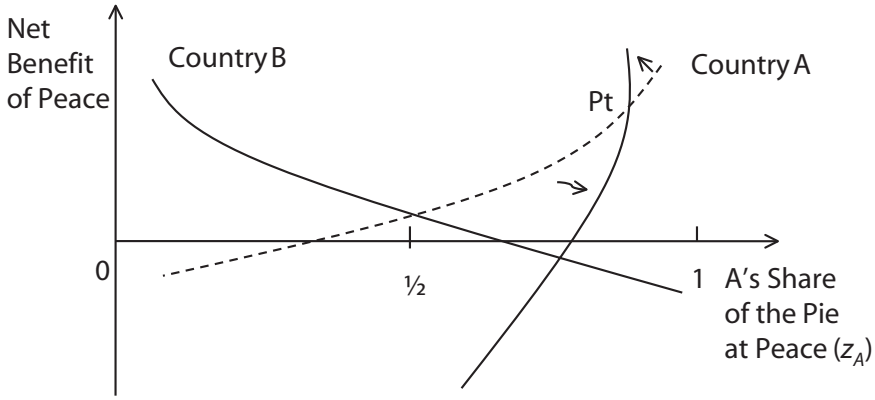
[21] Relative to Figure 3, Figure 4 adds a second type for country A, such that $I(t(A)) - O(t(A)) = 10$, $\beta(t(A)) = 1/5$, everything else remaining unchanged.

FIGURE 3. Net Benefit of Peaceful Settlement as a Funtion of A's Share of the Pie: Nonunitary Countries



The net benefit schedules are as follows:
Country A: $1/3\ (z_A - p) + 1/20(z_A^2 - (p - 1/100)) + c_{L(A)}$
Country B: $-1/3(z_A - p) + 1/20((1 - z_A)^2 - (1 - p - 1/100)) + c_{L(B)}$
where $p = 1/2$, $c_{L(i)} = 1/20$ for any i

FIGURE 4. Net Benefit of Peaceful Settlement as a Funtion of A's Share of the Pie: Nonunitary Countries



The net benefit schedules for country A (dotted line) and B as given in Figure 3:
Country A (full line): $1/3\ (z_A - p) + 2(z_A^2 - (p - 1/100)) + c_{L(A)}$
where $p = 1/2$, $c_{L(A)} = 1/20$

of the pie is preferable to war for both countries; see proposition 1 for a formal statement of this claim).

With most of the set-up of the model in place, we need to discuss only two additional features, which generate statements on the probability of war involvement of a given leader. We assume that the regime type of countries A and B and the direct cost of war for the leaders are independently distributed.[22] Then, given these two assumptions, and holding everything else constant, we get:

Claim 1. *The probability that a country is involved in war increases in the leader's private stakes and in the sensitivity of his or her survival to the outcome of the international interaction.*

COMPARING REGIME TYPES

Testing claim 1, we look for proxies of the private stakes of holding office $(I(t(i)) - O(t(i)))$ and the sensitivity of the leader to the outcome of international interaction $(\beta(t(i)))$. For the former, we use the evidence on the posttenure fate of leaders (i.e., whether they are okay, exiled, jailed, or killed). Next, we assume that a victory in war corresponds to a larger share of the pie than a defeat in war and that the outcome of war is, to some extent, instructive about the effect of changes in the peaceful bargain on a leader's survival (as we do in 3).

As we saw previously, democratic leaders have lower private stakes and are less sensitive to the outcome of

[22] We subsequently relax the second assumption and discuss dyadic explanations of the democratic peace.

war. Therefore, claim 1 predicts that democracies are less likely to be involved in war, a claim supported by the most recent scholarship (Russett n.d.). We discuss this result and how our model can generate a dyadic explanation of the democratic peace later in this section. First, we want to show how our model generates novel and broader predictions about regime type and war. To that end, we focus on the subsample of dictatorships.

Types of Nondemocracies

Although the comparative politics literature has long discussed the structural differences among nondemocratic regimes, the consequences of these theories for the outbreak of war has been relatively neglected.[23] For recent exceptions, see Peceny, Beer, and Sanchez-Terry (2002), Lai and Slater (2006), and Weeks (2010). In contrast to this literature, our work starts from fundamentally different premises and provides a theory linking the sensitivity of rulers to the war outcome and their posttenure fate to their probability of war involvement.

We disaggregate autocracies into different subtypes, according to the classification suggested by Cheibub and Gandhi (2004), which classifies autocracies (1946–96) as either monarchic, military, or civilian. To that end, we merge their data with *Archigos* (Goemans, Gleditsch, and Chiozza 2009).[24] We assess these leaders on the two fundamental factors driving our model: their sensitivity to war outcomes and their post tenure fate.

We first examine whether different types of autocracies were more or less sensitive to the outcome of war. Table 3 reports the results.[25]

Focusing on the sensitivity to the war outcome, we notice that although victory increases the tenure of leaders in all autocratic regimes, the effect is not significant. Defeat, however, significantly increases the hazard of losing office for leaders of all autocratic regimes. Wald tests show that the difference between defeat and victory is statistically significant for military dictators ($p < .001$), civilians ($p < .026$), and monarchs ($p < .020$). This difference, however, is not statistically different among the three regime types. We also compare the effect of victory, defeat, or draw for one type against the other and find no statistically significant difference. Hence, the sensitivity to the war outcome does little to distinguish the incentives of these types of autocrats for or against war.

