The impact of coups d’état on civil war duration

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Abstract
This paper considers how coups d’état influence the duration of civil wars. While previous work on civil war duration has ignored coups, grouped them alongside civil wars or considered them as a special type of conflict, this article recognizes coups as dramatic events that can quickly change the course of a conflict. Coups that take place during a civil war can shock an otherwise intractable bargaining situation, shortening the war’s duration. This shock influences both information and credibility concerns. Coups condense government preferences into a single, unified viewpoint and allow governments to efficiently translate preferences into action. They likewise combine the military with the government, effectively eliminating the military as a potential spoiler, which helps ease the commitment problem. These expectations are tested by examining the impact of successful coups on civil war duration, 1950–2009. Results suggest that coups indeed serve as peace-inducing shocks, primarily by working through the credibility mechanism.

Keywords
Civil war, conflict duration, coup d’état, intrastate bargaining

Ongoing civil wars are one of the foremost barriers to peace and stability throughout the world. As interstate conflicts decline, scholars have increasingly turned their attention to the dozen-plus civil wars going on today (Themnér and Wallensteen, 2013). The costs of civil wars are dramatic, as evidence points to both short- and long-term economic, social and political costs (Collier et al., 2003; Salehyan and Thyne, 2012). Recognizing the horrors that accompany civil conflicts is increasingly ranging beyond scholarly attention. The media has focused recent attention on massacres in Libya and Syria, terrorism in Afghanistan and Iraq, and ethnic killings in South Sudan. One characteristic of civil wars that largely drives these costs is their long duration, with the average civil war lasting around 6 years (Fearon and Laitin, 2003). The duration and costs of civil wars point to a clear need for continued research on how to best shorten their duration.

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Insightful developments have arisen among civil war scholars to enhance our understanding of why some civil wars end quickly and decisively, while others rage for decades. Early work characterized civil conflicts in a simple two-actor construct: the government vs the rebels. More recent work has broken the two-actor assumption by considering multiple actors among both the rebels (Cunningham, 2006; Cunningham et al., 2009) and the government (Cunningham, 2007; Stedman, 1997; Thyne, 2012). Others consider intervention to be a primary factor in explaining the duration of civil conflict, as external actors can influence the balance of power among the combatants (Balch-Lindsay and Enterline, 2000; Regan, 2002) or provide security guarantees to support war-ending agreements (Walter, 2002). These are important developments because they move the focus away from static, state-level variables, shifting our attention to policy-mutable events that can account for the high level of variation we see in the duration of civil wars.

This article continues this vein of research by focusing on how coups d'état can impact the duration of civil wars. Two questions guide the study. First, how should scholars deal with coups in studies of civil war duration? Second, how do successful coups influence civil war duration? To deal with the first question, I begin by articulating differences between coups and civil wars, noting that the two have often been conflated in studies of civil wars when coups happen to cross a certain death threshold. Following a discussion of how this approach can yield biased samples, I provide a list of coups that are frequently grouped alongside civil wars in empirical analyses.

To address the second question, I articulate a two-part theory for how coups impact civil war duration. This article situates coups within the intrastate bargaining literature, seeking to understand how coups influence the information and commitment problems that increase war duration. Similar approaches have found that factors internal to the state, such as state capacity (DeRouen and Sobek, 2004; Fearon, 2004), the strength or number of rebel factions (Cunningham, 2006, 2010; Mason et al., 1999) and combatant strategy (Kalyvas and Kocher, 2007; Mason and Krane, 1989), influence civil war duration. However, previous work on civil war duration has ignored coups, grouped them alongside civil wars or considered them as a special type of civil conflict. In contrast, I argue that coups are dramatic events that can quickly change the course of a conflict by clarifying information about the government’s preferences and capabilities, and by providing stability needed for the government to credibly commit to war-ending agreements. This argument culminates in the single hypothesis that successful coups should shorten the duration of civil wars. I extend the primary argument with an attempt to understand whether coups work via the information or commitment mechanism, arguing that coups taking place early in a conflict should primarily influence information problems, while later coups influence credibility concerns. Empirical tests strongly support the idea that coups shorten civil war duration, and an analysis of late vs early coups suggests that the war-shortening impact of coups is primarily working through the commitment mechanism. The conclusion highlights implications for researchers and policy-makers.

**Coups, civil wars and conceptual clarity**

Coups are dramatic events that can happen during civil wars. Coups may also provide the initial spark to a civil war. However, regardless of their bloodiness or long-term consequences, coups are not civil wars. A discussion on the differences between coups and civil
wars is warranted given that scholars have often blurred their distinction in studies of internal conflict. For example, Fearon (2004) characterizes coups as a special type of civil conflict, and develops a theory for how shocks can provide space for both civil wars and coups to emerge. Others tacitly ignore any distinction, studying the duration of civil conflicts with coups lumped alongside large-scale rebellions (Balch-Lindsay et al., 2008). More recent scholarship recognizes that coups are distinct from civil wars, and controls for coups in empirical models (Cunningham, 2006; Thyne, 2012). I urge scholars to go one step further in removing coups as cases in civil war models (e.g. Hultquist, 2013).

