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Shocks, Commitment, and the Risk of Civil War

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This article investigates how shocks to state capabilities are related to the probability of civil war. Drawing on Powell (2004, 2006), shocks are conceptualized as shifts in the domestic distribution of power that can lead to bargaining breakdown and, consequently, violent conflict. Following a shock to the state's capabilities, the leadership has incentives to grant concessions to other groups within the state, yet such promises are not credible given that the leadership may regain its strength. Similarly, opposition groups cannot make credible commitments as they expect to be more powerful in the future. Unable to commit, both actors may use force to achieve their preferred outcome. The study then analyzes how the institutional structure of the state's leadership and opposition groups influences actors' credibility during this bargaining process. Statistical analysis of all leaders for the 1960–2004 time period shows that shocks such as economic recession, war defeat, and changes in the international balance of power increase the risk of civil war as expected. Moreover, results confirm that the relationship between shocks and civil war is mediated by leadership type and the cohesiveness of opposition groups.

KEYWORDS *bargaining, civil war, commitment, shocks*

This article analyzes how shocks to state capabilities increase the risk of civil war onset. Much of the quantitative civil war literature focuses on variables that exhibit little variation over time, thus generating findings that primarily

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result from cross-sectional variations in the data. While useful in establishing baseline probabilities of civil war onset, they cannot tell us why civil war breaks out at a particular point in time. For example, even countries such as Nigeria, Rwanda, Lebanon, or Nepal—considered at high risk for civil war according to commonly proposed explanations such as low income, resource wealth, regime type, or ethnic polarization—do not constantly experience violent conflict. This article attempts to fill this gap by explaining how political and economic shocks result in bargaining breakdown and subsequent violent conflict.

More specifically, the argument expects that shocks trigger bargaining over power during which relevant actors suffer from commitment problems. When a shock weakens the state's power, both the current state's leadership and the opposition are unable to credibly commit to peaceful outcomes. A leadership weakened through an economic crisis or another type of shock has incentives to transfer some power to competing groups in the state, yet is not credible in doing so since it may attempt to regain its strength in the future. Opposition groups suffer from similar credibility problems. Groups may expect to be more powerful in the future, thus having incentives to renege on agreements. Commitment problems thus increase the risk for bargaining failure and, consequently, civil war.

The central difficulty in times of political instability, therefore, is to develop mechanisms allowing all actors to credibly commit to sharing power. First, I expect that leaders in states with smaller winning coalitions will face greater difficulty in making a commitment to peaceful settlements than other political leaders. Smaller winning coalition regimes lack the institutional mechanisms for accommodating newly mobilized groups, thus rendering concessions made by leaders noncredible. Leaders relying on larger winning coalitions, on the other hand, will be more successful at securing a role in future governments at least for the short term, as can be seen in the case of Communist parties in the recent transitions in Eastern Europe and the former Soviet Union. Second, I expect that opposition movements with cohesive organizational structures and links to existing social organizations are more likely to make credible commitments to sharing power. Cohesive, hierarchical organizations are better at in-group policing and can therefore coerce more radical opposition members and enforce compromises.

This article makes three contributions to the civil war literature. First, by analyzing shocks and their effect on civil war onset, this article proposes an explanation capable of understanding the timing of civil war onset. Second, it evaluates the effects of shocks on both the state's leadership and opposition groups within the state. Absent a stable set of actors in civil war, many studies focus on national attributes such as regime type, population size, or economic development. Yet to understand why civil war occurs it is important to know more about the motivations driving non-state actors. This article investigates how the organizational structure of opposition groups affects their credibility in the bargaining process. Finally, this article identifies

and operationalizes political and economic shocks that trigger bargaining between actors. By focusing on actual instances of regime instability, it adds to existing explanations of instability and civil war and avoids endogeneity problems (Hegre, Ellingsen, Gates, and Gleditsch 2001). In doing so, this essay also steers clear from black-boxing the types of events initiating the bargaining process, as is common in the literature on commitment problems (Powell 2004).

This article proceeds as follows. I first discuss limitations in existing quantitative studies of civil war onset. Because existing research emphasizes concepts that exhibit little change over time, the literature faces difficulty explaining shifts from peace to war. I subsequently identify shocks by consulting the comparative literature on regime breakdown. The theoretical section discusses how shocks weaken the current state's capabilities and why actors suffer from commitment problems following such a weakening. A third section tests the theoretical arguments and shows strong support for the expectations developed. The fourth and final section summarizes the findings.

SHOCKS AND CIVIL WAR ONSET

Quantitative research on civil war onset commonly employs independent variables such as income, population size, economic growth, natural resource wealth, geographical terrain, ethnic and religious fractionalization or polarization, inconsistent institutions, and political instability (Hegre and Sambanis 2006). Yet the majority of these variables change little or not at all over time, meaning that differences in the probability of civil war onset are mainly a result of cross-sectional variations in the data. Consequently, such approaches are useful in establishing different baseline probabilities of civil war, but tell us little about when civil war breaks out within a particular state. However, even the most risk-prone states do not constantly experience civil war, meaning that such factors alone cannot help explain why countries move from peace to war.

Research on political instability and its effect on civil war is an exception since the concept of instability implies substantial variation over time. Existing research mainly operationalizes political instability as fluctuations in polity scores (Fearon and Laitin 2003; Hegre et al. 2001). Yet this operationalization requires establishing arbitrary thresholds on what type of movement is considered instability or regime change, which may or may not correspond to actual power struggles or handovers of authority.¹ Such measures, then, do not speak to the actual conditions triggering bargaining over power.

¹Hegre et al. (2001), for example, define regime change as fluctuations of greater than or equal to 2. Accordingly, Hungary's change in polity score from 8 to 10 in 1993 would be considered a regime change.

In addition, regime change or instability may already entail the occurrence of violence (consider a bloody coup or other violent regime breakdown), meaning that regime change could be endogenous to a model of civil war. This essay avoids both of these problems by identifying and operationalizing exogenous events triggering bargaining processes over power. I argue here that political and economic shocks trigger bargaining between actors that can lead to conflictual outcomes (Fearon 2004; Powell 2006). Before I further develop this argument, it is necessary to know what types of shocks trigger bargaining over the domestic balance of power.

According to the literature in comparative politics, the breakdown of authoritarian and democratic regimes is triggered by critical events, or shocks. Colomer (2000), for example, points out that regime change is provoked by a significant crisis of the regime, thus modifying actors' bargaining power and inducing them to develop new strategies of behavior. The literature on regime breakdown identifies economic decline, international war defeat, the death of a dictator, and changes in the international balance of power as instances triggering regime change (Colomer 2000; Geddes 1999; Haggard and Kaufmann 1995; Przeworski, Alvarez, Cheibub, and Limongi 2000).²

All transition specialists argue that economic crises increase the likelihood of authoritarian and democratic breakdown. Research emphasizes how economic shocks can lead to a disintegration of the coalitional foundations of regimes and the ousting of elites in authoritarian regimes and unconsolidated democracies. This expectation has been supported in case study research and quantitative analyses (Haggard and Kaufmann 1995; Przeworski et al. 2000).