We therefore turn to the posttenure fate of these leaders. Table 4 reports a simple cross-tabulation of the three types of autocratic leaders and their posttenure fate.

TABLE 3. Conflict Outcomes, Autocratic Types, and Loss of Office

	Tenure	
Variables	b	Std.Err.
Civilian	−0.057	0.131
Monarch	−0.312	0.302
Civil War	0.466*	0.133
GPD per capita	1.730*	0.269
GPD per cap × *ln*(*t*)	−0.242*	0.038
Growth	−2.743*	0.572
Trade Openness	−0.212	0.231
Δ Trade Openness	−0.170	0.121
Population	−0.013*	0.050
Age at Entry	0.035*	0.005
Manner of Entry	5.140*	0.468
Entry × *ln*(*t*)	−0.724*	0.066
Times in Office	−0.198†	0.121
Challenger	−1.784*	0.418
Target	−0.138	0.266
Inheritor	0.118	0.424
Military Crisis Victory	−0.906	0.652
Military Crisis Defeat	1.042†	0.623
Military Crisis Draw	−0.396	0.617
Military War Victory	−8.928	0.219
Military War Defeat	2.220*	0.555
Military War Draw	0.175	0.838
Civilian Crisis Victory	−0.688	0.626
Civilian Crisis Defeat	0.264	0.470
Civilian Crisis Draw	−1.060**	0.509
Civilian War Victory	−3.299	0.237
Civilian War Defeat	1.776*	0.684
Civilian War Draw	−1.696	0.069
Monarch Crisis Victory	−2.336	0.285
Monarch Crisis Defeat	0.870	0.673
Monarch Crisis Draw	0.201	0.592
Monarch War Victory	−2.023	0.961
Monarch War Defeat	2.840*	0.035
Monarch War Draw	0.327	0.548
Θ	0.267*	$p < .001$

Note: The frailty parameter θ measures the variance of a gamma distribution with mean equal to 1.
*$p < .01$, **$p < .05$, †$p < .1$.

Table 4 shows that civilians are by far most likely to enjoy a safe retirement. Tests (ANOVA) revealed that the difference between civilians and military autocrats is indeed significant ($p < .029$). Although Monarchs seem tantalizingly different, there are two few instances (only 25 monarchs lost office in the sample) to draw any inference. Translating this into the language of our framework, we conclude that the private stakes of holding office are smaller for civilian dictators than they are for military dictators or monarchs. Therefore, consistent with claim 1, we propose:

Conjecture 1. *The average probability of the outbreak of war should be significantly lower for civilian dictators than for military dictators and monarchs.*

[23] For recent advances in the formal study of nondemocratic regimes, see among others, Acemoglu and Robinson (2006), Besley and Kudamatsu (2008), Debs (2007a, 2007b, 2007c), Egorov and Sonin (2009), Gandhi and Przeworski (2006), Myerson (2008), Padro i Miquel (2007), and Svolik (2009).

[24] Because Cheibub and Gandhi (2004) is a country-year data set and *Archigos* is a leader-country-year data set, we took care to assign leaders to their appropriate regime type.

[25] Note that an interaction between *GDP per capita* and *Manner of Entry* and the log of time are included because these variables violated the proportional hazard assumption of the Cox model. The model has 4,145 observations, 602 subjects, and 525 failures. The I likelihood is −2648.7, the likelihood ratio test is significant with $p < .0001$.

TABLE 4. Fate of 3 Types of Nondemocratic Leaders

	Okay	Exile	Jail	Killed	Total
Monarch	7 (28%)	14 (56%)	1 (4%)	3 (12%)	25 (5%)
Military	108 (49%)	52 (24%)	34 (16%)	26 (12%)	220 (43%)
Civilian	151 (58%)	53 (20%)	41 (16%)	16 (6%)	261 (52%)
Total	266 (53%)	119 (24%)	76 (15%)	45 (9%)	506 (100%)

Note: Pearson $chi^2(6) = 23.9$. $p < .001$.

TABLE 5. Nondemocratic Regime Types and Onset of War

	War	
Variables	b	Std.Err.
Civilian	−0.351†	0.196
Monarch	0.098	0.272
Civil War	−0.246	0.189
GDP per capita	0.139†	0.081
GDP Growth	−2.181**	0.029
Trade Openness	0.030	0.260
Δ Trade Openness	−0.153	0.132
Population	0.249*	0.073
Age	−0.015†	0.008
Times in Office	−0.423	0.263
CINC	−6.484**	0.146
Military Mobilization	0.520*	0.137
Number of Borders	0.063†	0.033
Time since Previous Onset	−0.551*	0.166
$Time^2$ since Previous Onset	1.051*	0.361
$Time^3$ since Previous Onset	−0.566*	0.208
Constant	−1.953*	0.372
No. Obs.	4040	
Log-likelihood	−144.88	
Pseudo *R* square	0.158	
Wald test (16)	160.5	$p < .001$

Notes: Coefficients of each regime type must be interpreted relative to the excluded category, Military Autocrats. Standard errors are clustered on country code.
$^{**}p < .01$, $^{*}p < .05$, $^{\dagger}p < .1$.

We test this prediction in Table 5, where we focus on the outbreak of war which is coded as 1 if a leader launched a challenge or became a target that year and 0 otherwise.

The results from Table 5 show that civilian autocrats are indeed significantly less likely to become involved in war than military autocrats ($p < .074$, two-tailed test). Moreover, monarchs are not significantly different from military autocrats nor from civilian autocrats ($p < .144$). These tests provide corroborating evidence for the logic of our model. Moreover, they highlight the importance of considering the posttenure fate of leaders, which the previous literature has ignored.

