Time to Kill: The Impact of Election Timing on Post-Conflict Stability[*]

Dawn Brancati
Assistant Professor
Washington University in St. Louis
Corresponding Author: brancati@wustl.edu

Jack L. Snyder
Robert and Renée Belfer Professor of International Relations
Columbia University
jls6@columbia.edu

Draft: February 6, 2011

Time to Kill: The Impact of Election Timing on Post-Conflict Stability

Abstract

Elections constitute a fundamental element of post-conflict peacebuilding efforts in the post-Cold War era and are often held soon after conflicts end. Yet, the impact of early elections on post-conflict stability is the subject of sharp debate. While some argue that early elections facilitate peace agreements, hasten democratization, and ensure post-conflict stability, others suggest that they undermine genuine democracy and spark a renewal in fighting. In this study, we argue that holding elections soon after a civil war ends generally increases the likelihood of renewed fighting, but that favorable conditions, including decisive victories, demobilization, peacekeeping, power sharing, and strong political, administrative and judicial institutions, can mitigate this risk. We attempt to reconcile the extant qualitative debate on post-conflict elections through a quantitative analysis of all civil wars ending in the post-World War II period.

Introduction

Democracy advocates, including both the Clinton and Bush administrations, have long favored early elections in countries emerging from authoritarianism and violent conflict. Since democracies do not fight each other and tend to settle internal disagreements peacefully, these advocates have reasoned that democratic transitions yield peace, the sooner the better. In their view, pushing autocratic war-prone regimes along the fast track toward democracy should break the power of violent authoritarian elites, accustom people to the habits of democratic participation, provide legitimacy for new leaders, and in cases of international peacekeeping or military occupation, hasten the withdrawal of foreign forces. "It is the practice of democracy that makes a nation ready for democracy," according to President George W. Bush, "and every nation can start on this path."[1]

However, recent troubled transitions to democracy have raised doubts, even among some staunch democracy advocates, about whether early elections are beneficial for peace and democracy. Skeptics claim that early elections reignite violence by empowering former combatants rather than liberal, programmatic political parties. Early elections, they also contend, often take place when the rule of law is weak, making it more likely that elections will suffer from irregularities, candidates will resort to illiberal populist appeals, and losers will refuse to accept the results peacefully. For these reasons, the skeptics recommend postponing fully competitive elections until some progress has been made in strengthening the institutions needed to make democracy work, including competent state bureaucracies, independent courts, professionalized media, and functioning market economies.

Today, this debate is taking on greater urgency because post-conflict elections are being held much more quickly than in the past. The average time between the end of a civil war and the first post-conflict election has been cut in half since the end of the Cold War (See Figure 1). Prior to

---

[1]George W. Bush, Remarks by the President at the 20th Anniversary of the National Endowment for Democracy, Washington, DC, November 6, 2003; See also 1994 State of the Union Address, Transcript of Clinton's Address, *New York Times*, January 26, 1994, p. A17.

1989, an average of 5.6 years passed before countries held their first post-conflict election. Since 1989, this figure has fallen to 2.7 years.

Bringing quantitative evidence to bear on this heretofore largely qualitative policy debate, we find that the skeptics are correct in their central claim: holding elections too soon after a civil war raises substantially the risk of war occurring again. However, early elections, we argue, do not necessarily increase the risk of war under all circumstances. Decisive victories, demobilization, and peacekeeping diminish the fighting capacity of former combatants who might otherwise be tempted to return to war when faced with unfavorable election results. Effective institutional reforms can help new pro-reform actors come to power. Power sharing agreements reassure both sides that they will have a place in government, reducing the chances of them rejecting the election results and returning to war. In the long run, however, power sharing can retard a full transition to peaceful democracy and spark renewed fighting since it locks former combatants into power and reifies social cleavages along old lines.

International involvement has often pushed for early elections in risky conditions, when recently warring factions remain well armed and able to use violence to contend for power. Indeed, international actors have helped create these conditions in the first place by pressing warring factions to reach settlements before one side has defeated the other. However, international actors can sometimes create conditions that mitigate the risk posed by early elections when they provide robust peacekeeping, facilitate the demobilization of armed forces, back power sharing agreements, and help build robust political institutions. Thus, we argue that international pressure in favor of early elections strengthens peace when it provides these stabilizing instruments, but it undermines peace when it is not backed by effective means to achieve stable democracy.

We test our argument using an original dataset of all post-civil-war elections that occurred between 1945 and 2008. In estimating the effect of election timing on the renewal of war, we use matching methods to distinguish the effects of election timing from the effects of other factors that

might affect timing as well as the likelihood of a return to war. Before presenting our statistical results, we review the debate on early elections, elaborate the logic of our argument, and illustrate it with reference to some recent cases.