Similarly, the death of a leader opens up space for a renegotiation of authority within the state, resulting in bargaining over the domestic distribution of power. In particular, the death of a leader in regimes with small support circles has been shown to increase the initiation of regime change (Geddes 1999).

Third, defeat in an international conflict is seen as a sign of the leader's ineptitude by the general public (Bueno de Mesquita, Smith, Siverson, and Morrow 2003; Goemans 2008). Defeat in war, therefore, increases the likelihood of a leader's being removed from office (Bueno de Mesquita et al. 2003). The realization of the leader's incompetence makes it easier for members of opposition groups to coordinate and increases confidence

²While these events are frequently emphasized in the comparative politics literature as key events triggering bargaining over power and regime change, they do not represent a comprehensive list of shock events. Other destabilizing events such as elections could initiate bargaining similar to the processes emphasized here. However, there are two problems that would arise with including elections. First, elections are often routine events unlikely to unleash power struggles between groups. One could focus on closely contested elections, but it would be difficult to make such assessments *ex ante*. Second, bargaining and subsequent violence could precede elections, meaning that such cases would be excluded from the analysis.

that many will join in the effort to remove the leader. Consequently, defeat in war lowers the costs of removing the leader from office and increases the probability of being removed by unconstitutional means such as a coup or assassination (Goemans 2008).

Finally, changes in the international balance of power, such as a crisis in a foreign tutorial power, will have similarly destabilizing repercussions (Colomer 2000:32). During the period of 1985–1991, reforms in the Soviet Union promoted major changes in Eastern European satellite states resulting in the eventual collapse of the USSR itself (Colomer 2000). Surrounding the collapse, regime transitions in 28 states have occurred, with a minority of states adopting democratic regimes but various shades of dictatorships and transitional regimes in the remaining majority (McFaul 2002). In addition, the breakdown of the Soviet Union and the subsequent end of the Cold War had consequences for political change outside its immediate sphere of influence. It contributed to political instability and violence in countries where the superpowers had been a party (such as Afghanistan or Angola), but also in countries that had relied on their financial and economic backing (such as Somalia or Mozambique). No longer propped up by the superpowers, leaders in these countries lacked the ability to distribute the spoils of this “fountain of privilege” and were thus unable to buy off political opponents (Bates 2001:97). The end of the Cold War and superpower competition thus contributed to state collapse and violence in countries such as Somalia, the Democratic Republic of Congo, and Liberia, among others.

It is important to note that the comparative politics literature links the above events to the likelihood of regime breakdown and not civil war as proposed in this essay. Consequently, the literature does not focus on whether violence occurs during this process and is interested primarily in the likelihood that these regimes democratize. The argument developed here, in contrast, ties political and economic shocks to the onset of civil war, an outcome neglected in the literature on regime breakdown. I conceptualize these shocks as large and rapid power shifts that trigger a commitment problem between the state’s leadership and the opposition. Powell (2004, 2006) emphasizes how shifts in the distribution of power undermine actors’ credibility and contribute to bargaining breakdown and subsequent violence. I develop this expectation in detail in the next section.

THEORETICAL EXPECTATIONS

The Two-Sided Commitment Problem

The literature on commitment problems sees war as the result of bargaining failure in which actors fail to credibly commit to less costly alternatives (Fearon 1995, 2004; Morrow 2001; Powell 2004, 2006; Walter 2009). Commitment problems arise because actors want to make promises to

adhere to agreements but their opponents have reason to doubt that they are willing to carry them out in the future (Morrow 2001). If actors could credibly commit to negotiated agreements, both would benefit from dividing the flow of benefits and avoiding the inefficient use of force. Using force is inefficient as it destroys resources and results in a smaller pie to be divided among bargainers. However, because of incentives to renege on agreements in the future, actors are unable to make credible promises and may use force to lock in a share of the good in question (Powell 2006).

Given that the use of force and the occurrence of violent struggle are relatively rare events, what events trigger bargaining failures as a result of commitment problems? Powell (2004, 2006) clarifies that commitment problems occur because large and rapid shifts in the distribution of power make it impossible for actors to credibly buy off their adversaries.³ When a power shift strengthens a once-weak bargainer, it will want to exploit its better bargaining position in the future and renege on agreements made in the past. Anticipating the adversary's incentives to renege, the temporarily strong bargainer will use force to preserve the largest possible share of the good while it can (Powell 2006:181).

This logic aptly describes the dynamic expected to follow the shocks to the domestic distribution of power outlined in the previous section. When a shock such as an economic crisis or defeat in war weakens the capabilities of the state, the incumbent leadership and challengers will bargain over a redistribution of domestic power. The incumbent leadership would like to protect its vital interests and secure future access to power. Weakened by a shock to its capabilities, it has to offer some benefits to challengers in order to buy off a potential rebellion. The government thus wants to make concessions following a shock to its power, yet such commitments are not credible given its reasons to renege on agreements in the future.⁴ The opposition will doubt whether the state's leadership is serious about transferring power, and not simply attempting to provide temporary buyoffs

³In addition to power shifts, Walter (2009:251–252) mentions weak institutions and cemented cleavages as possible factors leading to commitment problems and civil war onset. Yet these factors lack the dynamic element emphasized in the explanation on power shifts, making it difficult to explain when such cleavages or institutions — which presumably change little over time — will trigger violent bargaining.

⁴Why would leaders not use repression rather than offer concessions? First, repression is not a strategy that is equally available to all leaders. Democratic political institutions decrease state repressive behavior, a finding referred to as a “domestic democratic peace” (Davenport 2007:11). Yet leaders in regimes below a certain threshold of “democraticness” have been shown to employ coercive strategies to quell threats to their power (Davenport and Armstrong 2004). However, it seems that when faced with a major challenge to their leadership, leaders in mixed or authoritarian regimes cannot simply pursue the same strategy and need to offer some alternatives such as benefits or perks to opposition groups. Second, research suggests that the strategies of concession and repression are not mutually exclusive and are often used simultaneously. For instance, Rasler's (1996) analysis of the Iranian revolution shows how the Shah and his government used both concessions and repression as a response to popular mobilization. More importantly, the combined use of repression and concession likely exacerbates the credibility problems emphasized in this research.

it will renege on in the future. Opponents of the leadership may worry that its offers are merely an attempt to appease opposition groups, which will then be followed by the reestablishment of hegemonic control once the state recovers from its weakness. The state's leadership faces a credibility problem, being unable to commit to outcomes it has incentives to renege on in the future.

In addition to the commitment problem encountered by the state, a similar situation arises for the opposition. Following a weakening of the state's capabilities, the opposition may expect to become more powerful in the future, and therefore has an incentive to renege on agreements in order to itself gain hegemonic control of the state. Emboldened by the current weakness in the leadership's capabilities, opposition movements will attempt to secure power to enact favorable policies and programs. While opposition groups would like to accept concessions offered by the state, they can use this increased bargaining power by reneging on a settlement in later interactions. The weakened leadership will anticipate this behavior and thus be anxious that concessions will lead to additional challenges by dissident groups in the future. The state's leadership, in consequence, may be reluctant to transfer power, fearing that such transfers may empower their opponents to make even greater demands in future interactions (Fearon 2004:298 fn.43; Walter 2006).