Democracy vs. Nondemocracy

Although the study of nondemocratic regime types is in its relative infancy, much more has been said about the differences between dictatorships and democracies. In the discussion of the democratic peace, it remains debated and empirically inconclusive whether democracies are more peaceful overall or just toward other democracies (i.e., whether the democratic peace is monadic or dyadic). For example, some claim evidence of a "cats-and-dogs" effect, where democracy–nondemocracy dyads are more warprone than nondemocracy–nondemocracy dyads (Bennett and Stam 2004; Oneal and Russett 1997). However, more recent research seems to reject the "cats-and-dogs" effect (Bueno de Mesquita and Ray 2004; Russett n.d.; Russett and Oneal 2001) and argue for a possible monadic effect.

As we discussed previously, our model straightforwardly generates an explanation for the monadic democratic peace in that it orders dyads from most to least peaceful: democracy–democracy, democracy–dictatorship, dictatorship–dictatorship. But we note that the logic of the model can also accommodate a dyadic version, whereby the democracy–dictatorship dyad is at least as violent as the dictatorship–dictatorship dyad.

Recall that claim 1 assumes that the costs of war are independently distributed between the two countries. It could be argued, however, that the distribution of the costs is a function of the regime types in the dyad. For example, democrats may reciprocate the nonviolent norm of conflict resolution, which they experience domestically, with their democratic counterparts. They may see the other government as legitimate and find it difficult to justify the use of force. However, democrats may be suspicious of autocrats and may be more willing to use force to settle their disagreements. This is essentially the argument proposed by normative explanations of the democratic peace. As Peceny, Beer, and Sanchez-Terry (2002) and others argue, dictators may treat other dictators more favorably than they treat democrats.

Our setup can easily accommodate such arguments if we allow the distribution of the direct costs of war to be correlated. Then we show that if homogeneous dyads (democracy–democracy and dictatorship–dictatorship) produce the same distribution of costs, the democracy–democracy dyad is necessarily more peaceful than the dictatorship–dictatorship dyad for the reasons laid out in the preceding section. Mixed dyads would be more warprone than homogeneous dictatorship dyads if the leaders of mixed dyads are more likely to have a low cost of war than the leaders of homogeneous dyads (see claim 2 in the Appendix). Such an assumption seems reasonable, as noted previously.

Taking a step back, we view it as a strength of our framework that it can accommodate different viewpoints associated with the democratic peace. Nevertheless, we are reluctant to move away from the assumption of our main model (i.e., that the costs of war are independently distributed for the two leaders). We believe that it is difficult to justify, empirically, what should be the appropriate correlation of costs across a broad range of regime types. We also believe that it is important to ground our study, as much as possible, on observable characteristics of regime types to understand the conflict propensity of different regimes.

CONCLUSION

In this article, we explore the relationship between regime type, the fate of leaders and war. We focus on two hitherto unexplored attributes of regime type, the cost of replacing leaders and the consequences of losing office. Building on these assumptions, we explain the conflict propensity of a broad array of regime types. Although these are novel results, our setup is by no means limited to the study of war, and has broader implications to the study of international relations and comparative politics. Specifically, we argue that the leader's policy choice depends on how that specific policy affects his or her tenure, given his or her regime type. Thus, although democratic leaders may appear overall more accountable than nondemocratic leaders, this may well be the result of an "averaging out" effect of their likelihood to lose office as a result of a broad set of potential policies. In other words, democratic leaders may be more likely to be removed from office for (the failure) of one set of policies, whereas nondemocratic leaders may face a significantly higher probability of losing office as the result of (the failure) of another set of policies. Thus, policy concessions may be more painful for one or the other regime, depending on how that particular policy affects their tenure in office. To give some examples, it remains an open question whether democrats are more sensitive to their record on international trade, environmental policies, or redistributive policies, which would make them more or less willing to make concessions on these dimensions.

We believe, therefore, that a focus on leaders and their incentives holds great promise to explain the different policies and behavior of different regime types, not only in international relations, but also in comparative politics.

APPENDIX

This is a one-shot game with four players, leaders $L(i)$ and populations $P(i)$ in countries $i \in \{A, B\}$. Leaders divide a pie of size one in the shadow of domestic accountability. $L(i)$ picks an action a_i from a set A_i, producing either war ($I^w = 1$) or peace ($I^w = 0$). War is an inefficient alternative to peace, generating a direct cost c_j to j. A war is won by country A (B) with probability p $(1-p)$. A country gets the full international pie if it wins a war. Write z_i for the share of the international pie going to country i. j gets a direct benefit from his or her country's share of pie, valuing it at rate $v_j \geq 0$.[26]

After the international pie has been allocated, $P(i)$ decides whether to replace $L(i)$. Write r_i for the replacement decision, where $r_i = 1$ means that $P(i)$ replaces $L(i)$ and $r_i = 0$ means that it does not. Replacing $L(i)$ imposes a (domestic) cost $d(z_i, t(i), I^w)$ to $P(i)$, where $t(i)$ is the regime type of country i, and brings a benefit b_i. For tractability, we impose the functional form in Equation (2). b_i is a preference shock that follows a uniform distribution $U[0, 1]$, where the bounds 0 and 1 are "sufficiently wide."[27] Write F for the cdf of b_i. Finally, assume that $L(i)$ receives a payoff $O(t(i))$ if he or she is ousted and $I(t(i))$ if he or she is kept in office, where $I(t(i)) > O(t(i))$. Assume that $t(A)$ and $t(B)$ are independently distributed [i.e., for any $t', t'' \in T$, $prob(t(B) = t'|t(A) = t'') = prob(t(B) = t')$].