Blurring coups with civil wars is strange because little debate exists over the conceptual distinctions between the two. Gates (2004) provides a general definition of civil wars that is common to the majority of civil war datasets, explaining that civil war is “an armed conflict between representatives of the state and another organized domestic party over a contested political incompatibility resulting in a number of causalities exceeding a certain threshold for both parties”. Meanwhile, coups are conceptualized by Powell and Thyne (2011: 252) as “illegal and overt attempts by the military or other elites within the state apparatus to unseat the sitting executive”. These definitions yield three primary distinctions between civil wars and coups. First, coup perpetrators must come from within the central state apparatus, while civil wars commonly include vast segments of the general population. Second, the goal of coups must be to overthrow chief executives. While some civil wars have the same goal, many others are fought for autonomy, secession or greed-based motives (Fearon, 2004). Third, although coups may spark long-running civil conflicts, the coup attempt itself is frequently so brief that it is over before the public is aware that the attempt has been made.

Consistent with the definitions, theoretical arguments rarely blend civil wars and coups. Leading arguments for the former include studies of grievances (Gurr, 1970), greed (Collier and Hoeffler, 2004) and state strength (Fearon and Laitin, 2003). Theories for coups largely center on military-focused concepts, such as counterbalancing (Belkin and Schofer, 2003), corporate grievances (Thomson, 1980) and cohort rivalry (Kposowa and Jenkins, 1993). Although scholars rightly keep coups and civil wars separate theoretically, coups are often conflated with civil wars in empirical models if they happen to cross the minimal death threshold for the civil war dataset. Taking this approach can quickly yield biased samples. We should expect only minor problems when coups are unrelated to our covariates of interest because coups should introduce only noise in these cases. For example, poverty has been shown to increase the likelihood of both civil wars and coups, making it unlikely that including coups in models of civil war duration will capture special cases where poverty will “mark” conflicts that will necessarily be short because they are coups. However, other variables that are commonly examined in models of civil war duration are apt to bias inferences because they mark conflicts that will almost always be very short simply because they are coups. Focusing on the three main distinctions outlined above—perpetrators, goals and brevity—helps shed light on how ignoring these distinctions can bias samples.

Regarding perpetrators, coup architects must come from the “military or other elites within the state apparatus” (Powell and Thyne, 2011), while rebels are defined as “organized domestic part[ies]” (Gates, 2004). Given the broader range of potential perpetrators, it is common to see civil war models include measures that capture the characteristics of the general population, such as population size, education levels, ethnic fractionalization and inequality (Cunningham, 2006; Fearon and Laitin, 2003; Gubler and Selway, 2012; Thyne, 2006). Consistent with the narrower definition, coup models rarely consider the general population, more commonly capturing factors that deal with military or other elites with
measures like military counterbalancing or the number of ground-combat capable organizations (Pilster and Bohmelt, 2011; Powell, 2012). If we include a measure capturing the general population, therefore, we are likely to be adding in measures that will mark conflicts with longer durations. For example, because high populations are associated with civil wars but not coups, adding population to a model of civil war duration with coups included in the sample should bias towards showing a war-lengthening impact because population will probably be distributed randomly among coups, but be consistently higher for civil wars. We should expect similar bias for any other characteristic included in civil war duration models that captures the general population.

Considering the goals of coups and civil wars provides a second reason to expect bias if coups are included in samples of civil war duration. Civil wars are fought over “a contested political incompatibility”, while coups must be attempts “to unseat the sitting executive”. Although both of these definitions include attempts to overthrow the government, the broader definition of civil wars also includes secessionist rebellions, popular revolutions, and contraband conflicts (inter alia, e.g. Fearon, 2004). Meanwhile, all coups must be attempts to overthrow the government. When coups are included alongside civil wars in duration models, therefore, we end up with samples where all coups are of one type (fights to control the government), while civil wars may be this type or any other. This has probably already led to biased findings in past work. One common finding in studies of civil war duration is that fights to control the government are often shorter than other types of conflict (Fearon, 2004; Regan, 2002; Regan and Aydin, 2006). This finding is likely to be overstated if bloody coups are conflated with civil wars because all coups are attempts to overthrow the government, and these events are likely to be significantly shorter than wars fought for other aims.

Finally, owing to the brevity of coups, we can see bias arise when coups are included in the sample predicting civil war duration when our independent variables change during the war. Even when bloody, coups are often over within hours, and they rarely extend beyond a few days. The primary concern here is with the ample literature on how external actors influence civil war duration. A fairly consistent finding in this vein of research is that interventions lengthen the duration of civil conflicts (Balch-Lindsay and Enterline, 2000; Regan, 2002). While external actors are likely to influence whether or not a coup or civil war will be attempted (Thyne, 2009, 2010), interventions during a coup are essentially impossible because their brevity allows external actors little time to organize an intervention. Thus, the finding that interventions lengthen civil wars is likely to be inflated when coups are included as observations because they can only happen during the much longer civil wars.

