Which Way Out?
The Manner and Consequences of Losing Office*

H. E. Goemans
Department of Political Science
University of Rochester

July 7, 2008

Abstract
Most of the burgeoning theoretical and empirical literature on the role of leaders in comparative politics and international relations is built on the assumption that leaders choose policies to stay in office. However, leaders can lose office in a variety of ways. Leaders can lose office as a result of ill health; they can lose office in a regular manner; or they can be removed in an irregular manner, such as a coup. How a leader loses office, moreover, significantly affects the leader’s subsequent fate. A broader perspective on not just the probability but also the manner of losing office—and its associated consequences—thus suggests an additional mechanism to explain the behavior of leaders. If policy significantly affects not just whether, but also how leaders lose office, leaders might design policy to minimize the anticipated negative consequences of losing office. Once we unpack the manner in which leaders lose office, for example, we see that the postulated logic of diversionary war only holds for a sub-group of leaders: those who fear an irregular removal from office.

*An earlier version of this paper was presented at the PIPES workshop at the University of Chicago, May 4, 2006. I thank Carol Atkinson, David Carter, Michael Colaresi, Burak Kadercan, Mark Kayser, Arndt Plagge, Duncan Snidal, Martin Steinwand and especially Giacomo Chiozza, Nikolay Marinov and Bruce Russett. Mistakes, omissions, and other assorted infelicities are my own responsibility.
1 Introduction

In both comparative politics and international relations, scholars focus more and more on the micro-incentives of the leaders who make the decisions and set policy. To that end, a generation of scholars since Downs (1957) adopted the simplifying assumption that leaders choose policies to stay in office. Leaders’ choices then depend on the anticipated effect of their policies on their tenure and leaders supposedly pick policies that maximize their time in office. Building on this assumption, scholars have argued that policies such as decisions to initiate or continue international conflict (Levy, 1989; David, 1991; Fearon, 1994; Downs and Rocke, 1994; Leeds and Davis, 1997; Schultz, 2001b; Bueno de Mesquita et al., 2003; Colaresi, 2004; Mansfield and Snyder, 2005; Horowitz, McDermott and Stam, 2005; Lai and Slater, 2006), impose or comply with international sanctions (Marinov, 2005), promote economic development (Bates, 1981; Wintrobe, 1998; Przeworski et al., 2000; Jones and Olken, 2005) or time elections (Warwick, 1994; Smith, 2003; Kayser, 2005) are fundamentally driven by the leader’s desire to maximize his or her tenure in office. Clearly, the assumption that leaders choose policies to stay in office has proven enormously influential and fruitful in international relations as well as comparative and American politics.

Notwithstanding great strengths, the common focus on the overall tenure of leaders ignores some important variation in how leaders lose office which can have important implications for the incentives and behavior of leaders. First, how leaders lose office is an important topic in its own right, as illustrated by the ongoing research into the causes (and consequences) of coups (O’Kane, 1983; Londregan and Poole, 1990; Belkin and Schofer, 2003, 2005). Furthermore, how leaders lose office affects a host of other important political phenomena, such as economic growth and international conflict behavior. Thus, Gupta (1990), Person and Tabellini (1994), Alesina et al. (1996) and Feng (1997) persuasively show that the anticipated irregular removal from office of a leader negatively affects economic growth. More fundamentally, how leaders lose office dramatically affects their post-exit fate. If policies affect the hazard, manner and consequences of losing office, leaders should anticipate these consequences and incorporate them in their decision making and policy choice. Leaders may thus base their policy choice on the consequences of losing office—associated with the manner of losing office—rather than the overall probability of losing office. In one of the very few studies which takes these factors into account,
Goemans (2000) showed that an exclusive focus on the overall probability of losing office could not explain why leaders decided to continue rather than terminate World War I for four grueling years. A focus on the anticipated post-exit fate of leaders, however, successfully explained why both German and Russian leaders continued what they realized was a losing effort in World War I. In short, with the exception of Bueno de Mesquita, Siverson and Woller (1992), scholars have relied on one particular mechanism to explain the behavior of leaders: how policy affects the overall probability of losing office. An alternative mechanism has been almost entirely overlooked. Leaders may choose policy based on its effect on how they are likely to lose office, especially when this in turn strongly affects their post-exit fate.

With the exception of the limited literature on coups, we know very little about the factors that determine how leaders lose office, their post-exit fate and any potential relationship between the two. To provide a baseline for further research in both international relations and comparative politics, I present and analyze a new data set on how leaders lose office as well as the post-exit fate of leaders. I find a striking and strong correlation between the post-exit fate of leaders and how they lost office. While only about 8% of leaders who lost office in a regular manner suffered exile, jail or death, fully 80% of leaders who lost office in an irregular fashion suffered such punishment. Leaders thus have good reason to consider how they might lose office.

I consider domestic factors and leader characteristics but focus in particular on how international conflict affects the hazard of a regular as well as an irregular removal from office. A focus on international conflict allows me to illustrate how explicit consideration of how leaders lose office leads to predictions and hypotheses different from the predictions generated by the Down-sian approach which considers only the leader’s overall probability of losing office. Specifically, the current literature on the diversionary use of force postulates that leaders who anticipate removal from office initiate international conflict because conflict increases their tenure in office. Because the current literature does not consider that leaders may lose office in different ways, with different consequences for their post-exit fate, I argue, empirical support for the thesis of the diversionary use of force has been decidedly mixed. Once I disaggregate how leaders can lose office, the reason for the mixed empirical support for this thesis becomes clear: international conflict barely affects the hazard of a regular removal from office but significantly affects the hazard of an irregular removal from office. My findings thus suggest that the logic of the diversionary use of force holds only for the sub-set of leaders who fear an irregular removal from
The article proceeds as follows. In the first section, I briefly review the literature on the
diversionary use of force and its perspective on the relationship between the tenure of leaders
and international conflict. The second section describes the research design and main variables.
In the third section, I present the results of my analyses. In the conclusion I summarize the
findings and discuss the implications for the literatures on tenure and the use of force.

2 The Costs and Benefits of International Conflict

To date, the diversionary use of force offers the best-known leader-level explanation for inter-
national conflict (Simmel, 1898; Levy, 1989; Richards et al., 1993; Downs and Rocke, 1994;
Bueno de Mesquita and Siverson, 1995; Gelpi, 1997; Bueno de Mesquita et al., 2003; Chiozza
and Goemans, 2003; Mansfield and Snyder, 2005; Goemans and Fey, 2009). Until recently, this
explanation relied on a psychological mechanism, the so-called “in-group–out-group” hypothesis
articulated by Coser (1956). In the last decade, however, scholars have developed a second, ra-
tionalist, mechanism to underpin the logic of diversionary conflict (Richards et al., 1993; Downs
and Rocke, 1994; Hess and Orphanides, 1995; Smith, 1996; Bueno de Mesquita et al., 1999;
Tarar, 2006). This rationalist mechanism argues that leaders can rationally choose to initiate
conflict when they do not anticipate a significantly higher probability of losing office as a result
of defeat than they currently face—e.g., their punishment is truncated—and victory increases
their time in office.