Timing of the Game

1. Regime types $(t(A), t(B))$ and direct costs of war c_j are realized and become public.
2. Leaders pick their action (a_A and a_B).
3. Countries get their share of the international pie (z_A and z_B).
4. The benefit of supporting the challenger b_i is realized in each country i and becomes public.
5. Populations decide whether to replace their leader (picking r_A and r_B, respectively).

Payoffs and Solution Concept

The utility of $L(i)$, $i \in \{A, B\}$ is given in Equation (4), where $Pr(z_i, t(i), I^w)$ is the probability that $L(i)$ remains in office. The utility of $P(i)$ is

$$U_{P(i)}(z_i, I^w) = v_{P(i)} z_i - I^w c_{P(i)} + r_i[b_i - d(z_i, t(i), I^w)].$$

We solve for a subgame-perfect Nash equilibrium. We impose the following restrictions. First, we assume that war obtains if and only if there is no division of the pie $(z_A, 1 - z_A)$ that both leaders prefer to war. We believe that this is a sensible solution concept that holds for a large array of bargaining protocols. As a result, we do not specify which actions a_i are taken in equilibrium. Instead, we focus on the outcome of international interaction I^w.

Solution of the Model

We solve the game by backward induction. Clearly, the population does not replace its leader, or $r_i = 0$, if and only if the costs are greater than the benefits:

$$b_i < d(z_i, t(i), I^w). \quad \textbf{(7)}$$

Using the uniform distribution $U[0, 1]$, a leader thus stays in power with probability

$$\begin{aligned} Pr(z_i, t(i), I^w) &= F(d(z_i, t(i), I^w)) = d(z_i, t(i), I^w) \\ &= \alpha(t(i)) + \beta(t(i))\delta(z_i, I^w). \quad \textbf{(8)} \end{aligned}$$

[26] We do not impose any restriction on whether the international pie is a public or a private good. For example, we could impose $v_{L(i)} + v_{P(i)} = 1$, interpreting v_j as the share z_i going to player j.

[27] By "sufficiently wide," we mean, loosely, that the probability of removal is strictly between 0 and 1. Clearly, the results hold if the preference shock is distributed uniformly on $[l, h]$, where $l \leq 0, h \geq 0$. However, we choose the current formulation for ease of notation.

For tractability, we assume that the replacement technology, $d(z_i, t(i), I^w) = \alpha(t(i)) + \beta(t(i))\delta(z_i, I^w)$, is *symmetric* [i.e., either (*i*) Equations (5) and (6) both hold; or (*ii*) neither Equation (5) nor Equation (6) holds. Then we can show:

Proposition 1. *If neither Equation (5) nor Equation (6) holds, war does not occur. If both Equations (5) and (6) hold, then in equilibrium, for any L(i), and everything else being equal,*

- **(a)** *There is a cut-off* $\underline{c} \in \mathbb{R}^+ \cup \{\infty\}$ *such that war occurs if and only if the leader's direct cost of war* ($c_{L(i)}$) *is strictly lower than* $\underline{c}$.
- **(b)** *Either (i) war happens for any value of the level of the replacement cost function* $\alpha(t(i))$*, or (ii) war never happens for any* $\alpha(t(i))$.
- **(c)** *There is a cut-off* $\gamma_1 \in \mathbb{R}^+ \cup \{\infty\}$ *such that war happens if and only if the sensitivity of the cost of replacement* ($\beta(t(i))$) *is strictly greater than* γ_1.
- **(d)** *There is a cut-off* $\gamma_2 \in \mathbb{R}^+ \cup \{\infty\}$ *such that war happens if and only if the leader's private stakes* ($I(t(i)) - O(t(i))$) *are strictly greater than* γ_2.

Proof. Write $N_i(z_A, c_{L(i)}, t(i))$ for the net benefit of a peaceful bargain where country A gets z_A, for the leader of country i, given a cost of war $c_{L(i)}$ and a regime type $t(i)$. We have

$$\begin{aligned} &N_A(z_A, c_{L(A)}, t(A)) \\ &\quad = v_{L(A)}(z_A - p) + c_{L(A)} + \beta(t(A))[I(t(A)) - O(t(A))] \\ &\qquad \times [\delta(z_A, 0) - [p\delta(1,1) + (1-p)\delta(0,1)]] \end{aligned} \tag{9}$$

and

$$\begin{aligned} &N_B(z_A, c_{L(B)}, t(B)) \\ &\quad = -v_{L(B)}(z_A - p) + c_{L(B)} + \beta(t(B))[I(t(B)) - O(t(B))] \\ &\qquad \times [\delta(1 - z_A, 0) - [p\delta(0,1) + (1-p)\delta(1,1)]]. \end{aligned} \tag{10}$$

By assumption,

$$\begin{aligned} I^w = 1 \Leftrightarrow \nexists z'_A \in [0,1] | N_A(z'_A, c_{L(A)}, t(A)) \\ \geq 0, N_B(z'_A, c_{L(B)}, t(B)) \geq 0. \end{aligned} \tag{11}$$

Therefore, if neither Equation (5) nor Equation (6) holds, $I^w = 0$ because $N_A(p, c_{L(A)}, t(A)) \geq 0$, $N_B(p, c_{L(B)}, t(B)) \geq 0$. Now assume that both Equations (5) and (6) hold.