The commitment problem encountered after the occurrence of shocks, therefore, is a two-sided one. Both the state's leadership and opposition groups suffer from credibility problems, which hinder their ability to commit to agreements. Unable to fashion credible commitments, both the incumbent leadership and the opposition have the option to achieve their preferred outcome through the use of force (Powell 2004). Leaders may use military force in an attempt to hold on to power and to avoid increasing demands by the opposition in the future, whereas the opposition could choose violence because it expects that promises by the weakened state will be broken in the future. It is therefore expected that the commitment problems caused by shocks to the leadership's capabilities increase the probability of civil war.

Hypothesis 1: A decrease in the capabilities of the state's leadership increases the probability of civil war onset.

Making Credible Commitments

Although commitment problems hamper actors' ability to fashion mutually enforceable agreements during leadership weakness, the empirical record presents instances of bargaining after shocks in which actors avoided resorting to arms and succeeded in establishing regimes with mechanisms for

power sharing.⁵ In the recent transitions in Central and Eastern Europe, for example, Gorbachev's shift to a policy of non-intervention into the internal affairs of its Warsaw Pact allies triggered intense bargaining between the old elite and opposition forces in the satellite states. The peaceful outcome of this process shows that actors can devise strategies that allow them to cooperate and transition without the use of force. Morrow (2001:93–96) emphasizes that institutions can create mechanisms for actors to credibly commit themselves to agreements. For example, institutions can share power across several actors, making it more difficult for leaders to renege on agreements. In addition, institutions can increase credibility through the presence of transparent procedures, providing actors with more confidence in whether and when commitments will be violated. Finally, established selection procedures can contribute to credibility since they create stable expectations on the institution's leadership and thus reduce the likelihood that the organization will be dominated by extremist demands. The following section develops an argument that details more specifically how the institutional structure of states and opposition groups affects their ability to commit credibly to peaceful agreements.⁶

LEADERSHIP TYPE

The institutional structure of the state's leadership in power will affect whether a weakened leader can negotiate a peaceful outcome in the bargaining process after a shock. Specifically, I anticipate that institutional differences across different types of regimes affect whether the leadership can expect to participate in future regimes, which in turn influences its ability to make credible commitments. Bueno de Mesquita et al. (2003) map all

⁵Since I cannot observe directly whether leaders attempt to offer concessions but rather only the events presumed to lead to such offers, it is necessary to acknowledge that observationally equivalent explanations for the expectations developed here exist. For example, the literature on opportunity structures would emphasize how shocks can provide a window of opportunity for dissident movements intent on challenging the state (Tarrow 1998). Furthermore, arguments on grievances could explain why certain types of regimes are better able to outlast the effects of such shocks (Gurr 1971). Yet an advantage of arguments on commitment problems is that they focus specifically on violent mobilization and that they address the question of why commitments by some groups are considered more credible, neither of which is emphasized in the literature on opportunity structures and grievances.

⁶While the following sections treat institutional dynamics and their effect on the credibility of the leadership and opposition groups as separate mechanisms, institutions enhancing the credibility of the leadership could also influence the credibility of opposition groups and vice versa. Regimes with larger winning coalitions may more frequently allow for the presence of cohesive opposition groups, thus simultaneously enhancing the credibility of the leadership and the opposition. Similarly, the presence of cohesive opposition groups could reduce the commitment problem faced by the government since governments that allow for opposition parties may have more institutional means to credibly extend power to new groups. I thank an anonymous referee for bringing this point to my attention. To avoid this issue in empirical tests, I estimate the mediating effects of the size of the winning coalition and opposition cohesion in separate models.

institutional arrangements onto a continuous two-dimensional space.⁷ The authors distinguish between the selectorate (the set of people who can participate in the choosing of the leader) and the winning coalition (the subset of the selectorate supporting the leader). For the purposes of this article, the size of the winning coalition will be most influential for determining outcomes since it is the group of individuals immediately responsible for the leader's stay in office. Crucial for a leader's stay in power, the size of the ruler's winning coalition is expected to influence expectations of political survival in future regimes.

Regimes with smaller winning coalitions depend on a small group of supporters that receive particularistic benefits in exchange for enforcement (Bueno de Mesquita et al. 2003). Leaders relying on the support of small segments of the population will, on average, face greater difficulty in making credible commitments. This is because elites maintain control through repressive tactics rather than co-optation and therefore cannot expect to receive political support from significant parts of society once opposition groups demand a share of power. They feel threatened by challenges to power, as they cannot expect to survive politically in a new regime and are therefore more likely to block a takeover with force. In addition, smaller winning coalition systems such as personalist or military regimes tend to be less institutionalized than regimes with larger winning coalitions, not having developed mechanisms to penetrate large parts of society. This limitation reduces their chances for participation in future governments, since their organizations cannot easily be transformed into political parties. When an international event, economic crisis, or defeat in war forces such regimes to negotiate with the opposition, they will have little prospect of maintaining even partial control in the future and will attempt to thwart the transition process with violence. Concessions promised by leaders of small winning coalition regimes will therefore not be credible.

Regimes with larger winning coalitions are expected to differ substantially from this logic. Democracies, the most prominent type of large winning coalition regime, have constitutional or informal mechanisms to respond to national crises that bypass normal legislative procedures. However, as Bueno de Mesquita et al. (2003:72) emphasize, "a large selectorate and a large coalition do not in themselves define democracy." Authoritarian regimes such as single-party regimes or regimes with nominally democratic institutions such as partisan legislatures have larger winning coalitions than other authoritarian regimes such as military, personalist, or monarchic regimes.

⁷Other classifications of regime type exist, but suffer from the problem of overlapping types and the absence of a consensus on which typology is preferable. Geddes' classification (1999) distinguishes between personal, military, single-party, and hybrid regimes. More recently, Gandhi and Przeworski (2007) have distinguished between authoritarian regimes relying on nominally democratic institutions (such as partisan legislatures) and authoritarian regimes without such institutions. Finally, Magaloni (2008) differentiates between party autocracies, monarchies, and military regimes.

Consequently, leaders of such regimes should be better equipped to respond to crises and feel less threatened by challenges to their authority than smaller winning coalition systems.⁸

Single-party regimes, for example, incorporate significant segments of society into the winning coalition and selectorate through the party organization. In the case of an economic or political crisis, dominant party regimes can adapt by broadening their base without giving up control.⁹ Similarly, authoritarian regimes with legislatures broaden the winning coalition by integrating potential opposition groups and co-opting them by distributing spoils and making policy concessions (Ghandi and Przeworski 2007). Finally, Magaloni (2008) argues that authoritarian regimes with political parties (both one-party and multiparty) make credible power-sharing between the leader and his ruling coalition possible through the delegation of authority to a political organization.