This discussion reveals that analyzing coups alongside civil wars is apt to result in a variety of inferential problems. Similar arguments about selection effects and civil conflict have been noted elsewhere. For example, Christin and Hug (2003) and Hug (2013) note the selection bias that can arise when scholar use the “Minorities at Risk” dataset (Gurr, 1993), while Gates and Strand (2004) explain possible selection issues that arise when scholars use civil war datasets with high thresholds for battle deaths. Each argument follows the same general path, which is summarized well by Gates and Strand (2004: 6): “If the measurement error [owing to selection issues] is related in any possible way with variables included in the empirical model we wish to estimate, biases are very likely”. Thus, whether it is minorities at risk being related to violence (Fearon and Laitin, 1999), large populations related to higher battle deaths (Sambanis, 2001) or coups related to shorter civil wars, the selection process is one that should be of primary concern.
Fortunately, the fix is easy because the issue comes down to proper case selection. Scholars interested in civil war should analyze civil wars, while scholars interested in coups should analyze coups. In order to put scholars in a better position to separate coups from civil wars, Table 1 lists coups within internal armed conflicts in two datasets that are commonly used to study civil wars. These conflicts were chosen after reviewing the case histories for each conflict, looking primarily for instances where the perpetrators came from the state apparatus, the goal was to overthrow the chief executive and the conflict was brief. Although theory should drive the decision on which conflicts to include in the dataset, scholars studying civil wars should strongly consider dropping coups.

<table>
<thead>
<tr>
<th>Conflict no.</th>
<th>Country</th>
<th>Opposition</th>
<th>Start date</th>
<th>End date</th>
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<td>04/08/1952</td>
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<td>Shammar Tribe and Pro-West officers</td>
<td>03/06/1959</td>
<td>03/10/1959</td>
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<td>Chile</td>
<td>Pinochet-led military</td>
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<td>Yemen People’s Republic</td>
<td>Leftist factions</td>
<td>01/13/1986</td>
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Coups and civil war duration

A full understanding of how coups influence the duration of civil wars requires us to move beyond proper case selection. Removing bloody coups from our samples is a necessary first step, but the influence of coups on civil war does not end there. Descriptive statistics analyzing coups and civil wars make this readily apparent. Powell and Thyne (2011) report that 11 long-running civil wars were sparked by coups, while 139 coup attempts came in states that were in the midst of an active civil war. As we will see, these rather dramatic shifts in the government are apt to have important consequences for intrastate bargaining. Before moving to the primary argument, though, these descriptive statistics also suggest that any attempt to link coups with civil wars will be fraught with difficulty because both events are related to underlying instability in the state. Thus, this section first discusses how one might deal with this apparent endogeneity, and then proceeds to a discussion about how coups influence civil war duration.

The first step in trying to gauge how coups influence civil wars is to focus on the outcome of interest, civil war duration, which is different than civil war onset or incidence. As reported with descriptive statistics above and work from Belkin and Schofer (2003) and Bodea and Elbadawi (2007), it is safe to conclude that the incidence of civil wars increases the likelihood of coups. When these coups arise, however, conventional wisdom focused on civil war duration would expect a war-lengthening effect. This is based on work showing that coups destabilize an already tumultuous situation (Geddes, 1999; Onwumechili, 1998). Theoretically then, we should expect bias resulting from underlying conditions promoting both coups and civil wars to work in the opposite manner as predicted by the forthcoming argument.

Careful empirical work can also alleviate endogeneity concerns. One might suspect coups to be related to civil war termination if coup leaders, seeing a defeat as inevitable, defect and join the opposition in overthrowing the government. Such cases would clearly bias the analyses towards showing a war-shortening effect of coups. Fortunately, the dataset used for the forthcoming analyses explicitly excludes such cases as coups. Once actors defect from the government, they cannot launch a coup based on the Powell and Thyne (2011) definition because they are no longer members of the state apparatus. To be sure, robustness checks on the analyses exclude cases where coups happened at the same time as the war outcome, assuring that the putsch influences the war outcome and not the other way around. Thus, while it would be foolhardy to consider coups as exogenous to the existence of the civil war itself, it is reasonable to suggest that coups can have an exogenous effect on civil war duration and outcome. If not, the most likely bias would point towards a war-lengthening effect of coups, and careful empirical work can alleviate these concerns.

The following argument deviates from the conventional wisdom. Instead of expecting coups to further destabilize an already tumultuous situation, it is possible that coups are events that provide vital shocks to intrastate bargaining. Akin to hitting the “reset” button on a frozen computer, the theory focuses on the potential for coups to usher in a completely different group to bargain with the opposition, which will probably entail different preferences and capabilities than the incumbent regime.

Coups and intrastate bargaining

Scholars drawing on rationalist explanations for war termination have made great gains in our understanding of war duration. This approach provides two focal points for explaining how coups can impact civil war duration (Fearon, 1995; Powell, 2006). First, competing
actors have difficulties seeing eye-to-eye about an acceptable agreement because they hold private information about their acceptable reservation points, and they have an incentive to misrepresent capabilities. As this information is revealed during the conflict, we should expect a convergence in expectations about future military victory, which should help bring an end to the conflict (Filson and Werner, 2002; Smith and Stam, 2002; Slantchev, 2003). Second, even if both sides have sufficient information to devise a war-ending agreement, the combatants may be unable to credibly commit to upholding the agreement because each side has an incentive to renege once an agreement is signed (Cunningham, 2007; Fortna, 2004; Hartzell and Hoddie, 2003; Walter, 2002). These two barriers—commonly known as information and commitment problems—provide the framework to understand how coups impact civil war duration.