(*a*) follows from $\frac{\partial N_i(z_A, c_{L(i)}, t(i))}{\partial c_{L(i)}} > 0$.

(*b*) is immediate from Equations (9) and (10).

Let us prove (*c*) for $i = A$ [which is without loss of generality because both Equations (5) and (6) hold].

First assume that $N_B(0, c_{L(B)}, t(B)) < 0$. From $\frac{\partial N_B(z_A, c_{L(B)}, t(B))}{\partial z_A} < 0$, we get $N_B(z_A, c_{L(B)}, t(B)) < 0$ for any z_A and $I^w = 1\ \forall \beta(t(A))$. In other words, $\gamma_1 = \infty$.

Second, assume that $N_B(0, c_{L(B)}, t(B)) \geq 0$. Then there exists $\overline{z}_A^B \in [0,1]$ such that $N_B(z_A, c_{L(B)}, t(B)) \geq 0 \Leftrightarrow z_A \leq \overline{z}_A^B$. To simplify notation, extend $\delta(z_A, 0)$ and $N_A(z_A, c_{L(A)}, t(A))$ to any $z_A \geq 0$ and define z_A^A such that

$$\delta\left(z_A^A, 0\right) = p\delta(1,1) + (1-p)\delta(0,1).$$

Given Equation (5), we have $p < z_A^A$ and $N_A(z_A^A, c_{L(A)}, t(A)) > 0\ \forall \beta(t(A))$.

If $z_A^A \leq \overline{z}_A^B$, then $N_B(z_A^A, c_{L(B)}, t(B)) \geq 0$ and $I^w = 0\ \forall \beta(t(A))$. In other words, $\gamma_1 = 0$.

If $z_A^A > \overline{z}_A^B$, then $I^w = 0 \Leftrightarrow N_A(\overline{z}_A^B, c_{L(A)}, t(A)) \geq 0$. Given that $z_A^A > \overline{z}_A^B$, $\frac{\partial N_A(\overline{z}_A^B, c_{L(A)}, t(A))}{\partial \beta(t(A))} < 0$ and the conclusion follows immediately.

The proof of (*d*) follows the same steps as (*c*). ■

We will assume that both Equations (5) and (6) hold from now because it is the assumption that does not produce a trivial prediction that peace always prevails. Alternatively, we could assume that either Equation (5) or Equation (6) holds, with some probability, or that neither Equation (5) nor Equation (6) holds, and we would get the same results.

Let $f_c(c_{L(A)}, c_{L(B)} | t(A), t(B))$ be the joint pdf of the costs of war and $f_c(c_{L(A)} | t(A))$ and $f_c(c_{L(B)} | t(B))$ be the marginal pdfs. We assume that the support of each marginal pdf is the set of positive real numbers $\mathbb{R}^+$. We impose the following condition:

Condition 1. (Costs are Independently Distributed) For every $c_{L(A)} \in \mathbb{R}^+$, $c_{L(B)} \in \mathbb{R}^+$,

$$\begin{aligned} f(c_{L(A)}, c_{L(B)} | t(A), t(B)) &= f_c(c_{L(A)} | t(A)) f_c(c_{L(B)} | t(B)) \\ &= f_c(c_{L(A)}) f_c(c_{L(B)}). \end{aligned}$$

Then we show that claim 1 holds, i.e., $I(t') - O(t') < I(t'') - O(t'')$ or $\beta(t') < \beta(t'')$ imply that, for any $i \in \{A, B\}$,

$$prob(I^w = 1 | t(i) = t') < prob(I^w = 1 | t(i) = t''). \tag{12}$$

Proof. Let us prove the case $i = A$ [the case $i = B$ follows by the same logic because both Equations (5) and (6) hold]. Let us prove the comparative statics for $\beta(t(A))$ [the comparative statics for $I(t(A)) - O(t(A)]$, clearly, follow the same logic. The probability that country A gets involved in war as a function of its regime type t' is

$$\begin{aligned} prob(I^w = 1 | t(A) = t') = \sum_t prob(I^w = 1 | (t(A), \\ t(B)) = (t', t)) prob(t(B) = t). \end{aligned}$$

Write $c(t(A), t(B), c_{L(B)})$ for the cut-off $\underline{c}$ described in proposition 1 (*a*). From proposition 1 (*c*), $c(t', t(B), c_{L(B)}) \leq c(t'', t(B), c_{L(B)})$. Now note that $c(t', t(B), c_{L(B)}) < c(t'', t(B), c_{L(B)})$ for a set of positive measure, i.e., whenever

$$c_{L(B)} \in [\max\{-N_B(0, 0, t(B)), 0\}, -N_B(p, 0, t(B))). \tag{13}$$

Indeed, $N_B(p, 0, t(B)) < 0$ given Equation (6). Next, $N_B(0, 0, t(B)) > N_B(p, 0, t(B))$ because $\frac{\partial N_B(z_A, 0, t(B))}{\partial z_A} < 0$. Finally, if Equation (13) holds, then $\overline{z}_A^B \in [0, p)$ and $c(t(A), t(B), c_{L(B)}) = -N_A\left(\overline{z}_A^B, 0, t(A)\right)$, which satisfies $c(t', t(B), c_{L(B)}) < c(t'', t(B), c_{L(B)})$. We then have