To conclude, leaders of larger winning coalition regimes can respond to destabilizing events by making use of institutional mechanisms that allow for adjustments to their winning coalitions. Moreover, even if leaders of larger winning coalition regimes are removed as a result of a shock, they can return to the selectorate or possibly even the winning coalition if their party continues to hold power after they lose office. In large winning coalition regimes, “the difference between being the leader and being ousted is small compared to other systems” (Bueno de Mesquita et al. 2003:342). Based on these expectations, I anticipate that regimes with smaller winning coalitions face greater credibility problems when challenged in their capabilities and are therefore more likely to experience civil war.

Hypothesis 2: Following a decrease in the capabilities of the state’s leadership, the likelihood of civil war onset increases as the size of the winning coalition decreases.

THE COHESIVENESS OF OPPOSITION ACTORS

Opposition groups also encounter credibility problems in situations of leadership weakness. When a weakened state’s leadership is willing to negotiate

⁸This expectation is supported by empirical research. Geddes (1999) shows that single-party regimes are more durable than personalist or military regimes. Ghandi and Przeworski (2007) demonstrate that leaders in authoritarian regimes with legislatures stay in office longer than regimes without such institutions. Magaloni (2008) similarly shows that hegemonic and single-party autocracies are longer-lasting than other types of authoritarian regimes.

⁹While leaders in small winning coalition regimes may attempt to increase their support circles, the institutional logic of their regimes reduces their ability to do so. First, leaders relying on small winning coalitions must constantly defend themselves from potential rivals, and extending their circle of supporters thus threatens their hold on power. Second, some small winning coalition regimes, such as military regimes or monarchies, also rely on small selectorates such as the military cadre or the aristocracy and therefore cannot grant credible concessions to challengers outside the selectorate.

and offer concessions, it may fear that granting concessions could result in greater opposition demands in the future. Fear of ever-increasing demands by opposition groups can result in the use of military force by the threatened regime. The opposition, therefore, must find ways to credibly commit its willingness to adhere to agreements, and to deflect the government's fears over future demands or a takeover of control. As mentioned earlier, institutions are emphasized as important mechanisms that can influence actors' credibility in the literature on commitment problems. In particular, Morrow (2001) argues that the diffusion of power, transparent procedures, and established selection mechanisms can provide important information on the credibility of actors. Critical for this analysis, therefore, is the credibility of opposition groups during periods of leadership weakness. As in the discussion of leadership type, I will focus on institutions and how they influence opposition movements' ability to make credible commitments.

It is argued here that the institutional structure of opposition groups will affect their ability to cooperate when the state is weakened by a shock. Cohesive and organized groups are expected to signal more credibly their commitment to a regime with shared powers. Groups with developed institutional mechanisms will be more transparent on the procedures used within the institution, will have more clearly established mechanisms on the selection of the institution's representatives, and will distribute power across the institution more effectively.

In addition, since opposition groups are often divided into moderate and radical challengers, groups without developed organizational structures have difficulty limiting radicals' demands (Kalyvas 2000; Fearon and Laitin 1996). Lacking the institutional strength to punish defectors, weakly organized groups cannot deflect the regime's fear of greater demands in the future. Groups without clear leadership or a cohesive organization cannot signal resolve to a negotiated settlement, thus hindering the prospect for cooperation (Kalyvas 2000). This intuition is consistent with insights from the study of ethnic conflict, where only strong, hierarchical organizations that can effectively police extremists succeed in inducing compromise for cooperation. Pointing to the relative prevalence of interethnic cooperation, Fearon and Laitin (1996) argue that the organizational structure of groups plays a crucial role for the outbreak of conflict. Groups with dense social networks and interactions allow for in-group policing, and radicals threatening interethnic cooperation can be identified and sanctioned (Fearon and Laitin 1996:719). Yet when institutional arrangements allowing for in-group policing are absent, defection can lead to the breakdown of cooperation in the form of spiraling violence.

In addition to the organizational structures and their effects on credibility emphasized above, links to existing social institutions such as churches or unions can further enhance the credibility of opposition movements. Such linkages can signal to the government that moderates are in control, as

existing institutions tend to ally with forces that will maximize their political impact (Kalyvas 2000:391).

Cohesive opposition groups with developed institutional structures and ties to existing organizations, therefore, are expected to be able to make credible commitments after a shock to the state's capabilities, and these characteristics consequently reduce the probability of violent conflict. Conversely, groups lacking such institutional characteristics suffer from greater credibility problems and an increased likelihood of civil war following a shock to the state's leadership.

Hypothesis 3: Following a decrease in the capabilities of the state's leadership, the likelihood of civil war onset increases as the cohesion of opposition groups decreases.

EMPIRICAL ANALYSIS

The theoretical arguments are tested against data on civil wars for the 1960–2004 time period. Goemans, Gleditsch, and Chiozza's (2009) data base on political leaders is used to create a dataset in which leaders, rather than countries, are the primary unit of analysis.¹⁰ Using states rather than leaders would significantly reduce the number of cases available for the analysis, since countries can have multiple leaders who hold office during the same year. This would lead to the exclusion of cases in which leaders experienced political instability or challenges to their authority, which are the most important observations for the substantive focus of this analysis. The unit of analysis in this dataset is the leader-year, including one observation for each leader and year for the 1960–2004 period. This results in more than 7,700 observations for the 1960–2004 time period.

I estimate a Cox proportional hazard model to investigate the relationship between independent variables and civil war onset. In time-series-cross-sectional data, the assumption of independence of observations across time and space is often violated. Hazard models offer the advantage of specifically modeling duration dependence that exists in the data. The Cox regression model is well suited for political science applications since it does not assume a particular probability distribution for the duration until event occurrence (civil war onset).¹¹

¹⁰Data are available online at <http://www.rochester.edu/college/faculty/hgoemans/data.htm>. Version 2.5 is used here.

¹¹The only restriction imposed on the Cox regression model is the assumption of proportionality, meaning that the effect of the covariates on the hazard ratio has to be proportional over a leader's time in office. Tests based on Schoenfeld residuals were conducted on all Cox regression models specified and did not show significant evidence for non-proportionality.

Dependent Variable

The dependent variable in Cox regression models is the hazard rate, or risk of event occurrence at a given point in time (in this case civil war onset). Therefore, covariates in the model are employed to explain an increase or decrease in the likelihood of event occurrence for any given leader. Entry and exit dates for leaders are available in Goemans, Wallensteen, Erikson, Stollenberg, and Strand's (2009) data base on political leaders. Data on the onset of civil war come from the Uppsala Armed Conflict Project and are described in Gleditsch et al. (2002).¹² The Uppsala dataset on armed internal conflict uses a threshold of 25 battle-deaths per year to classify conflicts as civil wars. Internal armed conflicts and internationalized internal armed conflicts are included in this variable. Leaders are included in the analysis until there is a civil war onset.