Although there has been significant theoretical progress on the diversionary use of force,
empirical support for the various versions of the theory has remained decidedly mixed (Rummel,
Thus, contrary to the theory, some scholars have found that the popularity of US Presidents
(Meernik and Waterman, 1996) is not significantly associated with the use of force. On the other
hand, Morgan and Anderson (1999, 808) find that “that lower levels of support for the [British]
prime minister’s party are a significant predictor of conflictual behavior on the part of British
governments.” Similarly, whether crises produce any rallying around the leaders remains hotly
contested (Oneal and Bryan, 1995; Baker and Oneal, 2001; Lai and Reiter, 2005). Chiozza
and Goemans (2004a) recently found, contrary to the rationalist version of the theory, that
victory does not significantly increase the tenure of leaders. (For an extensive and insightful discussion of the mixed record of the diversionary use of force hypothesis, see Oneal and Tir (2006, 757–760).) The weak evidence for what remains a plausible and powerful intuition has even led James (1987, 22) to lament “seldom has so much common sense in theory found so little support in practice.” Scholars have, however, remained unable to identify why the theory has fared so poorly.

One set of explanations for the poor empirical track record of the theory focuses on the strategic interactions between challengers and targets to argue that leaders with diversionary incentives will not be given the opportunity to divert by their international opponents (Smith, 1996). A second approach argues that regime type fundamentally affects incentives to divert (Gelpi, 1997). Evidence for these amendments to the theory again remains mixed (Leeds and Davis, 1997; Chiozza and Goemans, 2004b; Miller, 1999; Pickering and Kisangani, 2005; Oneal and Tir, 2006). This article lays the groundwork for an alternative explanation: international conflict fundamentally affects not just whether but also how leaders lose office and thereby structures their incentives to divert (Levy and Vakili, 1992).

2.1 Two Processes of Removal

I propose that the manner and closely associated consequences of losing office—and therefore the private benefits of leaders—depend on at least two different political processes (Acemoglu and Robinson, 2006; Popper, 1963, 124). The first process is regular, driven by the prevailing norms, rules and procedures of each country and regime. The second process is irregular and involves the threat or use of force.\(^1\) This second process typically involves military actors and culminates in coups.\(^2\) These constitute two fundamentally different processes which have a different impact on the consequences of losing office. Whereas the regular process typically leads to a peaceful retirement, the second, irregular process typically results in additional punishment. Successful

\(^1\) The failure to disaggregate the different ways leaders lose office implicitly assumes that voluntary retirements, term limits, the natural death of leaders, coups and revolutions and foreign interventions to overthrow the leader all result from the same political processes. In other words, a policy choice such as international conflict initiation has the same effect on the probability of voluntary retirement, the probability of losing office as a result of term limits or illness, the probability of a coup or a revolution and the probability of removal as the result of a foreign invasion. I relax this simplifying assumption and consider not just whether and when but also how leaders lose office.

\(^2\) With the limited exception of some parliamentary democracies, in this second process, moreover, those who remove the leader typically seek to grab power themselves. For a fascinating and insightful discussion of the tactics of coups, see Farcau (1994).
coup leaders have incentives to make it more difficult if not impossible for the deposed leader to mobilize opposition and regain power. Therefore, such irregular removals often result in the exile, imprisonment or death of the former leader. Coups and coup-threats therefore affect not only the leader’s tenure, but also his subsequent fate.

2.2 International Conflict and its Effects on the Processes of Removal

International conflict affects each of these processes of removal through its effects on the respective benefits, costs and probability of success of attempts to replace the leader. I argue, in particular, that international conflict fundamentally affects the costs and probability of success of attempts to irregularly remove the leader. Below, I explore how conflict roles as well as conflict outcomes affect the benefits, costs and probability of success of attempts to replace the leader.

Challengers in international conflict enjoy the benefits of picking the time and place of their conflicts. I expect this to weakly affect the regular process because leaders in some countries can choose the timing of their elections. This allows such leaders to make the most of any, even if short-lived, rallying around the flag (DeRouen Jr., 2000). However, because relatively few countries allow for endogenous election timing, I expect a relatively weak effect. Since Targets do not choose the time and place of conflict, they do not enjoy a similar lower hazard of a regular removal from office. (Note that the traditional literature on diversionary conflict (Levy, 1989) suggests that regardless of their conflict role, all leaders who face an external threat should enjoy a lowered hazard of losing office.)

H. 1: Conflict Roles & Regular Removal Hypothesis : Challengers enjoy a lower hazard of a regular removal from office.

Once we shift our focus to the irregular removal from office, however, the conflict role of a leader can have more powerful effects. The initiation of international conflict can provide leaders unique opportunities to deal with potential coup-plotters. Opponents, be they actual or potential, can be sent to the front to fight and die for the country. Following the ancient example of King David and Uriah the Hittite, Idi Amin, the leader of Uganda, apparently used the same strategy to eliminate opposition from within the armed forces. In 1978 Amin’s domestic control began to unravel with a plummeting economy and unrest among his core supporters,
the military (Omara-Otunnu, 1987, 139–141). Determined to maintain control, Amin began to purge his inner circle, most prominently his long-time second in command, Vice-President and Commander of the Armed Forces General Idris Mustafa Adrisi (Avirgan and Honey, 1982, 48–51; Smith, 1980, 176–178). After Adrisi suffered a highly suspicious car accident, his supporters in the army, particularly the crack Simba (Lion) Regiment and the Chui (Leopard) Regiment began an open revolt. While the revolt was brutally suppressed, survivors fled across the border into Tanzania (Smith, 1980, 178). The 1978 war between Uganda and Tanzania started when Amin sent his soldiers in pursuit of the rebels. Contemporaries agree that Amin’s primary goal of the invasion was to deal with a threat from his own military forces. Milton Obote, the former president of Uganda, in exile in Tanzania, put it bluntly at the time: the invasion “was a desperate measure to extricate Amin from the consequences of the failure of his own plots against his own army” (quoted in Avirgan and Honey (1982, 52), emphasis in original). By going after some of his remaining core supporters, Amin risked antagonizing the very forces underpinning his brutal regime. Thus, he tried to blame the Tanzanian forces for the executions of rebels from the Simba Regiment. After the Tanzanian forces recaptured the Kagera salient, they found “[s]cattered in the bush . . . the bodies of 120 Ugandan soldiers. There had been no Tanzanian troops in the area before, and there was no sign that Tanzanian artillery had landed there” (Avirgan and Honey, 1982, 69). The conclusion was inescapable. “The Tanzanian commanders deduced the corpses had been dumped to look as if they were battle fatalities, although they were actually executed mutineers” (Kamau and Cameron, 1979, 306). It is not difficult to find other examples where leaders initiated conflict to forestall an impending coup, such as in the cases of the Falklands War, Napoleon’s invasion of Egypt or the 1879 War of the Pacific (Levy and Vakili, 1992, 131, 133–4; Schroeder, 1994, 177–179; Farcau, 2000, 51). For these reasons, I expect Challengers to enjoy a lower hazard of an Irregular removal from office. Because Targets have much less freedom to pick the time, place and circumstances of conflict, I again expect they do not gain a lower hazard of an irregular removal.