$$\begin{aligned} &prob(I^w = 1 | (t(A), t(B)) = (t', t)) \\ &\quad = \int_0^\infty \int_0^{c(t(A), t(B), c_{L(B)})} f(c_{L(A)}, c_{L(B)} | t(A), \\ &\qquad t(B)) dc_{L(A)} dc_{L(B)} \\ &\quad = \int_0^\infty \int_0^{c(t(A), t(B), c_{L(B)})} f_c(c_{L(A)}) f_c \\ &\qquad \times (c_{L(B)}) dc_{L(A)} dc_{L(B)} \\ &\quad = \int_0^\infty f_c(c_{L(B)}) F_c(c(t(A), t(B), c_{L(B)})) dc_{L(B)}, \end{aligned}$$

where F_c is the cdf of f_c. Thus, $prob(I^w = 1 \mid (t(A), t(B)) = (t', t)) < prob(I^w = 1 \mid (t(A), t(B)) = (t'', t))$ because $c(t', t(B), c_{L(B)}) \leq c(t'', t(B), c_{L(B)})$, with the inequality being strict for a set of values $c_{L(B)}$ of positive measure, and the support of each marginal pdf is $\mathbb{R}^+$. Equation (12) then follows immediately. ■

Democracy and Nondemocracy

Let the set of regime types $T = \{D, N\}$, where D stands for democracy and N for nondemocracy. Given the previous arguments, we have $\alpha(N) > \alpha(D)$, $\beta(N) > \beta(D)$, $I(N) - O(N) > I(D) - O(D)$. Therefore, assuming Equation (1) (direct costs are independently distributed), claim 1 implies that a democracy has a lower rate of war involvement than a nondemocracy ($prob(I^w = 1 \mid t(A) = D) < prob(I^w = 1 \mid t(A) = N)$).

Now assume that costs are correlated between the leaders of country A and B. For simplicity, we consider the case where $c_{L(i)}$ belongs to a finite set C. Then we show:

Claim 2. *Let*

$$\begin{aligned} prob((c_{L(A)}, c_{L(B)}) = (c', c'') \mid (t(A), t(B)) = (D, D)) \\ = prob((c_{L(A)}, c_{L(B)}) \\ = (c', c'')|(t(A), t(B)) = (N, N)) \end{aligned} \tag{14}$$

for any c',$c'' \in C$. Then

(*i*)

$$\begin{aligned} prob(I^w = 1 \mid (t(A), t(B)) = (D, D)) \\ \leq prob(I^w = 1|(t(A), t(B)) = (N, N)). \end{aligned}$$

(*ii*) *There is a set C, a distribution of correlated costs and a distribution of regime types prob(t(i) = t) such that*

$$\begin{aligned} prob(I^w = 1|(t(A), t(B)) = (D, D)) \\ < prob(I^w = 1|(t(A), t(B)) = (N, N)) \\ < prob(I^w = 1|(t(A), t(B)) = (D, N)) \end{aligned} \tag{15}$$

$$prob(I^w = 1|t(A) = D) < prob(I^w = 1|t(A) = N). \tag{16}$$

Proof. (*i*) Write $c(t(A), t(B), c_{L(B)})$ for the cut-off $\underline{c}$ described in proposition 1 (*a*). From proposition 1 (*c*), (*d*), we have

$$c(D, D, c_{L(B)}) \leq c(N, D, c_{L(B)}) \leq c(N, N, c_{L(B)}). \tag{17}$$

Therefore,

$$\begin{aligned} prob(I^w = 1|(t(A), t(B)) = (D, D)) \\ = \sum_{c' \in C} \sum_{c'' < c(D,D,c')} prob((c_{L(A)}, c_{L(B)}) \\ = (c', c'')|(t(A), t(B)) = (D, D)) \\ = \sum_{c' \in C} \sum_{c'' < c(D,D,c')} prob((c_{L(A)}, c_{L(B)}) \\ = (c', c'')|(t(A), t(B)) = (N, N)) \\ \leq \sum_{c' \in C} \sum_{c'' < c(N,N,c')} prob((c_{L(A)}, c_{L(B)}) \\ = (c', c'')|(t(A), t(B)) = (N, N)) \\ = prob(I^w = 1|(t(A), t(B)) = (N, N)), \end{aligned}$$

where the second equality follows from Equation (14) and the inequality follows from Equation (17).

(*ii*) Let $p = 1/2$, $C = \{\underline{c}, \overline{c}\}$, where

$$\begin{aligned} \underline{c} = \beta(D)(I(D) - O(D)) \\ \times \left[\frac{1}{2}\delta(1, 1) + \frac{1}{2}\delta(0, 1) - \delta\left(\frac{1}{2}, 0\right)\right] \end{aligned} \tag{18}$$

$$\begin{aligned} \overline{c} = \beta(N)(I(N) - O(N)) \\ \times \left[\frac{1}{2}\delta(1, 1) + \frac{1}{2}\delta(0, 1) - \delta\left(\frac{1}{2}, 0\right)\right] \end{aligned} \tag{19}$$

and

$$\begin{aligned} prob((c_{L(A)}, c_{L(B)}) = (c', c'')|(t(A), t(B)) = (D, N)) \\ = \begin{cases} 0 & \text{if } c' = \overline{c} \\ \theta_1 & \text{if } (c', c'') = (\underline{c}, \underline{c}) \\ 1 - \theta_1 & \text{if } (c', c'') = (\underline{c}, \overline{c}) \end{cases} \end{aligned} \tag{20}$$

$$\begin{aligned} prob((c_{L(A)}, c_{L(B)}) = (c', c'')|(t(A), t(B)) = (t, t)) \\ = \begin{cases} 0 & \text{if } c' \neq c'' \\ \theta_2 & \text{if } (c', c'') = (\underline{c}, \underline{c}) \\ 1 - \theta_2 & \text{if } (c', c'') = (\overline{c}, \overline{c}) \end{cases} \end{aligned} \tag{21}$$

with $\theta_1 > \theta_2 > 0$.