Independent Variables

The first hypothesis investigates whether the occurrence of shocks increases the probability of civil war onset. I construct four separate variables to operationalize the concept of a "shock." First, I include a measure that indicates whether a country experienced a period of recession, or economic crisis. Researchers in comparative politics argue that economic shocks increase the likelihood of authoritarian and democratic breakdown, and this expectation has been supported in quantitative analyses (Prezworski et al. 2000). The standard definition of recession is a decline in a country's gross domestic product (GDP) for two or more consecutive quarters.¹³ Since quarterly data on GDP growth rates are not available for a large set of countries, states with negative growth rates during a given year are defined as being in recession. I create a dummy variable coded 1 if a country experienced a decline in GDP growth during a given leader-year, 0 otherwise. Values for this variable are lagged by one year.

Defeat in interstate war is the second event type operationalized in this article. Data on interstate wars provided in the Correlates of War (COW) project include information on war outcomes.¹⁴ Specifically, the data include a variable indicating whether a country was on the winning or losing side of a conflict. I constructed a dichotomous variable coded 1 if a leader was on the losing side of an interstate war during a given leader-year, 0 otherwise.

¹²Data are available at http://www.pcr.uu.se/research/UCDP/data_and_publications/datasets.htm. Armed conflict is defined as "a contested incompatibility which concerns government or territory or both where the use of armed force between two parties results in at least 25 battle-related deaths. Of these two parties, at least one is the government of a state" (Gleditsch et al. 2002:619).

¹³GDP data come from the Penn World Tables, version 6.2, available at <http://pwt.econ.upenn.edu/> and the World Development Indicators, available at <http://data.worldbank.org/data-catalog/world-development-indicators>.

¹⁴Data are available at <http://www.correlatesofwar.org/>.

For the period of 1960–2004, 28 leaders experienced defeat in international wars. Values for this variable are lagged by one year.

Third, I have argued that the death of a leader while in office constitutes a shift in the regime's power and will trigger a bargaining process between followers of the incumbent regime and opposition. Data for leader deaths are available in the Goemans et al. (2009) data. I include a measure of death in office, coded 1 for leaders that died of natural causes while in office, 0 otherwise. In the time period analyzed here, 99 leaders died in office.

Fourth, changes in the international balance of power can weaken the domestic distribution of power and open up space for bargaining. While this concept is difficult to operationalize in a large-N setting, the upheaval triggered by the end of the Cold War presents an instance of such changes.¹⁵ Reforms in the Soviet Union in the late 1980s led to regime changes in the Central and Eastern European satellite states and to the eventual collapse of the USSR, but also contributed to instability, state collapse, and violence in regions previously relying on the military and financial support of the superpowers (Bates 2001; Chabal 1998; Colomer 2000).¹⁶ To account for this change in the balance of power, I include a dichotomous variable coded 1 for the years 1989–1992, 0 otherwise.

The second and third hypotheses investigate whether the institutional structure of the state's leadership and opposition groups alleviates the commitment problem as hypothesized. Both hypotheses investigate mediating effects, meaning that the effect of shocks on the probability of conflict is expected to be conditional on the institutional structure of the state and opposition groups. Multiplicative interaction terms are suited for the investigation of conditional effects. To test for such effects, I first create a variable combining three of the four critical event or shock types. This measure is labeled "shock" and combines three of the four previously described indicators. It is a dichotomous measure coded 1 for countries experiencing recession, war defeat, and/or changes in the international balance of

¹⁵Although this concept is admittedly post-hoc, the comparative politics literature offers few suggestions for ex-ante measures of such changes in the balance of power. One possible alternative would be to investigate shifts in the distribution of power for the most powerful states in the international system by analyzing data on material capabilities from the Correlates of War project. I collected data on CINC scores for major powers in the time frame under analysis and analyzed during which years states experienced major power shifts. Using a threshold of a change in CINC score of 0.02 or greater, the years 1945–1947 (United States, UK, and Soviet Union), 1951 (United States), 1954 (United States), and 1989–1992 (Soviet Union/Russia) were identified as experiencing power shifts. Interestingly, these shifts are the result of major wars (World War II, Korean War), the 1958 recession, and the end of the Cold War. Since the current operationalization of the variable coincides with this alternative operationalization and because remaining events are already included in additional shock variables measuring recession and war defeat, retaining the Cold War variable as operationalized seems justifiable.

¹⁶For example, research shows that the end of the Cold War contributed to instability, state collapse, and violence in countries as far away as Angola, Mozambique, Somalia, the Democratic Republic of Congo, and Liberia (Bates 2001; Chabal 1998).

power, 0 otherwise.¹⁷ To investigate the mediating effect of leadership and opposition structure on the impact of shocks, I then multiply this composite measure with the respective measure of the leadership's and opposition's institutional structure. While it would be preferable to create separate variables for each type of shock in order to account for substantive differences between them, the small number of cases for some types of shocks does not allow for the construction of separate measures.

The second hypothesis expects that regimes with smaller winning coalitions are more conflict prone following a shock event because of their heavy reliance on a smaller winning coalition and a high probability of punishment if they lose office. To test this hypothesis, I use data on the size of a regime's winning coalition provided by Bueno de Mesquita et al. (2003).¹⁸ This variable is named W and ranges from 0 to 1, with greater numbers indicating larger winning coalitions. To investigate whether the size of a regime's winning coalition mediates the impact of shocks, I create an interaction term between the composite variable for different types of shocks and W .

The third hypothesis focuses on the commitment problem encountered by the opposition. Here, opposition movements that are cohesive, are organized hierarchically, and thus have clear leadership responsibilities are expected to have improved abilities to commit to a peaceful agreement. In addition, I hypothesized that movements with links to existing organizations have better commitment abilities. Systematic data on the organization of social movements or opposition groups are not readily available, especially for noncompetitive regimes. Many noncompetitive regimes, however, allow for the existence of opposition parties, thereby approximating the characteristics outlined above. First, the existence of a formal party organization implies a certain degree of organization as well as the presence of a leadership structure. Second, party organizations often venture into many areas of social life, thereby forging ties with existing social institutions. To construct a measure indicating the cohesion of opposition groups, I collected data on opposition parties from various editions of the *Political Handbook of the World*. The *Handbook* provides information on governing and opposition parties in all countries for the entire time frame under analysis (Banks et al. 2007). While Banks, Overstreet, and Muller (2007) occasionally provide data on the age or size of parties, which might function well as proxies for cohesion, this information is not available systematically. I also attempted to count the number of parties, but it is questionable whether the listing of parties is exhaustive, especially for earlier editions of the *Handbook*.

A simple dummy variable indicating the presence or absence of one or more formal opposition parties was created. In the time period under

¹⁷As results in Model 1 of Table 1 indicate, leader death is not significantly related to the hazard of civil war and is therefore excluded from the composite measure.

¹⁸Data available at <http://www.nyu.edu/gsas/dept/politics/data/bdm2s2/Logic.htm>.

analysis, 65% of leaders allowed for the existence of at least one opposition party.¹⁹ The variable is coded 0 for leader-years without opposition parties, 1 for states with one or more parties. To investigate whether the presence of opposition parties mediates the impact of shocks as hypothesized, I create an interaction term between the composite variable for different types of shocks and the dummy variable for the presence of opposition parties.