**Informational uncertainties.** A large body of rationalist work considers informational asymmetries as key factors to explain conflicts (Fearon, 1995). The most recent rationalist work has effectively unified the onset and duration stages of conflict by allowing actors to update their pre-war bargaining positions based on information revealed through fighting. We should expect a termination of war to become more likely as information is revealed. This expectation is known in the bargaining literature as the “Principle of Convergence” (Blainey, 1988; Filson and Werner, 2002; Smith and Stam, 2002).

While the bulk of the rationalist bargaining literature simplifies the discussion to two actors, in reality numerous actors must often develop convergent expectations for war to come to an end. The arrival of additional actors makes it increasingly difficult for each side of the conflict to develop a single expectation for future military victory. This logic has been used to explain how external interventions (Cunningham, 2010) and multiple rebel groups (Cunningham, 2006) can prolong civil wars. Thyne’s (2012) recent discussion regarding variations within governments is particularly relevant for understanding how coups can reveal information to increase the likelihood of civil war termination. According to Thyne, the diffusion of power within governments makes it difficult to present a clear reservation point to the rebels, efficiently update their reservation point as the balance of power shifts through fighting and eliminate spoilers who might obstruct war-ending agreements. He suggests that strong authoritarian governments are best able to overcome these problems.

Although consolidation of power is one potential mechanism for the government to overcome information problems, coups provide a second and much clearer route. The simplest way that military coups can remove misperceptions is by bringing in a new set of leaders who are willing to use scorched-earth policies to crush the rebels (Choi and James, 2008). Policies such as politically motivated arrests and emergency rule heighten the costs of collective action, reducing a rebel group’s ability to recruit and retain fighters, and ultimately leading to their demise. Such policies are costly, however. Thus, a more common mechanism by which coups can reveal information is by clarifying the government’s reservation point, which provides information to the opposition about the range of acceptable agreements. This can happen regardless of whether the military is more extreme or conciliatory than the government. Given that perpetrating a failed coup is costly (Svolik, 2009), we should only expect coups to arise when the coup leaders have very clear and obtainable goals. Upon taking control of the government, coup leaders almost inevitably seize power over the media to clearly articulate their goals to the population (McCartan, 2008). In the context of an
ongoing civil conflict, we should expect the goals and policies to be geared towards their preferences for potential war-ending agreements and revised fighting tactics.

In contrast to more regular methods of leadership turnover, the nature of coups provides two very clear mechanisms to reveal information. First, the preferences of coup leaders can be articulated clearly and in a unified manner. Most coups are led by the military, and all coups have the military playing at least a critical supporting role. Unlike civilian governments, the military is able to articulate and maintain a stable and unified viewpoint. Upon seizing power, either a single, high-level actor or a small ruling junta articulates its demands and policy preferences, and few actors exist to credibly challenge the rule of the new executives. This is true even in instances where the pre-coup government attempted to counterbalance the military to prevent coups (Belkin and Schofer, 2005). In fact, a unified viewpoint is even clearer in such circumstances. Because counterbalancing heightens the organizational costs of perpetrating a coup by increasing the collective action problem, only coup leaders who are able to build a broad coalition of support with clear goals and strong leadership will be able to successfully take control of the government (Powell, 2012). When coups take place, therefore, information regarding the new government’s acceptable bargaining range should quickly become clear.

Second, militaries are organized in a hierarchical manner, which allows for new policies and decisions to be implemented quickly and efficiently. The foundational reason behind this is that military leadership must be able to adapt quickly to changing realities on the battlefield, and they must train and expect subordinates to abide by their decisions without dissent (Dyer, 2004). When taking control over government policy, these characteristics do not go away. Rather, we should expect the organization of the military to allow the junta to have its preferences implemented quickly, efficiently and with little dissent.

Credible commitments. Coups go beyond providing information to help bring an end to civil conflicts by allowing the government to more credibly commit to war-ending agreements. As explained in previous work, civil wars are apt to continue even with full information because governments have a difficult time convincing the rebels that they will follow through with war-ending agreements. This is because the government forces naturally become dominant as rebel armies disband, which gives them an incentive to renege on an agreement ex post that was beneficial ex ante (Collier et al., 2004; Fearon, 2004; Walter, 2002). Scholars have identified several potential solutions to the commitment problems that cause the continuation of civil conflicts, including multifaceted war-ending agreements (Hartzell and Hoddie, 2003) and third-party security guarantees (Walter, 2002). Coups provide another potential mechanism to enable the government to credibly commit to war-ending agreements.

The most critical factor in a rebel group’s decision to sign and implement a war-ending agreement is its estimation of whether or not potential spoilers will arise after a settlement is reached. Although the government may be perfectly conciliatory at the time of the agreement, it is possible for new leaders to come to power with radically different preferences (Stedman, 1997). In fact, if the agreement draws the ire of important factions, new leaders may come to power because their preferences diverge from the agreement. While several potential spoilers exist in society, the military is one of the most likely spoilers of the peace process. Because they are already mobilized, the military has ample capability to renege on agreements through renewed fighting. They also have a strong incentive to renege because war-ending agreements frequently include integration of rebel soldiers with the military,
which sets up an awkward process of attempting to convert former combatants into comrades (Glassmyer and Sambanis, 2008).