Note that $N_i(1/2, \underline{c}, D) = N_i(1/2, \overline{c}, N) = 0$. Given $\frac{\partial N_i(z_i, c_{L(i)}, t(i))}{\partial c_{L(i)}} > 0$, $prob(I^w = 1|(t(A), t(B)) = (D, D)) = 0$; $prob(I^w = 1|(t(A), t(B)) = (N, N)) = \theta_2$; $prob(I^w = 1|(t(A), t(B)) = (D, N)) = \theta_1$. (15) follows from $\theta_1 > \theta_2 > 0$. To prove Equation (16), note that

$$\begin{aligned} prob(I^w = 1|t(A) = t') = \sum_{t'' \in \{D,N\}} prob(I^w = 1|(t(A), \\ t(B)) = (t', t''))prob(t(B) = t'') \end{aligned}$$

so that

$$prob(I^w = 1|t(A) = D) = \theta_1 prob(t(B) = N)$$

$$\begin{aligned} prob(I^w = 1|t(A) = N) = \theta_1 prob(t(B) = D) \\ + \theta_2 prob(t(B) = N) \end{aligned}$$

and

$$\begin{aligned} prob(I^w = 1|t(A) = D) < prob(I^w = 1|t(A) = N) \\ \Leftrightarrow \frac{prob(t(B) = N)}{prob(t(B) = D)} < \frac{\theta_1}{\theta_1 - \theta_2}. \end{aligned}$$

■

REFERENCES

Acemoglu, Daron, and James A. Robinson. 2006. *Economic Origins of Dictatorship and Democracy*. New York: Cambridge University Press.

Babst, Dean V. 1964. "Elective Governments: A Force for Peace." *The Wisconsin Sociologist* 2: 9–14.

Baliga, Sandeep, David O. Lucca, and Tomas Sjostrom. 2007. "Domestic Political Survival and International Conflict: Is Democracy Good for Peace?" Northwestern University. Mimeo.