In order to control for alternative explanations of civil war, several control variables are added to the models testing all hypotheses.²⁰ First, empirical evidence strongly suggests that the level of economic development influences the risk of civil war occurrence. To control for economic development, I include a variable measuring GDP per capita per leader-year.²¹ Conforming to the negative relationship found by Collier and Hoeffler (2004), increases in GDP per capita are expected to lower the risk of internal war. Second, Hegre and Sambanis (2006) have shown that population size is a strong and robust predictor of civil war onset. Data for population size come from Fearon and Laitin (2003), and the variable is log-transformed for the same reasons as the GDP variable. Finally, a variable measuring ethnic polarization is added to the model. I use data on ethnic polarization provided by Collier and Hoeffler (2004). Ethnic polarization represents the probability that two randomly selected individuals will belong to different groups weighted by the relative size of each group. Greater ethnic polarization is expected to increase the risk of civil war.

RESULTS

The first model presented here includes four variables measuring the effect of different types of shocks on the hazard of civil war onset. Results for this model are presented in the first column of Table 1 and show strong support for the expected relationship between shocks and the probability of civil war onset. The hazard ratio for the variable measuring whether a leader experienced a recession is positive and significant, indicating that economic decline indeed increases the potential for violence. Undergoing a recession results in a 45% increase in the hazard rate (all other variables held constant). This result supports the expectation that shocks weakening the incumbent

¹⁹To ensure that the data are not simply reflective of regimes with large winning coalitions, I conducted cross-tabulations comparing the existence of opposition parties across different sizes of the winning coalition measure. Results show that 34% of regimes where $W=0$, 38% of regimes with a W of 0.25, 89% of regimes with W of 0.5, 84% of regimes with W of 0.75, and 98% of regimes with a winning coalition of 1 allow for the presence of opposition parties.

²⁰All control variables are lagged by one year.

²¹GDP data come from the same source as the recession measure. This variable is log-transformed because of positive skewness and because meaningful differences in GDP per capita are non-linear (that is, a change in per capita GDP from \$100 to \$200 is more analogous to a change from \$1,000 to \$2,000 rather than a change from \$1,000 to \$1,100).

TABLE 1 Cox Regression Results for the Effect of Shocks on Civil War Onset

Variable	Model 1		Model 2	
	Hazard ratio	% Change in hazard rate ^a	Hazard ratio	% Change in hazard rate ^a
Recession	1.825*** (2.94)	+45%	—	—
War Defeat	8.046*** (4.16)	+158%	—	—
Death in Office	0.560 (-1.34)	—	—	—
Cold War	2.986*** (2.90)	+56%	—	—
Shock	—	—	1.928*** (3.51)	+65%
Ethnic Polarization	2.495** (2.15)	+44%	2.485** (2.17)	+37%
GDP per capita	0.322*** (-6.01)	-64%	0.318*** (-6.05)	-58%
Population	1.330*** (4.97)	+97%	1.329*** (4.73)	+79%
N	4,035		4,035	
Wald χ^2	123.0		77.4	
Wald <i>p</i> -value	<.0001		<.0001	

Hazard ratios greater than 1.0 indicate an increased risk of civil war. *z*-scores are presented in parentheses. Standard errors (not reported) are adjusted for clustering on each leader.

^aPercentage changes are calculated by using the *adjust* routine in Stata 10.0. Continuous variables are varied from one standard deviation below the mean to one standard deviation above, dichotomous variables from zero to one (holding continuous variables at their means and dichotomous variables at their modes).

****p* < .01; ***p* < .05.

leadership's capabilities create commitment problems and increase the risk for violence.

War defeat is the second variable employed to operationalize the concept of a shock. It was argued that defeat in war signals the leadership's weakness to opposition groups, leading in turn to bargaining over power. The ratio for this variable indicates a positive and significant relationship, thus supporting the expectation that war defeat generates credibility problems among actors and thus increases the likelihood of civil war. The substantive effect of war defeat is strong. The hazard rate of civil war onset increases by 158% when the variable is varied from 0 to 1.

The third variable used to measure the occurrence of a shock is the death of a leader. When a leader dies during his term in office, one should expect intense bargaining between members of the old regime and opposition groups over the future distribution of power. While peaceful agreements may be mutually preferable, both groups have incentives to renege on agreements, and these incentives can lead to bargaining inefficiencies and

fighting. The hazard ratio for this variable, however, shows a negative relationship that fails to meet conventional levels of statistical significance. Therefore, I cannot support the expectation on bargaining inefficiency and violence after leader death.

Three possible explanations for this non-finding exist. First, many states have pre-arranged succession arrangements that may reduce the potential for violence following the death of a leader. However, whether such arrangements will be adhered to after a leader's death will vary across different types of regimes. To account for this possibility, I used data from Geddes (1999) to create a variable measuring a leader's death in office in personalist and military regimes only. While the hazard ratio for this variable showed a positive relationship, it nevertheless failed to reach conventional significance levels. Second, opposite from claims made in some of the transition literature, simple changes in leadership may have limited effects on the likelihood of regime change. Bermeo (1992:279–280) argues that the construction of democracy should not be mainly attributed to the passing away of leaders, since members of the old elite often participate in the setup of a new government. Finally, especially in cases where the death of the leader is foreseeable, instability and violence may in fact precede the leader's death.

Finally, the literature also identifies changes in the international balance of power as instances related to leadership weakness and regime change. This concept is operationalized with a measure accounting for the destabilizing effects of the end of the Cold War. As hypothesized, the hazard ratio shows a significant and positive relationship and the risk of civil war increases by 56% during the years of the Soviet Union's collapse. The collapse of a foreign tutorial power evinces the current government's weakness and thus results in bargaining over a new distribution of authority. The disintegration of the former Soviet Union and the subsequent end of the Cold War divide have therefore triggered increased probabilities of civil war. Violent struggle in the Caucasus, for example, demonstrates how shocks to the balance of power can lead to conflictual outcomes.

It is possible, however, that some of the shock events in the above analysis are endogenous to a model of civil war. In particular, the deleterious effects of civil wars could trigger periods of negative growth and recession. Similarly, experiencing civil wars could increase the risk of being defeated in international conflict. To account for this possibility, I reversed the lag structure of the dependent and independent variables in question and reran the analyses. When the civil war variable is lagged by a year and the recession and defeat in war variables are included without lags, the hazard ratio for recessions does not reach conventional statistical significance levels. This finding confirms the causal logic presented here, which expects that recessions are economic shocks triggering violent bargaining between government and opposition groups. Findings for the defeat in war variable are less encouraging. With the lag structure reversed, results

show that a significant relationship between defeat in war and civil conflict remains, raising further questions on the direction of the causal arrow. To further investigate this finding, I estimate the hazard of civil war onset in years before and after defeats in international war (Cleves and Gould 2008:113–117). The hazard function shows that the risk of civil war increases dramatically when leaders experience such shock events but decreases gradually once defeat in war has occurred. While not entirely conclusive, the shape of the hazard function supports the relationship hypothesized here. If civil war would have a stronger effect on war defeat than vice versa, the hazard function should be greater before shocks occur.