While military defections during the post-war period can easily unravel an existing war-ending agreement, we should expect coups that happen in the midst of conflict to actually support war-ending agreements. This is perhaps counter-intuitive, and it seems to ignore rather famous instances where military coups seemed to prolong civil conflicts by canceling elections (e.g. Algeria, 1992) or removing conciliatory leaders (e.g. Rwanda, 1994). As discussed above, however, the military playing a spoiling role is common, and all intrastate bargains are negotiated under the shadow of potential reneging by the military. When the military takes over during a conflict, we can point to two clear mechanisms by which coups ameliorate the commitment problem.

First, a military coup consolidates the government and the military, essentially eliminating the most important actor that could renege on a war-ending agreement. This is particularly true if multiple actors could renege on an agreement within the incumbent government, as is frequently the case in more democratic, power-sharing governments (Thyne, 2012). Regardless of the government type, however, the military can always play a spoiling role, and coups at least reduce the strength of other parties that might also be able to fulfill this role. When a deal is struck by the military, we should expect the deal to reflect the military’s preferences, giving it little incentive to renege once the war comes to an end.

Second, potential spoilers are less likely to challenge the policy decisions made by a ruling junta. Emergency rule and repression frequently follow coups, which greatly increases the costs of challenging governmental policies. By consolidating rule into a single military leader or junta, the military becomes the single governmental entity that could renege on an

![Figure 1. Coup frequency among ongoing civil wars.](image-url)
agreement. If an agreement with the rebels is made in such conditions, we should expect the rebels to have reduced fears that the government will renege on its promises.

Taken together, by both improving the volume and quality of information and by enhancing the ability of the government to credibly commit to war-ending agreements, this argument suggests the following hypothesis:

**H1**: We should expect successful coups perpetrated during a civil war to shorten the war’s duration.

**Information or credibility?** The theoretical argument thus far provides reasons to suspect that coups will shorten the duration of civil wars by helping solve the information problem, the commitment problem or both. This approach is consistent with the bulk of approaches to understanding war in the bargaining framework. Theoretical models from scholars like Filson and Werner (2002), Powell (2004), Slantchev (2003) and Smith and Stam (2004) leave commitment problems aside to focus on information, while models focused on commitment largely do the same with information (e.g. Fearon, 2004; Leventoglu and Slantchev, 2007; Powell, 2006). More recent work attempts to better address information vs commitment issues. For example, Wolford et al. (2011) develop a theoretical model that simultaneously incorporates both commitment and information problems, while Shannon et al. (2010) differentiate between “Information providing” and “Commitment enhancing” international organizations in their attempt to explain how international organizations influence war duration. Thus, while we have theoretical grounding to suggest that both information and commitment problems work simultaneously to prolong war, we also have a basis to begin understanding which mechanism plays a larger role in prolonging conflicts.

When considering the influence of coups on civil war duration, one way that we can better understand whether coups shorten civil wars via the information or commitment mechanism is to consider when coups are apt to have the strongest effect in shortening conflicts. In Figure 1, we see the number of successful coups perpetrated during civil conflicts alongside the number of wars ongoing in each month. The bulk of civil wars die fairly quickly, with median and mean durations of 22 and 54 months, respectively. Among the 69 successful coups that happened during civil conflicts, the plurality (10) clusters in the first 2 months of civil wars. Beyond these first 2 months, coups spread more evenly across conflict durations. If we take the median civil war duration as a cut-off point, for example, we see that 38 (55%) coups happen before the median civil war duration, and 31 (45%) happen afterwards.

The spread of coups over civil war duration is important because differentiating between coups that happen early in conflicts and those that happen later can provide leverage in explaining whether coups influence the information problem or the commitment problem. As suggested by Fearon (2004) and Powell (2006), information problems should be solved fairly quickly once combatants meet on the battlefield. If commitment is a minor issue, we should see the opposing sides update their bargaining positions and form agreements once they see victories and losses accumulate on the battlefield. Applying this logic to the coup argument, we should see quick terminations following coups that happen early in conflicts if information problems are the primary problem prolonging the conflict. In contrast, commitment problems become the largest barriers to ending conflicts once time allows fighting to reveal information about relative capabilities (Reiter, 2009). Coups that take place later in
conflicts, therefore, are apt to shorten civil wars by working primarily through the commitment mechanism. This discussion yields the following predictions:

**H2a:** If coups shorten civil wars via the information mechanism, we should see coups that take place early in conflicts have a stronger effect than those that take place later in conflicts.

**H2b:** If coups shorten civil wars via the commitment mechanism, we should see coups that take place later in conflicts have a stronger effect than those that take place early in conflicts.

### Research design

This quantitative test examines the duration of civil conflicts from 1950 to 2009 using the UCDP Conflict Termination Dataset (Kreutz, 2010), which defines armed conflict as “contested incompatibility that concerns government and/or territory where the use of armed force between two parties, of which at least one is the government of a state, results in at least 25 battle-related deaths” (Gleditsch et al., 2002). Both internal and internationalized internal conflicts are included in the analyses. A new civil war is coded if a conflict restarts after at least a 1 year break in fighting. The coups coded as armed conflicts listed in Table 1 are excluded from the analyses. After losing cases owing to missing data, the final unit of analysis is the duration of each of the 301 remaining civil conflicts coded monthly. This yields 17,319 potential conflict-months for analysis with durations ranging from 1 to 576 months (48 years).