Bennett, D. Scott, and Allan C. Stam. 2004. *The Behavioral Origins of War*. Ann Arbor: University of Michigan Press.
Besley, Timothy, and Masayuki Kudamatsu. 2008. "Making Autocracy Work." In Institutions and Economic. Performance, ed. Elhanan Helpman. Cambridge, Mass.: Harvard University Press pp. 452–510.
Box-Steffensmeier, Janet M., Dan Reiter, and Christopher J.W. Zorn. 2003. "Nonproportional Hazards and Event History Analysis in International Relations." *Journal of Conflict Resolution* 47 (1): 33–53.
Bueno de Mesquita, Bruce, and David Lalman. 1992. *War and Reason: Domestic and International Imperatives*. New Haven, CT: Yale University Press.
Bueno de Mesquita, Bruce, James D. Morrow, Randolph M. Siverson, and Alastair Smith. 1999. "An Institutional Explanation of the Democratic Peace." *American Political Science Review* 93 (4): 791–807.
Bueno de Mesquita, Bruce, James D. Morrow, Randolph M. Siverson and Alastair Smith. 2004. "Testing Novel Implications from the Selectorate Theory of War." *World Politics* 56 (3): 363–88.
Bueno de Mesquita, Bruce, and James Lee Ray. 2004. "The National Interest versus Individual Political Ambition: Democracy, Autocracy, and the Reciprocation of Force and Violence in Militarized Interstate Disputes." In *The Scourge of War: New Extensions of an Old Problem*, ed. Paul F. Diehl. Ann Arbor: University of Michigan Press, 94–119.
Bueno de Mesquita, Bruce, and Randolph M. Siverson. 1995. "War and the Survival of Political Leaders: A Comparative Study of Regime Types 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 (4): 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.
Cheibub, José Antonio, and Jennifer Gandhi. 2004. "Classifying Political Regimes: A Sixfold Classification of Democracies and Dictatorships." Presented at the Annual Meeting of the American Political Science Association. Chicago.
Chiozza, Giacomo, and H.E. Goemans. 2004. "International Conflict and the Tenure of Leaders: Is War Still *Ex Post* Inefficient?" *American Journal of Political Science* 48 (3): 604–19.
Debs, Alexandre. 2007*a*. "Media and Divide-and-Rule." University of Rochester. Mimeo.
Debs, Alexandre. 2007*b*. "Political Strength and Economic Efficiency in a Multi-Agent State." University of Rochester. Mimeo.
Debs, Alexandre. 2007*c*. "The Wheel of Fortune: Agency Problems in Dictatorship." University of Rochester. Mimeo.
Dixon, William J. 1994. "Democracy and the Peaceful Settlement of International Conflict." *American Political Science Review* 88 (1): 14–32.
Doyle, Michael W. 1983. "Kant, Liberal Legacies, and Foreign Affairs." *Philosophy and Public Affairs* 12 (3): 205–35.
Egorov, Georgy, and Konstantin Sonin. 2009. "Dictators and Their Viziers: Endogenizing the Loyalty-Competence Trade-off." *Journal of the European Economic Association* [forthcoming] .
Fearon, James D. 1995. "Rationalist Explanations for War." *International Organization* 49 (3): 379–414.
Filson, Darren, and Suzanne Werner. 2004. "Bargaining and Fighting: The Impact of Regime Type on War Onset, Duration, and Outcomes." *American Journal of Political Science* 48 (2): 296–313.
Gandhi, Jennifer, and Adam Przeworski. 2006. "Cooperation, Cooptation, and Rebellion under Dictatorships." *Economics and Politics* 18 (1): 1–26.
Goemans, H.E. 2008. "Which Way Out? The Manner and Consequences of Losing Office." *Journal of Conflict Resolution* 53 (6): 771–94.
Goemans, H.E., Kristian Skrede Gleditsch, and Giacomo Chiozza. 2009 "Introducing Archigos: A Data Set of Political Leaders, 1875–2003." *Journal of Peace Research*. 46 (2): 269–83.
Goemans, H.E., and Mark Fey. 2008. "Risky but Rational: War as an Institutionally Induced Gamble." *Journal of Politics* 71 (1): 35–54.
International Crisis Behavior Project. 2007. "ICB Version 7.0 (1918–2004)." www.cidcm.umd.edu/icb/. (Accessed July 1, 2010).
Jackson, Matthew O., and Massimo Morelli. 2007. "Political Bias and War." *American Economic Review* 97 (4): 1353–73.
Kant, Immanuel. 2006. "Toward Perpetual Peace: A Philosophical Sketch." In *Toward Perpetual Peace and Other Writings on Politics, Peace, and History*, ed. Pauline Kleingeld. Trans. David L. Colclasure. New Haven, CT: Yale University Press, 67–109.
Kuran, Timur. 1991. "Now Out of Never: The Element of Surprise in the East European Revolution of 1989." *World Politics* 44 (1): 7–48.
Lai, Brian, and Dan Slater. 2006. "Institutions of the Offensive: Domestic Sources of Dispute Initiation in Authoritarian Regimes." *American Journal of Political Science* 50 (1): 113–26.
Levy, Gilat, and Ronny Razin. 2004. "It Takes Two: An Explanation for the Democratic Peace." *Journal of the European Economic Association* 2 (1): 1–29.
Maoz, Zeev, and Bruce Russett. 1993. "Normative and Structural Causes of Democratic Peace, 1946–1986." *American Political Science Review* 87 (3): 624–38.
Myerson, Roger. 2008. "The Autocrat's Credibility Problem and Foundations of the Constitutional State." *American Political Science Review* 102 (1): 125–39.
Oneal, John R., and Bruce M. Russett. 1997. "The Classical Liberals Were Right: Democracy, Interdependence, and Conflict, 1950–1985." *International Studies Quarterly* 41 (2): 267–93.
Padro i Miquel, Gerard. 2007. "The Control of Politicians in Divided Societies: The Politics of Fear." *Review of Economic Studies* 74 (4): 1259–74.
Patty, John, and Roberto A. Weber. 2006. "Agreeing to Fight: An Explanation of the Democratic Peace." *Politics, Philosophy & Economics* 5 (3): 305–20.
Peceny, M., Caroline C. Beer, and S. Sanchez-Terry. 2002. "Dictatorial Peace?" *American Political Science Review* 96 (1): 15–26.
Popper, Karl R. 1963. *The Open Society and Its Enemies. Vol. I. The Spell of Plato*. New York: Harper & Row.
Powell, Robert. 2006. "War as a Commitment Problem." *International Organization* 60 (1): 169–203.
Przeworski, Adam, Michael E. Alvarez, José Antonio Cheibub, and Fernando Limongi. 2000. *Democracy and Development: Political Institutions and Well-being in the World, 1950–1990*. Cambridge: Cambridge University Press.
Ray, James Lee. 1995. *Democracy and International Conflict: An Evaluation of the Democratic Peace Proposition*. Columbia: University of South Carolina Press.
Reiter, Dan, and Allan C. Stam. 2002. *Democracies at War*. Princeton, NJ: Princeton University Press.
Riker, William H. 1982. *Liberalism Against Populism*. Prospect Heights, IL: Waveland Press.
Russett, Bruce. 1993. *Grasping the Democratic Peace: Principles for a Post–Cold War World*. Princeton, NJ: Princeton University Press.
Russett, Bruce. n.d. "Democratic Peace." In *International Encyclopedia of Peace*, ed. Nigel Young. Oxford: Oxford University Press. Forthcoming.
Russett, Bruce, and John R. Oneal. 2001. *Triangulating Peace: Democracy, InterDependence, and International Organizations*. New York: Norton.
Schultz, Kenneth A. 2001a. *Democracy and Coercive Diplomacy*. Cambridge: Cambridge University Press.
Schultz, Kenneth A. 2001b. "Looking for Audience Costs." *Journal of Conflict Resolution* 45 (1): 32–60.
Schumpeter, Joseph A. 1950. *Capitalism, Socialism, and Democracy.* 3rd ed. New York: Harper & Brothers.
Svolik, Milan. 2009. "Power-sharing and Leadership Dynamics in Authoritarian Regimes." *American Journal of Political Science* 53 (2): 477–94.
Weart, Spencer. 1994. "Peace among Democratic and Oligarchic Republics." *Journal of Peace Research* 31 (3): 299–316.
Weeks, Jessica. 2010. *Leaders, Accountability, and Foreign Policy in Non-democracies. Diss. Stanford University, 2009.* Ann Arbor: ProQuest/UMI. Publ. No. 3364479.