Control variables perform as expected, indicating that ethnic polarization and population size increase the hazard rate of armed internal conflict. Findings on economic development also confirm results in earlier research, demonstrating that greater GDP per capita reduces the hazard of experiencing civil war.

The second model in Table 1 uses the variable combining three of the four types of shocks. Since the effect of the leader death variable did not significantly affect the hazard of civil war onset, it is not included in the composite shock measure. The measure combines economic decline, defeat in war, and the end of the Cold War into a single dichotomous variable. Consistent with the evidence in the first model, the occurrence of a shock significantly increases the risk of civil war. The hazard rate of civil war onset increases by 65% if the variable is varied from 0 to 1 (with all other variables held constant). The first hypothesis, therefore, is supported using individual types of shocks and the measure combining three types of shock events. Results for control variables are similar to the first model.

The models investigating the second and third hypotheses are presented in Table 2. For comparison reasons, Model 1 presents results excluding the interaction terms. While I do not develop hypotheses for the independent effects of W and opposition cohesion, results show that leaders with larger winning coalitions are less likely to experience civil war overall, although the result is only significant at the 90% confidence level. The measure for opposition parties is positive but not significant, thereby indicating that the presence of opposition groups has no independent effect on civil war. Models 2 and 3 in Table 2 present results for the remaining two hypotheses. The second hypothesis, expecting that leaders supported by smaller winning coalitions are more likely to experience civil wars, is upheld in the empirical analysis. The interaction variable is a multiplicative term of the composite variable for different types of shocks (recession, war defeat, and changes in the status quo) and the measure for the size of a government's winning coalition. Results in Model 1 show that the combined effect of shocks and W significantly reduces the hazard of civil war onset. This result indicates that the effect of shocks on civil war onset is conditional upon the size of the

TABLE 2 Cox Regression Results for the Effect of Shocks on Civil War Onset, Mediated by Institutional Differences

Variable	Model 1	Model 2		Model 3	
	Hazard ratio	Hazard ratio	% Change in hazard rate ^a	Hazard ratio	% Change in hazard rate ^a
Shock	1.856*** (3.25)	3.223*** (3.38)	—	2.919*** (3.29)	—
Winning Coalition	0.521* (-1.78)	0.933 (-0.14)	—	0.533* (-1.70)	—
Shock*Winning Coalition	—	0.309** (-2.02)	-31.2% ^b	—	—
Opposition	1.453 (1.50)	1.441 (1.48)	—	1.987** (2.11)	—
Shock*Opposition	—	—	—	0.509* (-1.68)	-6.6% ^b
Ethnic Polarization	2.230** (1.99)	2.406** (2.08)	+44.5%	2.277** (1.97)	+50.6%
GDP per capita	0.351*** (-4.28)	0.345*** (-4.34)	-62.9%	0.346*** (-4.30)	-69.5%
Population	1.336*** (4.88)	1.342*** (4.92)	+109.6%	1.335*** (4.90)	+139.7%
N	3,954	3,954		3,954	
Wald χ^2	81.41	92.57		85.93	
Wald <i>p</i> -value	<.0001	<.0001		<.0001	

Hazard ratios greater than 1.0 indicate an increased risk of civil war. *z*-scores are presented in parentheses. Standard errors (not reported) are adjusted for clustering on each leader.

^aPercentage changes are calculated by using the *adjust* routine in Stata 10.0. Continuous variables are varied from one standard deviation below the mean to one standard deviation above, dichotomous variables from zero to one (holding continuous variables at their means and dichotomous variables at their modes).

^bPercentage changes reflect changes in the hazard rate when the shock variable equals one and the modifying variable and interaction term are varied from one standard deviation below the mean to one standard deviation above the mean for continuous variables, and from zero to one for dichotomous variables (holding other variables constant).

****p* < .01; ***p* < .05; **p* < .1.

winning coalition. As indicated by the negative *z*-score, the conflict exacerbating effect of shocks is reduced in the presence of regimes with larger winning coalitions.

Figure 1 illustrates how winning coalition size mediates the effects of shocks on civil war onset. I observe that leaders with smaller winning coalitions face a much greater hazard of experiencing civil war in the face of shocks. Conversely, the hazard of experiencing civil war is smaller for leaders with larger winning coalitions. This finding confirms the expectation that states in which the survival of elites is threatened by a shock are more likely to experience violence than other types of political regimes.

The organizational structure of opposition groups was the focus of the third hypothesis. I argued that opposition groups with cohesive organizational structures are more credible in the bargaining process after shocks,

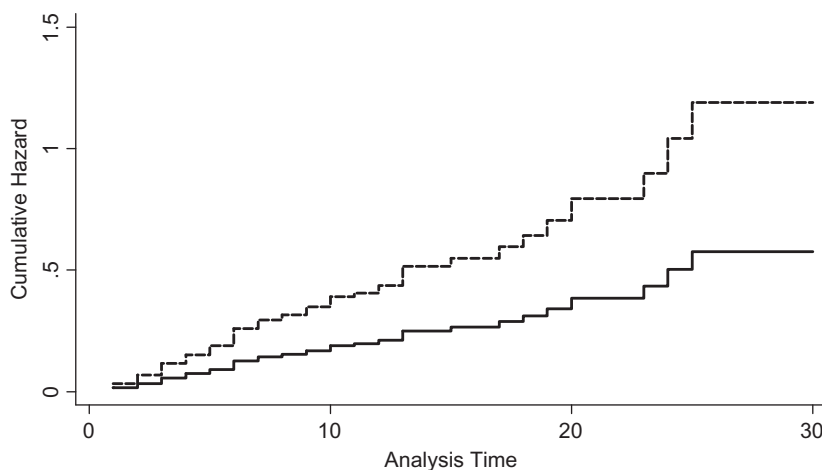


FIGURE 1 The effect of shocks on civil war onset, mediated by winning coalition size: ---, small winning coalition; —, large winning coalition. (The graph was produced using the `stcurve` command in Stata 10.0. Lines indicate the cumulative hazard of civil war onset when the shock variable equals one and the winning coalition variable and interaction term are varied from one standard deviation below the mean to one standard deviation above the mean.)

and this credibility reduces the probability of civil war. An interaction term is included to test this conditional relationship. The interaction variable is a multiplicative term of the composite variable for different types of shocks and the measure for opposition cohesion. Empirical results in Model 3 of Table 2 confirm this argument. The hazard ratio for the variable confirms a negative and significant relationship, showing support for hypothesis 3. In substantive terms, the hazard rate of civil war decreases by 6.6% when opposition groups mediate the effect of shocks on the onset of armed conflict.

Figure 2 illustrates the mediating effect of opposition parties. When leaders allow for one or more opposition parties, their hazard of experiencing civil war onset is smaller than for regimes without such parties. While the plot reveals an arguably small substantive difference, it may result from a less than perfect operationalization of the concept at hand. The last section stressed how the cohesiveness of groups and connections to existing social organizations should enhance the opposition's credibility. Yet the measure employed does not provide precise information on the number, size, or age of opposition parties, the unity of party leadership, or the degree of institutionalization in society. Such information is either not available at all, or only on a case-by-case basis in Banks et al. (2007), especially for the earlier years in the time period analyzed here.