The duration of each conflict is examined by observing whether or not the conflict ended in each month using a hazard model. Hazard analyses allow us to predict the likelihood that the civil war ended in each time period, given that it has survived to that time period. The Cox proportional hazard model is used because there is no theoretical reason to predict a specific functional form of the underlying baseline hazard. This leaves the duration dependence unspecified, allowing us to see how the covariates shift the baseline hazard. Coefficients (rather than hazard ratios) are presented in Table 2. These show the influence of the independent variables on the underlying baseline hazards with positive coefficients indicating an increase in the hazard of a conflict ending (i.e. shorter conflicts). Standard errors are clustered by country to account for potential unobserved state-level heterogeneity.

The first hypothesis suggests that successful coups should shorten the duration of civil conflicts. Coups are operationalized following Powell and Thyne (2011), who code the exact date of 235 successful coups from 1950 to present. A coup is deemed successful if the coup plotters are able to seize and maintain power for at least 7 days. Among these, 69 successful coups happened in the midst of ongoing civil wars. The theory speaks primarily to military coups. Thus, I exclude three non-military “palace” coups from the analyses. Given that coups are not expected to cause a termination of civil conflicts overnight, I code the primary independent variable, *successful coup*, as 1 for the month of the coup plus 6 months afterwards. Ten exceptions to the 6 month rule appear in the dataset. For example, Julius Bio seized power in Sierra Leone in January 1996, and then left power 3 months later following elections. In this case, the coup measure is coded 1 from January through March, and then returns to zero until a subsequent coup in May 1997. Nine other cases where coup-born governments lost power in less than 6 months are coded similarly. Our final tally results in 370 civil war months taking on a positive value for the primary independent variable, which represents 2.14% of the sample. In order to test the second hypothesis, I use the median civil
war duration of 22 months to differentiate *early coups* from *late coups*, again extending each measure by 6 months. If coups work via the information argument, we should see early coups having a stronger effect than late coups. We should see the opposite if coups primarily solve credibility problems.

Several measures are included to help isolate the impact of coups on the duration of civil wars. Among the dozens of measures that have been used in past empirical tests, I include five measures that have been found to be particularly robust in past models. First, fights to control the government have consistently been found to be shorter than either ethnically based conflicts or wars of secession. This is probably because the latter are perceived as non-divisible goods, which makes negotiated settlement unlikely (Fearon, 2004; Kaufman, 1996; Licklider, 1995; Regan, 2002). As discussed earlier, this might also be because coups, which are all meant to control the government, have frequently been included alongside civil wars in previous analyses. *Fight for government* (53.3% of observations) is a dummy variable coming from the UCDP/PRIO Armed Conflict dataset (Themnér and Wallensteen, 2013). Several scholars have argued that power-sharing governments have a more difficult time forging agreements with rebels owing to information and commitment problems that come with more potential veto players and spoilers being added to negotiations (Cunningham, 2007; Thyne, 2012). Thus, I include a measure for *democracy* (33.09% of observations), which is coded 1 if the state receives a Polity IV score of +6 and above (Marshall and Jaggers, 2007). Third, past research has found that poverty can lead to longer civil wars (Collier et al., 2004). Thus, I include a measure of logged *GDP per capita* from Gleditsch (2002) to capture the impact of poverty on civil war duration (mean = 6.93, SD = 1.26). Fourth, governments may have a difficult time settling conflicts when there is more than one rebellion going on at once. Thus, I include a variable called *parallel conflicts*, which is a count of the number of ongoing civil conflicts in each time period (mean = 2.13, SD = 1.70). Finally, we might expect combatants to be more willing to settle to avoid continued costs as the *intensity* of the conflict increases (Zartman, 1989). On the other hand, intensity might proxy resolve, as only highly resolved groups will continue to fight with high casualties. Following scholars such as Balch-Lindsay and Enterline (2000), Regan (2002) and Fearon (2004), I include a measure to capture war intensity, which is coded 1 if the conflict reached 1000 battle deaths over the course of the conflict and 0 otherwise (26.7% of observations).

**Data analysis**

We begin by examining the impact of successful coups on the duration of conflicts in Table 2. All models can be interpreted similarly with positive coefficients indicating that civil war termination becomes more likely as the independent variable increases. The first model analyzes the bivariate relationship between coups and civil war duration, providing initial support for the first hypothesis. The full model is presented in model 2, again finding strong support when controlling for a variety of measures common to models of civil war duration.

In substantive terms, the influence of coups on civil war duration is quite strong. The hazard of a conflict ending increases by around 91% if the state has experienced a recent coup. Figure 2a provides a graphical interpretation of the main results from model 2. This figure demonstrates how the predicted survival changes compared with a baseline scenario when all covariates are held constant at their means (for continuous measures) and modes.
For dichotomous measures. For the baseline prediction, we see that 50% of conflicts cease after about 2 years. This drops to 11 months when the state experiences a recent coup. The second hypothesis seeks to uncover whether the war-shortening influence of coups works through the information mechanism (H2a) or the commitment mechanism (H2b). Results splitting coups between early and late are presented in model 3. The results indicate that late coups—those predicted to work via the commitment mechanism—have a significant, war-shortening impact on coups. Though early coups have the predicted positive sign, the coefficient fails to reach significance ($p < 0.259$). Though we should be cautious about inferring that coups work exclusively via the commitment mechanism given that both information and commitment likely work simultaneously to prolong conflict (Wolford et al., 2011), these results provide the most support for the commitment side of the argument.