H. 2: Conflict Roles & Irregular Removal Hypothesis: Challengers enjoy a lower haz-

---

3Amin himself admitted “It was not Uganda’s intention to invade Tanzania, we took it merely as a precautionary measure to prevent exiles from infiltrating into Uganda” (cited in Kamau and Cameron (1979, 304)). Kamau and Cameron (1979, 301) note that Amin also hoped that the opportunity to plunder would at least temporarily buy off any rebellious soldiers. “Capture of the Kagera Salient would preempt the return of rebels and exiles—and with trade sanctions against Uganda beginning to bite, it would provide his soldiers with a chance of easy plunder.”
I now turn to discuss how the outcome of international conflict affects the two processes of leader removal. I focus, first, on the outcome’s effects on the hazard of a Regular removal. Since the norms, rules and procedures that guide the regular process of removal typically are well-institutionalized as in regular elections, I argue that the outcome of international conflict has little or no effect on the costs of a regular removal. The benefits and probability of success of a regular removal, however, can be affected by the outcome of international conflict. Scholars have proposed that Victory and Defeat reveal the foreign policy competence of leaders, and thereby influence the potential benefits of replacing the leader (Richards et al., 1993; Smith, 1996, 1998). By this logic, there would be few benefits in removing victorious leaders with demonstrated competence but large benefits in removing defeated leaders, who demonstrated foreign policy incompetence.

Thus, Victory should lower the hazard of a regular removal from office. It is important to keep in mind, though, that the process of regular removals is influenced not just by foreign policy competence, but also by regular domestic politics. Thus, Winston Churchill, Bülent Ecevit and George H. W. Bush lost office in elections after their victories in World War II, the 1974 Cyprus War and Gulf War I. In all three instances, foreign competence was trumped by (perceived) economic incompetence. Thus, in elections contested on several dimensions, foreign policy competence is only one factor to weigh in decisions to replace the leader. Nevertheless, demonstrated foreign policy competence should lower the benefits of replacing the leader, although its effect may be dampened by the salience of other issues.

**H. 3: Victory & Regular Removal Hypothesis**: Victory lowers the hazard of a regular removal from office.

Following this logic, it can be argued that Defeat should increase the hazard of a regular removal from office. As I explain in more detail below, however, I expect that defeated leaders will be replaced in an irregular manner or not at all.

The outcome of international conflict can have a dramatic effect on the benefits, costs and probability of success of an attempt to irregularly remove the leader.¹ Victory demonstrates the

---

¹It is important to stress that my focus here is on the benefits (and costs) of attempts to irregularly remove the leader conditional on the outcome of conflict. The overall—unconditional—potential benefits of overthrowing
competence and thereby enhances the prestige of the military. As a result, the military finds itself in a relatively strong bargaining position vis-à-vis other domestic actors in deliberations about policy and the budget, thus lowering the potential benefits of a coup. Similarly, victory and the support of the people for the military makes a leader’s commitment to the military and its preferences credible in a way it could not have been without conflict and victory. Moreover, victorious and politically ambitious military leaders can reap the rewards of the enhanced public status and gain access to power through the regular political process, again lowering the potential benefits of a coup. Finally, victory decreases the probability of success of a coup attempt since victory makes it more difficult to justify—and coordinate—the overthrow of the leader to the troops (and the populace at large). Because of the leader’s demonstrated success, fewer people believe that a sufficient number of others will join the coup attempt to make it successful, which in turn makes a coup more costly and less likely to succeed.

Hence I expect that victory decreases the probability of an Irregular removal.

**H. 4: Victory & Irregular Removal Hypothesis**: Victory decreases the hazard of an irregular removal from office.

Defeat significantly lowers the costs and increases the benefits and probability of success of an attempt to overthrow the leader. After defeat the potential benefits of a coup increase because defeat often leads to a re-organization of the military (Reiter and Meek, 1999) with significant implications for the careers and prospects of the officer corps. Officers who performed poorly can anticipate an end to their careers, although rarely outright dismissal. A coup, however, allows its military leaders to stave off organizational reform and may constitute a gamble for resurrection of their career. Moreover, military leaders may want to take over to forestall or overturn a peace treaty which similarly threatens their personal and corporate interests. To prevent a recurrence of hostilities, and tie the hands of their defeated foe, victorious states often impose restrictions on their opponent’s military forces.\(^5\) Defeat also significantly lowers the costs and improves the prospects of success of an attempt to overthrow the leader. As noted above, the general population takes defeat as an indicator of incompetence of the leader. The leader center around direct control over policy-making, which produces better protection of the military’s (corporate) interests, the interests of allied elites, and the satisfaction of personal ambitions (Londregan and Poole, 1990; O’Kane, 1983, 1993; Belkin and Schofer, 2003, 2005; Acemoglu and Robinson, 2006). The overall potential costs include an increased probability of the loss of one’s job, freedom or life and an increased probability of civil war.

\(^5\)Typically, victorious states attempt to limit both the size and weaponry of their opponent’s military.
worse the defeat, the more people will agree the leader is incompetent, and the more people can be confident that others will join them in an attempt to remove the leader. Defeat, thus, helps coordinate the expectations of members of the domestic opposition and the people at large (Hardin, 1995). As a result, a coup attempt is much less likely to face organized opposition, and may instead enjoy popular support and acceptance. The fates of Bolivian Presidents Daniel Salamanca and José Luis Tejada Sorzano after the Chaco War with Paraguay and of the Greek King Constantine I and many of his ministers after the disastrous war with Turkey prominently illustrate this dynamic.

Finally, after defeat in war leaders sometimes lose power at the hand of their foreign enemy’s military forces. Occupying foreign forces typically remove any impediment or potential source of opposition to their rule, and hence exile, imprison or outright eliminate the former leaders.

In summary, defeat in war exposes leaders to multiple threats to their political and physical survival. Because the forces that seek to irregularly remove the leader have incentives to strike while the iron is hot, I expect them to preempt any regular removal from office. Hence, I expect that defeat will increase the hazard of an irregular removal but not a regular removal from office.

**H. 5: Defeat & Irregular Removal Hypothesis**: Defeat increases the probability of an irregular removal from office.

### 2.2.1 Strategic Selection

My reconsideration of the costs and benefits of international conflict suggests that leaders have incentives to pick their conflicts carefully. Following Schultz’s (2001) arguments about crisis behavior, it could be argued that the probability of observing punishments or rewards depends on the value of those punishments and rewards. The higher the punishments from international conflict, the less likely we should be to observe such a decrease in tenure as a result of war. Conversely, the higher the rewards from war, the more likely we should be to observe them. Since the consequences of an irregular removal from office are typically far worse than the consequences of a regular removal from office, a selection effects argument suggests we should be least likely to observe a significant association between defeat in war and the irregular removal

---

6Between 1919 and 2003, 478 leaders were removed in an irregular manner. Most of these were at the hands of domestic forces but 43 leaders were removed by foreign forces. Irregular removal from office is overwhelmingly the result of the threat or use of force as exemplified in coups, (popular) revolts and assassinations.
from office. Similarly, if leaders select their wars to obtain the benefits of victory, victory in war should strongly and significantly decrease the hazard of an irregular removal from office.