Finally, I conduct several robustness tests to ensure that results are not influenced by the unit of analysis or statistical method employed. First, I

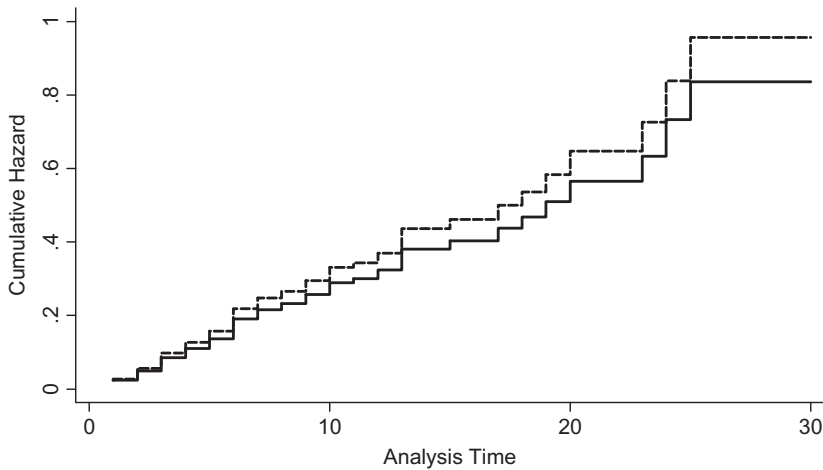


FIGURE 2 The effect of shocks on civil war onset, mediated by opposition cohesion: - - -, no opposition; —, opposition. (The graph was produced using the `stcurve` command in Stata 10.0. Lines indicate the cumulative hazard of civil war onset when the shock variable equals one and the opposition cohesion variable and interaction term are varied from zero to one.)

reanalyze the data using country-years as the unit of analysis since concerns over the subsequently larger number of cases with a leader-year specification may arise. Results for this alternative specification are presented in Models 1–4 of Table 3. Findings for the individual shock events and combined shock variable are very similar to the previous models. Recession, war defeat, and shifts in the balance of power increase the probability of civil war both separately and jointly. In addition, results again confirm hypothesis 2, indicating that the presence of larger winning coalitions mediates the conflict-exacerbating effect of shocks. However, the hazard ratio for the interaction variable between opposition groups and shocks fails to reach conventional significance levels, thus not confirming the third hypothesis. As indicated above, this result may be influenced by the imperfect operationalization of the theoretical concept on the cohesiveness of opposition groups.

A second robustness test investigates whether probit analysis produces results similar to the Cox regression results.²² Probit models are presented in columns 5–8 of Table 3 and are very similar to earlier results. All hypotheses are supported in the alternative models, thereby confirming that results are not influenced by the statistical method employed.

²²I include a peace years variable and the square and cubic function of the variable to correct for temporal dependence (Carter and Signorino 2010). Coefficients for the peace years variables are not reported.

TABLE 3 Robustness Tests for Alternative Model Specifications

Variables	Country-year models				Probit models			
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8
Recession	2.280*** (0.72)	—	—	—	0.269*** (0.090)	—	—	—
War Defeat	6.047** (5.628)	—	—	—	1.127*** (0.348)	—	—	—
Death in Office	0.44 (0.277)	—	—	—	-0.262* (0.152)	—	—	—
Cold War	3.14*** (1.31)	—	—	—	0.364*** (0.102)	—	—	—
Shock	—	2.13** (0.689)	5.334*** (3.091)	1.738 (1.133)	—	0.314*** (0.078)	0.514*** (0.142)	0.482*** (0.135)
Winning Coalition	—	—	1.039 (0.734)	0.453 (0.278)	—	—	-0.137* (0.189)	-0.334** (0.154)
Shock*Winning Coalition	—	—	0.157** (0.142)	—	—	—	-0.455* (0.328)	—
Opposition	—	—	2.74** (1.162)	2.463* (1.313)	—	—	0.096 (0.099)	0.224* (0.127)
Shock*Opposition	—	—	—	1.288 (0.988)	—	—	—	-0.287* (0.127)
Ethnic Polarization	1.90 (1.42)	1.869 (1.363)	1.421 (1.02)	1.328 (0.934)	0.478*** (0.176)	0.420*** (0.171)	0.430** (0.171)	0.396** (0.170)
GDP per capita	0.389*** (0.121)	0.362*** (0.112)	0.357*** (0.137)	0.377*** (0.144)	-0.459*** (0.075)	-0.383*** (0.093)	-0.396*** (0.094)	-0.384*** (0.093)
Population	1.391*** (0.154)	1.391*** (0.157)	1.333*** (0.149)	1.327** (0.148)	0.158*** (0.025)	0.153*** (0.023)	0.157*** (0.024)	0.156*** (0.024)
N	2,156	2,156	2,089	2,089	4,644	4,644	4,553	4,553

Standard errors in parentheses. Standard errors are adjusted for clustering on each leader/country.

*** $p < .01$; ** $p < .05$; * $p < .1$.

CONCLUSION

The empirical analysis shows that shocks to state capabilities increase the probability of civil war, thus supporting the argument on commitment problems during leadership weakness. Shocks such as economic decline, defeat in war, and/or crises in a foreign tutorial power send a sign of weakness to opposition forces and lead to bargaining for authority. Yet both actors suffer from credibility problems because of incentives to renege on agreements in the future, and these incentives increase the risk of violence. In addition, findings show that certain types of actors have greater difficulty in making credible commitments. Empirical results confirm the mediating effect of leadership type and opposition parties on the relationship between political and economic shocks and civil war. Robustness tests using a different unit of analysis and statistical method confirm these findings.

This article makes three contributions to the existing literature on civil war. First, the argument developed here takes the dynamic element of civil war seriously—many analyses of civil war look at concepts that change little or not at all over time, such as relative poverty, ethnicity, or natural resources. While such arguments are valuable in the sense that they can tell us which states are expected to have a higher baseline probability of civil war, they do not explain why countries move from peace to war. Second, this essay investigates factors mediating this commitment problem and produces novel results regarding the role of nonstate actors, which are often neglected in quantitative research on civil wars. Finally, I show that shocks weakening the state's power can be understood as part of a larger class of commitment problems described in the political science literature. This article contributes to this literature by identifying the characteristics of power shifts, thereby not “black-boxing” the microfoundations of these changes.

Recently, bargaining over power has led to significant violence in the Philippines, Pakistan, Kenya, Nepal, Zimbabwe, Nigeria, and Iran. In all instances, the state's leadership and opposition groups bargained over the future distribution of power, and violent fighting occurred despite its humanitarian, economic, and political costs. It was the goal of this essay to develop a general explanation of the relationship between political instability and civil war and help identify the cases most likely to experience violent conflict.

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