Regarding the control variables, we see results largely supportive of previous analyses. Substantive effects for all measures from Table 2, model 2 are presented in Figure 2b. The measure for democracy indicates that conflicts should last significantly longer when they happen in a democracy, which is consistent with several recent studies (Cunningham et al., 2009; Thyne, 2012; Wucherpfennig et al., 2012). In substantive terms, 50% of conflicts cease after 36 months in a democracy as compared with the baseline scenario of 21 months. We next observe the war-shortening effect of state wealth with a positive and significant coefficient for GDP per capita, which is consistent with past work (Collier et al., 2004; Thyne,
Figure 2. Predicted survival functions.
Note: Estimations come from Table 2, model 2; (b) includes only significant variables. The x-axis in (b) was shortened and confidence intervals were removed for presentational purposes.
...we see the predicted hazard of a scenario when GDP per capita is set at its 90th percentile (8.62) as compared with the baseline mean, demonstrating that 50% of conflicts in high-wealth states terminate after 15 months. The measure for war intensity indicates that civil conflicts resulting in many battle deaths are appreciably longer than more minor conflicts. In substantive terms, 50% of high-intensity conflicts end at around 48 months, which is roughly 129% longer than those in the baseline scenario. This finding is consistent with previous empirical work on civil war duration (Regan, 2002). Next, we see that the measure for fights for the government is insignificant in model 2 ($p < 0.302$), which contrasts with several previous studies. As noted earlier, this is probably because work has lumped bloody coups alongside civil wars in previous analyses, inflating the war-shortening impact of war type. Finally, we see that “parallel war” has the expected negative sign, but is insignificant in model 2 ($p < 0.417$). Taken together, the preliminary results provide strong support for the theory, while the results for the control variables are largely consistent with previous literature.

**Robustness and extensions**

The analyses discussed to this point are supportive of the theoretical expectations. However, several extensions can be made to ensure that the results are as robust as possible. This section begins by analyzing the primary findings in the context of other potential measures and explanations, and then focuses on model specification.

First, one might be concerned that the conflict dynamics themselves influence the decision to attempt a coup, rather than the other way around. Such a problem would arise if plotters foresaw an impending end to the war and either launched a coup to ward off defeat by improving government tactics or defected in bandwagoning with the opposition (Tiernay, 2013). In either case, the assumption that coups are exogenous to civil war duration would be broken, and parameter estimates would be biased as a result (Box-Steffensmeier and Jones, 2004). I probed the data in two ways to ensure that this is not the case. First, given that the conflict dynamics that might spur a coup (i.e. impending victory or defeat) are unobservable, I predicted coups using GDP per capita, yearly change in GDP per capita, polity, instability and regional dummies. The error term from this model, which should capture the unobserved conflict dynamics of interest, was then included in models 1–5 in Table 2. The inclusion of this measure produced a coefficient that was not significantly different than zero, indicating that endogeneity is not a problem. Second, I examined the qualitative accounts for each coup that shared the same month as the civil war termination, finding little evidence that the impending end to a conflict was a cause of the coup attempt.

The second extension of the primary findings focuses on the precision in war termination dates. The conflict termination dataset presents a variable indicating how well the coders could decide upon an exact day/month/year to code the cessation of the conflict episode. This is useful for analyzing the influence of coups on civil war termination because the coup data are also known to the precise day/month/year level. When looking at the full sample, which includes war termination for dates that cannot be captured precisely, it is possible for the findings for the influence of coups on war duration to be either over- or under-stated. If a coup happened in February, for instance, the coup measure would be coded 1 for February through July of that year. This would miss conflicts that cannot be coded precisely, which by default terminated on 31 December of the final war-year, thereby
understating the war-shortening influence of coups. Likewise, a coup that took place in July would be coded as a 1 from July through December. Unlike before, this coup would capture war terminations that cannot be coded precisely, but may mistakenly capture those that by default ended on 31 December, even though a “best guess” might put them prior to the coup date. In this case, the war-shortening influence of coups might be overstated. To ensure that the precision in date codes is not influencing the primary findings, I re-run the analyses in model 4 on only civil conflicts that have precise day/month/year war-termination dates. While we can see that the numbers of both cases and observations drops considerably, the primary results presented in model 2 change little in terms of statistical significance or the size of the coefficients.

Finally, one might be interested in how coups influence civil war in relation to other ways that leaders enter office. It is possible that all changes in leadership provide a fresh opening for bargaining, with coups playing only part of a much larger process. I analyze this possibility in model 5 by including a dummy variable called “regular entry” in the analyses. This measure comes from the Archigos dataset, and captures the precise date that a leader enters office via regular means as defined by the “prevailing rules, provisions, conventions and norms of the country” (Goemans et al., 2009: 273). Like the coup measure, this dummy variable is coded 1 for the day of entry plus 6 months. As we can see, this measure is insignificant ($p < 0.404$), while the coup measure remains significant ($p < 0.020$).