Although I do not have the space for a full empirical analysis, leaders could also systematically select themselves into war. In other words, the choice of war could be endogenous. In particular, this would suggest that Challenging and conflict outcomes would only be weakly associated with the regular removal from office because leaders who anticipate a regular removal from office have relatively little to gain, but much to lose from war. They have little to gain but much to lose since Victory pays only modest dividends, but Defeat significantly increases the hazard of an irregular removal from office with its unpleasant associated consequences. On the other hand, leaders who anticipate an irregular removal from office may have little to lose, since their punishment is truncated, but much to gain, since Challenging and Victory decrease the hazard of an irregular removal from office. This suggests that international conflict would be strongly and more broadly associated with the irregular removal from office. In particular, if such leaders pick wars with the greatest potential effect on their irregular removal from office, we would expect this to inflate the coefficient on Challenging and deflate the coefficients on Victory and Defeat.

# Research Design

To test these hypotheses I estimate a competing risks model in which the dependent variables measure how long a leader has remained in office before he or she left office in a particular way. Competing risks analysis allows us to examine multiple models of exit or “risks” in a generalized duration framework by positing risk-specific hazard rates, one for each outcome state. (Box-Steffensmeier and Jones, 2000; Diermeier and Stevenson, 1999) A great strength of the method is that it makes it possible to examine how a variable affects the timing of one type of failure separate from its effect on another type of failure. Here, I will examine two risks: exit due to a regular loss of office, and exit due to irregular removal. It is possible to disaggregate irregular exits into more fine-grained categories. However, I do not pursue such a strategy since tests revealed this violated the independence assumption underlying the competing risks model. The independence assumption holds that the survival times for each mode of exit are independent.

---

7 Estimation of such a model would be complex, requiring at least three equations with endogenous dichotomous regressors.
of the other potential modes of exit (IIA)—the risk of one mode of exit thus does not affect
the risk of the other mode of exit—and each mode of exit could have possibly occurred, given
enough time. By further assuming that there exists a latent failure time for each mode of exit
and only the shortest failure time is actually observed, it becomes possible to simply estimate
single state models (one for each mode of exit) where the other modes of exit are treated as
randomly right-censored.

Following the approach in Chiozza and Goemans (2004b), I estimate semi-parametric Cox
proportional hazard models with frailty terms (Therneau and Grambsch, 2000). The frailty
terms are additional unmeasured covariates $\alpha_i$, sampled from a Gamma distribution with mean
1 and variance $\theta$ that multiplicatively affect the baseline hazards. The frailty parameter is
conceptually analogous to a random effect that assesses whether leaders of some countries are
more likely to lose power, all the other measured factors being equal. All else being equal, leaders
of countries with an $\alpha_i$ greater than 1 face a greater risk of removal from office than accounted for
by the explanatory variables. Leaders of countries with an $\alpha_i$ smaller than 1 are less likely to lose
office than accounted for by the explanatory variables. Hence, both the explanatory variables
and the frailty terms account for the risks of losing office in the models. I cluster observations—
e.g., leader–years—by countries because the leader’s chances of survival are likely to depend in
some general way on country specific factors not captured by the explanatory variables in the
models. (Therneau and Grambsch, 2000, 231-260).

As suggested by Box-Steffensmeier, Reiter and Zorn (2003), I extend the Cox hazard model
to account for non-proportional hazards. A failure to detect and control for time-varying effects
could mischaracterize the potentially different political dynamics that drive leaders from office
in different manners and could also lead to biased and inefficient estimates. Therefore, I perform
specification checks based on the analysis of the scaled Schoenfeld residuals for all the estimated
models. I next re-estimate the models including an interaction effect between the logarithm of
time and each variable that fails to meet the proportional hazards test. The coefficients associ-
ated with each time-interaction variable then measure how the effect of a covariate increases or
decreases as a function of time in office.

Finally, to overcome problems associated with missing data, I use multiple imputation to
fill in the missing values (King et al., 2001). Following Schafer’s (1997) approach, I use data
augmentation under a multivariate normal model based on all the explanatory variables and
the time-in-office dependent variables for the type of office removal (including the dichotomous indicator for office removal). I run five parallel chains of 500 steps each and set the starting values for each chain by using the EM estimates of the model parameters computed on a bootstrap sample a quarter of the size of the whole dataset (Allison, 2002, 38, fn. 11). This way, I create five imputed data sets with no missing records. I estimate the models on each data set and report the mean of the five estimates for each models’ coefficients and compute the standard errors and significance levels using Rubin’s formulas (Rubin, 1987, 76-79).8

The data set expands and updates Chiozza and Goemans’ (2004) compilation of leaders. I identify all leaders holding executive power from 1919 through 2003, how these leaders entered and left office as well as their post-exit fate. The data contains information on 2130 leaders from 164 countries. Each leader’s spell in office is split into yearly observations (because most of the explanatory variables are measured on an annual basis). This way, each leader has one record each calendar year he or she was in power. This creates a data set with 10938 observations.

I briefly describe how I code the dependent variables: a Regular and an Irregular removal from office as well as the leader’s post-exit fate.9 Removal from office is coded as Regular when the leader is removed in accordance with explicit rules or established conventions of his or her particular country. Examples of Regular removal include voluntary retirement, term limits and defeat in elections. In the sample, 1319 leaders lost office in a regular manner. Removal from office is coded as Irregular when the leader was removed in contravention of explicit rules and established conventions. Domestic forces are responsible for most irregular removals from office (477 cases). A small group of leaders (43) was deposed (directly) by another state’s intervention. Irregular removal from office is overwhelmingly the result of the threat or use of force as exemplified in coups, defeat in civil war, (popular) revolts and assassinations. A handful of leaders were impeached; if the constitutional court subsequently ruled this was done

8The standard errors are computed as the square root of the average of the within-samples variances plus the variance of the coefficient estimates across samples (multiplied by the correction factor, $1 + 1/M$, where M is the number of imputed data sets). The parameter estimates from a multiple imputation procedure follow a t-distribution with the degrees of freedom equal to $(M−1)/(1+r^{-1})^2$, where r is the ratio of the between-to-within variances (multiplied by the correction factor $(1+1/M)$). For the nuisance parameters, such as the variance of the random effect $\theta$, whose significance levels are based upon $\chi^2$ tests, I compute the repeated-imputation p-values using the approach of Li et al. (1991). For the tests of joint significance and the tests of linear hypotheses, I use the multivariate extension of the approach presented above as is described in Rubin and Schenker (1991).

9The case description file for Archigos—currently about 650 pages—provides detailed documentation for potentially controversial cases. The file is available at mail.rochester.edu/~hgoemans/data.htm. A detailed description of the independent variables is available in the replication file at mail.rochester.edu/~hgoemans/research.htm
unconstitutionally, this is coded as an irregular removal.\textsuperscript{10}

The post-exit fate of leaders is recorded up to one year after they lost office. This period is chosen to preclude as much as possible the possibility that the leader’s behavior after he or she lost office rather than his or her behavior in office is responsible for any type of punishment. The post-exit fate of leaders includes three levels of punishment: exile (which includes refuge in a foreign embassy, since such an embassy is considered foreign soil), imprisonment (which includes house arrest) and death. I record the severest form of punishment.

4 Data Analysis

I suggested above that leaders consider how they are likely to lose office because the manner in which they lose office directly affects their subsequent fate, I therefore first examine the relationship between how leaders lose office and their subsequent fate. Subsequently, I present a competing risks model and examine, in turn, how international conflict, domestic politics and leader characteristics affect the differentiated risks of losing office.

4.1 The Post-exit Fate of Leaders

In Table 1, I report a simple cross-tabulation of the manner in which leaders lost office and their subsequent fate. Recall that the leader’s fate is recorded for the period up to one year after he or she lost office. Although simple, this cross-tabulation produces straightforward and powerful results.

Table 1 demonstrates that the manner of exit has a profound effect on the leader’s subsequent fate in the period up to one year after losing office. Of the leaders who lost office in a regular manner fully 92% retired safely from their office and only 8% suffered some form of punishment. Of the leaders who were removed in an irregular manner, however, only 20% suffered no punishment; 41% were exiled or fled the country in self-imposed exile, 22% were imprisoned

\textsuperscript{10}177 leaders lost office as a result of Ill Health when they either died a natural death (126), committed suicide (5), or retired due to documented ill health (46).

\textsuperscript{11}Due to rounding, totals may not add up to 100. For 146 leaders who lost office as a result of natural death or illness, 4 leaders who lost office in a regular manner and 1 who lost office in an irregular manner but died within six months after losing office their post-exit fate is considered missing. For 24 leaders no information could be found on their post-exit fate; of these 20 lost office in a regular manner and 4 lost office in an irregular manner.
for some time, and 18% were killed. These findings firmly establish that how leaders lose office significantly affects their post-exit fate.

4.2 Competing Risks

Having established why leaders care about how they lose office, I next estimate three main models: a model for each manner of exit and for comparison a pooled model which aggregates all manners of exit into one category. The coefficients measure the effect of the explanatory variables on the hazard of losing office. A negative coefficient, thus, should be interpreted to show that an increase in the independent variable on average is associated with a decrease in the risk of removal from office and an increase in the expected time in office. The statistical significance of all coefficients is measured using two-tailed tests.

Before I discuss the results in detail, I first asses the crucial assumption of the independence of the different manners of losing office. To that end, I ran a multinomial logit regression, where the dependent variable recorded whether the leaders was in office, lost office in a regular manner or lost office in an irregular manner. Both the Hausman and Small-Hsiao tests of the IIA assumption found evidence in favor of the hypothesis that the outcomes were independent of other alternatives (IIA). Moreover, Wald tests and Likelihood-ratio tests rejected the hypothesis that some categories of outcomes can be collapsed. I therefore conclude, as required by the competing risks approach, that each mode of exit is indeed independent of the other potential mode of exit. (The Small-Hsiao test—but not the Hausman—revealed that disaggregating the Irregular removals into two further categories, at the hand of domestic and foreign forces, respectively, resulted in a violation of the independence assumption.)

Turning to the results, I first briefly compare and contrast some of the results from the competing risks approach and the customary (Downsian) pooled approach. Because the pooled model collapses all modes of exit into one category, the coefficients in this model more or less represent “a sort of “average” effect” of each variable across the different modes of exit (Box-Steffensmeier and Jones, 2000, 171).12 The competing risks model, in contrast, allows us to estimate how a variable affects one particular mode of exit, in isolation from its effects on the

12The results from the pooled model should be similar to Chiozza and Goemans (2004b), but may show minor changes because the latter excluded all leaders who lost office as a result of ill health.
other modes of exit. Comparison of the pooled and competing risks results shows that the "averaging" in the pooled model in some cases obscures significant variation in the effects of particular variables in the competing risks sub-models. For example, the results in the pooled model suggest that GDP per capita, the Change in Trade Openness and Population size do not significantly affect the overall hazard of losing office. However, in the competing risks model we see that all three variables significantly decrease the risk of losing office in an irregular manner. Similarly, Defeat in a Crisis does not significantly affect the hazard of the overall loss of office, but significantly increases the risk of losing office in an irregular manner. Victory in a Crisis does not affect the hazard of a regular removal from office but significantly decreases the hazard of the overall and the irregular removal from office. Victory in War, however, does not affect either the hazard of the overall or irregular removal from office but (weakly) decreases the hazard of a regular removal from office.

The coefficients for Parliamentary (and, more weakly, Presidential) Democracy and the number of Times a leader has previously been in office, dramatically show how the "averaging" in the pooled model can mask distinctly different processes since these coefficients are significant but carry opposite signs in the different sub-models. The number of Times a leader has been in office before decreases the hazard of a regular removal from office but significantly increases the hazard of an irregular removal from office, ‘averaging out’ to an negative effect on the overall hazard of losing office. The previous literature’s reliance on the overall hazard of losing office can thus dismiss a factor such as GDP per capita and Population size as insignificant when these factors do significantly affect the risks of losing office but in two distinct and off-setting ways—increasing one risk while decreasing the other—averaged out into an insignificant coefficient in the pooled model. The competing risks model thus not only reveals much more detail about the process of losing office than the pooled model, it can also identify significant patterns that the pooled model would positively obscure. Most importantly, these results suggest that leaders might face important trade-offs in their choice of policy when a policy decreases one risk of losing office while increasing the risk of another way of losing office.
4.3 The Effects of Conflict on How Leaders Lose Office

Turning to a more detailed discussion of the results, I focus on the effect of international conflict on the competing risks of losing office. Disaggregation of the different ways leaders can lose office produces some striking results. I first examine how the conflict roles of leaders affect the hazards of losing office. In line with both $H. 1$ and $H. 2$ we see that Challengers enjoy significantly lower risks of both a regular and an irregular removal from office, although the effect is both statistically and substantively stronger for the hazard of an irregular removal. Contrary to the logic of rallying around the flag, being a Target does not significantly decrease the hazards of either a regular or an irregular removal from office.

Next I examine how the outcome of international crises and wars affects the risks of losing office. Contrary to $H. 3$, we first see that Victory in a crisis does not significantly decrease the hazard of a regular removal from office. On the other hand, supporting $H. 4$, Victory in a crisis decreases the hazard of an irregular removal from office, although the statistical significance is weak. In the pooled model, we find that the risks in the sub-model are still strong enough to average out to a significant negative effect on the overall hazard of losing office. Once we shift our focus to war, we find that Victory in war (weakly) decreases the hazard of a regular removal from office as proposed in $H. 3$. On the other hand, and contrary to $H. 4$, Victory does not significantly decrease the hazard of an irregular removal from office. For both the regular and irregular removal from office, the large coefficients are offset by large standard errors, indicating a lot of uncertainty associated with the effects of Victory in war. The effect of Victory in a war is apparently weak enough that it evaporates in the pooled model: Victory in war does not significantly affect the overall hazard of losing office. Overall, the effects of Victory on the hazards of losing office are surprisingly weak, and the evidence for hypotheses $H. 3$ and $H. 4$ is both weak and mixed.