**Conclusion and implications**

The purpose of this paper was to consider how coups influence the duration of civil conflicts. Conceptualizing coups as dramatic events that can alter the bargaining process between the opposition and the government, the theory suggested a variety of ways that coups can help ameliorate the information and commitment problems that plague intrawar bargaining. Empirical results show robust support for this argument. An extension of the primary argument questioned whether coups are apt to shorten civil conflict by solving information or commitment problems. An analysis of coup timing suggested that coups primarily work by solving commitment problems that come to the forefront later in conflicts. This study extends both the literatures on coups and civil wars, and provides important recommendations for policy-makers.

Although scholarship on the causes of coups is abundant, this is one of the few attempts to study coups as an independent variable. Within the civil war literature, past efforts have controlled for coups as a way to isolate them from civil wars in datasets of internal armed conflict more broadly defined (Cunningham, 2006; Thyne, 2012). However, no study has articulated a theory to explain the impact that coups during civil conflicts might have on civil war duration. Although this paper provides some interesting findings for civil war duration, much work is needed to fully understand the impact of coups. As noted earlier, many coups provide the initial spark to civil wars (e.g. Bangladesh, 1975), while others largely pacify the opposition (e.g. Egypt, 2011). Thus, understanding why coups lead to either positive or negative political outcomes within the broader civil war context is a fruitful area of study. Beyond civil conflicts, evidence suggests that coups can be harmful to fledgling democracies (Keih and Agbese, 2005; Onwumechili, 1998) and spur democratization (Thyne and Powell, 2015). However, we can explain little about when we might expect coups to lead to these
disparate outcomes. Thus, the vast literatures on repression and democratization would probably benefit from future studies on the impact of coups.

Studies of foreign policy could likewise benefit by focusing on coups. History is replete with examples of coups fomented by external actors; however, little is known about whether these efforts are ultimately beneficial to the fomenting state. While the coup spurred by the President Nixon against Guatemalan President Árbenz (1954) was beneficial for the USA (or the United Fruit Company at least), the failed coup fomented by President Bush against Venezuelan President Hugo Chavez (2002) seems to have produced a negative backlash against democracy and US economic interests (Vulliamy, 2002). Thus, further work to understand coups as a tool of foreign policy would be beneficial.

Regarding policy implications, this paper departs from the conventional wisdom that coups are inevitably harmful. This is consistent with Collier’s (2008) recent urging for policy-makers to take a fresh look at the potential benefits of coups. Although coups are certainly a threat to fledgling democracies, Collier argues that they are perhaps the most effective way to remove repressive leaders with the fewest costs. Similarly, I argue that ongoing civil conflicts are unique situations in which the shocks provided by coups can help bring an end to violence. This is an important departure from studies that focus on characteristics of civil conflicts that are nearly impossible to change (e.g. location of fighting, terrain, poverty and rebel goals) because coups represent one area where policy efforts can make a dramatic difference in civil war duration. Given that external actors have fomented coups in a variety of locations throughout history (Zimmermann, 1983), fomenting a coup to provide a new face to intrawar bargaining should be one option considered by leaders. Of course, this option should be weighed carefully with other policy options, such as mediation and direct interventions, and further research should consider the potential drawbacks of coups not covered in this article. In situations like Syria today, however, where we see continual bloodletting and a leader who lacks credibility and appears to have no intention of stepping down, covert operations to support a coup may unfortunately be the best policy option available.

Acknowledgment

The author would like to thank Jesse Johnson, Daniel Morey, the editor and three anonymous reviewers for helpful comments on earlier drafts of this article. Any errors or omissions are the author’s responsibility alone. Replication data are available at: http://www.uky.edu/~clthyn2/research.htm.

Funding

This research received no specific grant from any funding agency in the public, commercial or not-for-profit sectors.

Notes

1. Additional tests were run on all models to test for possible violation of the proportional hazard assumption, indicating that neither the models nor the covariates violated the assumption of proportional hazards. The Breslow method was used for ties.
2. To further address heterogeneity, models are also run by clustering by conflict, and after introducing a gamma frailty term as a random effect by country and conflict. In the latter cases, the frailty
term is statistically significant, and we see no substantive changes in the primary variables of interest.

3. The results remain substantively identical when the three palace coups are included in the analyses.

4. The results are insensitive to the decision to code the independent variable as 1 for the coup month plus 6 months. Robustness checks on the coup month plus 3 and 12 months yield substantively identical findings to those presented in Table 2. Although admittedly arbitrary, the theory speaks to the short-term ability of coup leaders to bring an end to conflicts, so a half year seems like a reasonable period of time to expect these changes.

5. The models presented here are kept as parsimonious as possible. Many other measures were included in tests not presented here to ensure the robustness of the results. These include measures for ethnic fractionalization and rough terrain from Fearon and Laitin (2003), external interventions from Aydin and Regan (2014), resources from Lujala et al. (2007), Gilmore et al. (2005) and Lujala (2010), regime type from Thyne (2012) and opposition fragmentation from Cunningham (2006). None made an appreciable difference in the primary findings.

6. An alternative measure of yearly battle deaths from Lacina and Gleditsch (2005) revealed similar findings to the measure described here. I use the dichotomous intensity measure in the models owing to a longer temporal coverage.

7. Measures for GDP per capita and yearly change in GDP per capita come from Gleditsch (2002), while the polity measure is from the Polity IV dataset (Marshall and Jaggers, 2007). Instability is a dummy variable coded 1 in years that see a ±3 change in the Polity measure from the previous year (Fearon and Laitin, 2003).

References