When we examine the effects of Defeat, the sub-models show that Defeat in a Crisis significantly increases only the hazard of an irregular removal from office. Although not transparent from the results of the pooled model—because of the interaction term to correct for a violation of the proportional hazards assumption—Defeat in a crisis does not seem to significantly affect the overall hazard of losing office. Defeat in war does not affect the hazard of a regular removal.

13 The international conflict dummies must be interpreted with respect to the excluded category, peace.
14 All R script replication files are available mail.rochester.edu/~hgoemans/research.htm.
but significantly decreases the hazard of both the overall and an irregular removal from office. Notably, and confirming H. 5, for leaders the political dangers of Defeat in war as well as in a crisis thus come in the form of an increased risk of an irregular removal, with the associated consequences for their post-exit fate.\textsuperscript{15} Finally, Draws do not significantly affect the hazards of losing office.

The findings on Victory and Defeat directly contradict a simple selection effects argument and suggest the potential for endogeneity. The selection effect logic suggests a biased sample because leaders should pick conflicts to avoid the worst outcomes. We would then expect that Defeat would not significantly affect the hazard of an irregular removal and perhaps only weakly affect the hazard of a regular removal. Instead we find the opposite pattern. Defeat in both crises and wars is positively associated with the hazard of an irregular removal. These findings thus throw doubt on a straightforward application of the selection effects logic to war.

Stepping back from the individual coefficients, the combined results reveal that the outcome of international conflict weakly affects the hazard of a regular removal from office, but significantly affects the hazard of an irregular removal from office. Strikingly, but as expected, Defeat does not significantly affect the hazard of a Regular removal but strongly affects the hazard of an Irregular removal. Of the Hypotheses on the hazard of an Irregular removal, Hypotheses H. 2—on Challenging—and H. 5—on Defeat are confirmed, while Hypothesis H. 4—on Victory—fares poorly. These findings suggest that leaders might consider their anticipated manner of removal in deciding for or against international conflict. Specifically, these results suggest a twist on the well-known theory of diversionary war. For leaders who anticipate a regular removal from office, international conflict does not seem a particularly attractive option. While Initiation and Victory bring uncertain benefits, these must be weighed against the potentially dire consequences of defeat. For leaders who fear an irregular removal from office such as a coup, in contrast, international conflict may well pay. Challenging pays—perhaps because the forces most likely to participate in the overthrow of the leader are otherwise engaged at the front—but somewhat surprisingly, however, as the large standard errors indicate, the benefits of Victory are rather uncertain. Nevertheless, for such leaders their punishment is truncated and hence a \textit{gambles for survival} might be worth it.

\textsuperscript{15}Note that these findings refute the logic of the gambling for resurrection mechanism of Downs and Rocke (1994) which assumes that leaders will not be worse off as a result of war—even defeat—because punishment is truncated.
4.4 Substantive Effects

I lack the space for a fully detailed discussion of the effects of domestic political and leader-specific variables. Instead, I focus here on the substantive effects of several important variables, including regime type, the leader’s manner of Entry into office and the international conflict variables on the hazards of losing office. To that end, I use the survival function to measure how likely a leader is to survive over time under various configurations of the explanatory variables (see Chiozza and Goemans (2004b, 614)). To perform this estimation, I posit counterfactual scenarios that are consistent with the time-varying characteristics of the variables included in the models. To examine the effect of international conflict, I posit a scenario where a leader initiates conflict in his or her first year in office, and obtains an outcome in that first year as well.

I first calculate the survival probabilities for the regular removal from office. Leaders of Autocracies, who enter regularly and stay at peace, on average are virtually guaranteed to remain in office five years or more. After one year in office leaders of Mixed Regimes who stay at peace on average have about a 98% chance of remaining in office which declines to 91% after three years and 71% after five years in office. After one year in office, leaders of Parliamentary Democracies who stay at peace on average have a 92% chance of staying in office which declines to 57% and 12% after respectively three and five years in office. For leaders of Presidential Democracies the survival probabilities drop from 98% to 85% and 49%, respectively. Leaders of Transitional regimes, finally, face the worst survival probabilities. After one year in office they have only a 90% chance of staying in office which drops to 3% after three years and to less than .1% after five years in office. Not too much weight should be given to these findings, given that after about three months in office, the confidence intervals are wide enough to encompass both zero and one, a pattern that does not hold for the irregular loss of office.

It is to the sub-model on the irregular loss of office I turn next. Table 3 reports the irregular removal survival probabilities—e.g., the probability of surviving in office before being removed in an irregular manner—associated both with international conflict and the manner of entry into office.

---

16 I discuss these results in Which Way Out? Additional Results & Appendix available at http://mail.rochester.edu/~hgoemans/research.
17 Hence, the Challenger variable is set to 1 the first year, and 0 thereafter. Since the outcome is coded as outcome divided by the number of years since the outcome, it is set to 1 the first year, .5 in the second year, .33 in the third, .25 in the fourth, and .2 in the fifth year. The other variables are set at their regime-appropriate means.
into office. In the conflict scenario’s the leader’s Entry is set to an Irregular Entry.

We first note that the manner of Entry significantly and substantively affects the survival probabilities for all leaders. Among leaders that stayed at peace, leaders of Mixed regimes who entered regularly enjoy a 95.5% chance of survival after one year in office, whereas entry in an irregular manner lowers their chance of staying in office after one year 85.2%. For leaders of Parliamentary Democracies, the probability of survival before an irregular removal after one year drops (only) two percentage points from 99% in the case of a regular entry to 96.7% in the case of an irregular entry. Generally, Autocrats face a roughly 6–8% higher chance of an irregular removal from office if they entered irregularly and leaders of Mixed and Transitional regimes a roughly 10-13% higher chance of an irregular removal from office if they entered irregularly.

Among all leaders, leaders of Parliamentary and Presidential Democracies always enjoy a substantially lower probability of an irregular removal from office than other leaders. On the one hand, the institutions of Democracy make it relatively easy to remove leaders from office; on the other hand, they also offer leaders of Democratic Regimes the protection of a low probability of irregular removal from office. For example, a leader of a Parliamentary Democracy who enters regularly, stays at peace and hangs on to power for five years faces a 92% chance of a regular removal but only a 5% (i.e., 1 – .947) chance of an irregular removal from office. Leaders of Mixed Regimes, in contrast, face a low probability of a regular removal from office and a relatively high probability of an irregular removal from office. A leader of a Mixed Regime who entered in a regular manner and stays at peace has a 2% chance of regular removal after one year in office. At the same time, such a leader has a 15% chance of an irregular removal from office. If he or she manages to stay in office 3 years, such a leader of a Mixed regime faces a 9% chance of a regular removal and a 25% chance of an irregular removal from office. Confirming the findings in Goemans (2000), we see that for leaders of Mixed Regimes defeat in a war carries ominous implications and dramatically increases their probability of losing office in an irregular manner and hence the also the probability of subsequent punishment. As anticipated by Mansfield and Snyder (2005), the effects for leaders of Transitional regimes closely mirror the effects for leaders of Mixed regimes.
Autocratic leaders, finally, face the opposite pattern from Democratic leaders: they enjoy a low probability of a regular removal from office, but must deal with a moderately high to high probability of an irregular removal from office. On the one hand, in their first five years in office, they have a very small chance of a regular removal from office. On the other hand, they must face significantly higher chances of an irregular removal from office than do Democratic leaders. Their chances of an irregular removal from office increase from roughly 3% after 1 year to 14% after 5 years in office, more than double those of the leader of a Parliamentary democracy, but still 13–16% lower than for leaders of Mixed and Transitional regimes.

Table 3 reveals that leaders may be able to overcome the higher probability of an irregular removal associated with an irregular Entry by Challenging in an international conflict. Compared to a leader who entered regularly but stayed at peace, a leader who enters office in an irregular manner tends to lower the chances of an irregular removal if she Challenges and obtains a Victory or a Draw in an international crisis. Thus, the leader of a Transitional regime who entered in a regular manner and managed to stay in office for three years has a roughly 13% \((1 - .868)\) chance of an irregular removal from office. A leader of a Transitional regime who governed under the same general circumstances but entered in an irregular manner faces more than double (27%) the chances of an irregular removal. Challenging and Victory in an international crisis, however, would dramatically improve the prospects for such a leader, who would then face only a roughly 12% chance of an irregular removal. A Draw in an international crisis would almost halve the risk of an irregular removal for such a leader (from 27% to 14%).

Defeat in an international crisis, notably, would only mildly worsen the prospects of such a leader, since he or she would face an increase of only 3 percentage points in the chances of an irregular removal from office. For leaders of Mixed regimes the same pattern holds. A leader of a Mixed regime who entered in a regular manner and held on to power for 5 years and stayed at peace must contend with a roughly 23% \((1 - .772)\) chance of an irregular removal from office. If that same leader had entered irregularly, he or she would have had to face a 33% chance of an irregular removal from office. Challenging and Victory in a crisis would lower the chances of an irregular removal from office for this leader—who entered irregularly, managed to stay in office for five years, and initiated and won a crisis in his or her first year in office—to about 19%. Challenging and a Draw would leave this leader roughly in the same position is if he or she had entered regularly and stayed at peace, with a 21% chance of an irregular removal from office.
office. Defeat in an international crisis would again only moderately increase his or her chances of an irregular removal by about 4 percentage points.

Challenging still pays if the conflict escalates to war, which is reflected in the lower probability of an irregular removal in the cases of Victory and Draw. However, we should be careful to interpret the substantive effects here since neither Victory nor Draw achieved statistical significance in the sub-model on the irregular removal from office. Defeat, in contrast, has both a statistically and substantively significant effect. A Democratic President who entered irregularly would have been much better off if he or she stayed at peace than if he or she challenged and lost a war. Staying at peace, the President would have had a 6% chance of an irregular removal after 1 year in office, an 10% chance of irregular removal after 3 years and a 14% chance of irregular removal after 5 years in office. If the President had challenged but was defeated in war, his or her chances of an irregular removal roughly double, from 6% to 15% after 1 year, from 11% to 24% after 3 years, and from 15% to 29% after five years. For leaders of Mixed regimes who entered irregularly, their chances of an irregular removal after staying at peace compared to challenging and suffering defeat in a war increase from 15% to 37% after 1 year, from 25% to 54% after 3 years and from 33% to 62% after 5 years in office. A leader who enters irregularly—and as a result is significantly more likely to leave irregularly as well—thus has much to gain from initiating an international conflict, as long as he or she can avoid defeat in a full-blown war.

I performed several robustness checks, in which I include elections and the number of days since last election, duration of the polity. In these tests the main results were basically unaffected. I also ran the analyses on regime type sub-samples. Notably, conflict has little effect on the hazard of a Regular removal in Democracies, Mixed Regimes and Autocracies. I furthermore find that Challenging reduces the hazard of an irregular removal for leaders of Autocratic and Mixed Regimes, but not for Democratic leaders. For all leaders, Defeat in War again significantly increases the hazard of an irregular removal. These findings suggest that leaders of Autocratic and Mixed regimes may again benefit from conflict whereas Democratic leaders do not.\(^{18}\)

\[^{18}\]I discuss the robustness checks in Which Way Out? Additional Results & Appendix available at \texttt{http://mail.rochester.edu/~hgoemans/research}.
5 Conclusion

I have provided the broadest examination to date of how leaders lose office and their post-exit fate. I found that the post-exit fate of leaders varies significantly—5% of all leaders were killed, 8% jailed and 14% exiled within one year after they lost office—and is strongly associated with how the leader lost office in the first place. These two findings imply that leaders have strong incentives to choose policy depending not just on how it affects the probability of losing office, but also depending on how it affects the manner of losing office and thus, their likely post-exit fate. In particular, leaders have strong incentives to pick policies that avoid an irregular removal from office, since fully 80% of leaders who lost office in an irregular manner subsequently suffered significant punishment. This basic point holds much promise to offer better explanations of policy choices, not just in international relations, but also comparative politics as Cox (2008) recently showed it helps explain when authoritarian regimes schedule and hold elections.

My analysis has also thrown new light on which leaders are particularly likely to lose office in an irregular manner. Institutionally, leaders of Mixed and Transitional Regimes, leaders of underdeveloped countries, relatively closed to the international trading community, and leaders who have been in power before or entered in an irregular manner are more likely to lose office in an irregular manner. Policies that increase the risk of an irregular removal from office include a poor record of economic growth and defeat in an international conflict. If leaders know that particular ways of losing office are associated with post-exit punishment—e.g., exile, jail or death—they have strong incentives to consider not only how their policies affect the overall hazard of losing office, but also the differential impact on how they will lose office. In particular, leaders who fear an irregular removal from office may take policy-gambles to avoid severe personal punishments that other leaders would eschew.

Previous research that focused solely on the overall loss of office threw doubt on some important theories of international conflict. Disaggregation of the loss of office by exit type yields results that resolve some questions and now offers empirical support for some of these theories (Bueno de Mesquita et al., 1999, 2003; Reiter and Stam, 2002; Schultz, 2001). However, the results further puts into doubt standard theories of the diversionary use of force (Levy, 1989; Chiozza and Goemans, 2003, 2004a). For leaders who anticipate a regular loss of office, international conflict can be a decidedly risky gamble since they have little to gain and much to
lose. On the other hand, leaders who fear an irregular removal from office stand to gain much more from a successful challenge and lose relatively little from an unsuccessful challenge, except when they lose a full-fledged war. Thus, for leaders who fear an irregular loss of office with the associated high probability of punishment—most likely leaders who entered in an irregular manner—the way out of their predicament may lead through international conflict.
References


Table 1: How Leaders Lose Office and the Consequences

<table>
<thead>
<tr>
<th></th>
<th>OK</th>
<th>Exile</th>
<th>Jail</th>
<th>Killed</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ill Health</td>
<td>90% (28)</td>
<td>6% (2)</td>
<td>3% (1)</td>
<td>0% (0)</td>
<td>31 (2%)</td>
</tr>
<tr>
<td>Regular</td>
<td>92% (1,200)</td>
<td>5% (65)</td>
<td>2% (32)</td>
<td>.1% (1)</td>
<td>1,298 (72%)</td>
</tr>
<tr>
<td>Irregular</td>
<td>20% (93)</td>
<td>41% (192)</td>
<td>22% (105)</td>
<td>18% (83)</td>
<td>473 (26%)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>1,321 (73%)</td>
<td>259 (14%)</td>
<td>138 (8%)</td>
<td>84 (5%)</td>
<td>1,802</td>
</tr>
</tbody>
</table>

Pearson Chi^2(6) = 964.13 p < 0.001
War Draw 0
War Defeat 0

Crisis Draw
Crisis Defeat

\[ a \]
Parl. Democracy 1.334** .118 29.641** .71 \ -0.682* .287
Parl. Dem \times ln(t) 0.769** .118 27.646** .79 \ -0.336 .249
Pres. Democracy 0.193** .118 \ -3.270\ | .226
Pres. Dem \times ln(t) -0.328 -0.05 1.69 0.460** .178
Trans \times ln(t) \ -3.498** .214
Civil War 0.222** .082 -0.050 .106 0.004 .466
Civil War \times ln(t) 0.102 .069
GDP per capita 0.072 .047 .081 .189 -0.227\ | .111
GDP pc \times (t) 0.001 .028
GDP Growth 0.049 .093 1.387** .398 -2.775** .489
GDP Gr. \times ln(t) -0.300 .158
Trade Openness -0.535** .154 -0.360 0.173 -1.333** .327
\Delta Trade Open -0.172 .119 -0.079 .132 -0.335 .220
Population -0.024 .042 0.059 .039 -0.113* .049

Age 0.292** .008 .018** .012 .008 .005
Age \times ln(t) -0.043** .001 -0.027** .002
Times in Office -0.138** .041 -0.154* .049 0.141 0.082
Entry 3.982** .229 2.350** .327 6.478** .501
Entry \times ln(t) -0.582** .035 -0.363** .052 -0.929** .072

Challenger -0.628** .191 -0.475\ | .262 -1.053** .350
Target -0.026 .128 -0.094 .167 .222 .236
Inheritor -0.228 .222 -0.022 .246 -0.304 .389
Crisis Victory -0.387\ | .204 -0.374 .251 -0.874\ | .478
Crisis Defeat -0.264 .762 -0.324 .295 0.889** .313
C. Defeat \times ln(t) 0.075 .111
Crisis Defeat 0.251 .223 -0.344 .478 2.039** .340
War Draw -0.073 .355 0.166 .475 -1.127 .813

\[ a \]
No. Obs 19938 19938 19938
No. Subjects 2130 2130 2130
No. Failure 1973 1319 477
Log-likelihood -11592.9 -7497.3 -2721.8
Wald-test D = 68.51 p < 0.001 D = 38.44 p < 0.001 D = 21.16 p < 0.001
\[ \Theta \] 0.467** \ \bar{D} = 4.823 0.322** \ \bar{D} = 3.305 0.256** \ \bar{D} = 1.894

\[ a \]
\[ * \] p < .01, \ [a] p < .05, \ [b] p < .1. Missing values are imputed using MI, m = 5. (Rubin, 1987; Schaefer, 1997). Estimates and standard errors are adjusted using Rubin’s (1987, 76-77) formulas. The Wald test refers to a test of the hypothesis that all coefficients are simultaneously equal to 0. For the D statistic in the Wald test, see Rubin and Schenker (1991, 590). For the \bar{D} statistic for the significance of \Theta, see Li et al. (1991). The frailty parameter \theta measures the variance of a Gamma distribution with mean equal to 1.
Table 3: Survival Probabilities: Irregular Removal from Office

<table>
<thead>
<tr>
<th></th>
<th>Manner of Entry</th>
<th>Challenger – Crisis</th>
<th>Challenger – War</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Regular</td>
<td>Irregular</td>
<td>Victory</td>
</tr>
<tr>
<td><strong>Autocracy</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$Pr(T &gt; 1 \text{ yr.})$</td>
<td>0.974</td>
<td>0.911</td>
<td>0.986</td>
</tr>
<tr>
<td>$Pr(T &gt; 3 \text{ yrs.})$</td>
<td>0.929</td>
<td>0.847</td>
<td>0.936</td>
</tr>
<tr>
<td>$Pr(T &gt; 5 \text{ yrs.})$</td>
<td>0.861</td>
<td>0.791</td>
<td>0.885</td>
</tr>
<tr>
<td><strong>Mixed regime</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$Pr(T &gt; 1 \text{ yr.})$</td>
<td>0.955</td>
<td>0.852</td>
<td>0.975</td>
</tr>
<tr>
<td>$Pr(T &gt; 3 \text{ yrs.})$</td>
<td>0.880</td>
<td>0.751</td>
<td>0.892</td>
</tr>
<tr>
<td>$Pr(T &gt; 5 \text{ yrs.})$</td>
<td>0.772</td>
<td>0.668</td>
<td>0.810</td>
</tr>
<tr>
<td><strong>Parl. democracy</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$Pr(T &gt; 1 \text{ yr.})$</td>
<td>0.990</td>
<td>0.967</td>
<td>0.995</td>
</tr>
<tr>
<td>$Pr(T &gt; 3 \text{ yrs.})$</td>
<td>0.973</td>
<td>0.941</td>
<td>0.976</td>
</tr>
<tr>
<td>$Pr(T &gt; 3 \text{ yrs.})$</td>
<td>0.947</td>
<td>0.918</td>
<td>0.956</td>
</tr>
<tr>
<td><strong>Pres. democracy</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$Pr(T &gt; 1 \text{ yr.})$</td>
<td>0.984</td>
<td>0.944</td>
<td>0.991</td>
</tr>
<tr>
<td>$Pr(T &gt; 3 \text{ yrs.})$</td>
<td>0.955</td>
<td>0.902</td>
<td>0.960</td>
</tr>
<tr>
<td>$Pr(T &gt; 5 \text{ yrs.})$</td>
<td>0.911</td>
<td>0.865</td>
<td>0.927</td>
</tr>
<tr>
<td><strong>Transitional</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$Pr(T &gt; 1 \text{ yr.})$</td>
<td>0.951</td>
<td>0.837</td>
<td>0.973</td>
</tr>
<tr>
<td>$Pr(T &gt; 3 \text{ yrs.})$</td>
<td>0.868</td>
<td>0.728</td>
<td>0.881</td>
</tr>
<tr>
<td>$Pr(T &gt; 5 \text{ yrs.})$</td>
<td>0.751</td>
<td>0.639</td>
<td>0.791</td>
</tr>
</tbody>
</table>

$^a$ In the conflict scenarios, the survival probabilities are computed while setting Entry to Irregular Entry, the involvement as Challenger to 1 in the first year, and to 0 thereafter. In the case of Victory, the leader receives a 1 in the year of victory, .5 the year after, .33 in the third year, .25 in the fourth and .2 in the fifth year. The frailty term is set at the median value of 1. The remaining variables are set at their mean values.