[**Figure 1 About Here**]

Post-Conflict Election Timing Debate

Policy-makers and scholars alike are sharply divided over the appropriate timing and sequencing of post-conflict elections, with some arguing for early elections at the national level, others arguing for them at the subnational level, and still others arguing against them at either level.

Early Election Proponents

Proponents argue that early elections can improve a country's chances of consolidating democracy by strengthening the legitimacy of post-conflict governments.[2] Failing to hold elections, in their view, could leave former combatants without a peaceful mechanism to influence politics and compel them to return to fighting instead. Even imperfect early elections, some scholars claim, can help consolidate democracy because they habituate politicians and voters to democratic routines and pave the way for cleaner elections in the future.[3] Electoral violence, some further argue, is a normal part of most democratic transitions, a price worth paying to crush authoritarian resistance and advance countries toward a more just and effective form of government.[4]

Elections held soon after wars end, some also claim, may take place in a context more conducive to peace and democracy since peacekeepers can help monitor elections and quell residual violence preventing voters from turning out at the polls.[5] The prospect of early elections, some scholars

[2]Larry Diamond,"Promoting Democracy in Post-Conflict and Failed States," *Taiwan Journal of Democracy*, Vol. 2, No. 2 (2006), pp. 93-116.

[3]Staffan I. Lindberg, "The Democratic Qualities of Competitive Elections: Participation, Competition and Legitimacy in Africa," *Commonwealth and Comparative Politics*, Vol. 41, No. 3 (2003), p. 79.

[4]Sheri Berman,"The Vain Hope for "Correct" Timing," *Journal of Democracy*, Vol. 18, No. 3 (2007), pp. 14-17; Thomas Carothers,"The "Sequencing" Fallacy," *Journal of Democracy*, Vol. 18, No. 1 (2007), pp. 12-27.

[5]Michael W. Doyle and Nicholas Sambanis, *Making War and Building Peace: United Nations Peace Operations,*

suggest, makes foreign countries more willing to commit peacekeeping forces to war-torn countries in the first place because successful elections provide an opportunity for peacekeepers to extricate themselves from obligations abroad.[6] In holding elections early, scholars further point out that countries can attract international aid faster since many aid organizations make good governance a prerequisite for aid.[7]

Not everyone who advocates early elections claims that they should be held at the national level, however. Larry Diamond contends, for example, that early elections should be held first at the subnational level because this sequence of elections gives people a sense of ownership in the reconstruction process and yields a more diverse and legitimate array of interlocutors in government.[8] Other scholars have suggested that holding subnational elections first, though not necessarily early, provides a way of building strong democratic leaders and institutions while keeping the stakes of the electoral struggle low.[9]

Early Election Opponents

Skeptics have argued, in contrast, that early elections can derail democratization and propel countries back on a path toward war. Edward Mansfield and Jack Snyder argue, for example, that elections in newly democratizing countries, including post-conflict states, ought to wait until

(Princeton, NJ: Princeton University Press, 2006); Virginia Page Fortna, "Peacekeeping and Democratization," in Anna K. Jarstad and Timothy D. Sisk ed., *From War to Democracy: Dilemmas of Peacebuilding* (New York: Cambridge University Press, 2008), pp. 39-79.

[6]Terrence Lyons, "The Role of Postsettlement Elections," in Donald Rothchild Stephen John Stedman and Elizabeth M. Cousens, ed., *Ending Civil Wars: The Implementation of Peace Agreements* (Boulder, CO: Lynne Rienner Publications, 2002), pp. 215-236.

[7]Lyons, "The Role of Postsettlement Elections"; Krishna Kumar, *Postconflict Elections, Democratization, and International Assistance* (Boulder, CO: Lynne Rienner Publishers, 1998).

[8]Diamond,"Promoting Democracy in Post-Conflict and Failed States."

[9]Jonathan Fox, "Latin America's Emerging Local Politics," *Journal of Democracy*, Vol. 5, No. 2 (1994), pp. 105-116; Roger B. Meyerson, "Federalism and Incentives for Success of Democracy," *Quarterly Journal of Political Science*, Vol. 1, No. 1 (2006), pp. 3-23; Benjamin Reilly, "Post-Conflict Elections: Constraints and Dangers, *International Peacekeeping*, Vol. 9, No. 2 (2002), pp. 118-139.

some progress has been made in building effective political and administrative institutions.[10] When countries democratize in settings lacking an independent judicial system, a competent bureaucracy, and free media, they claim, electoral politics becomes an exercise not in civic deliberation but in coercion, manipulation, and nationalist, sectarian, or radical appeals. This illiberal style of politics, they contend, often gets locked into political institutions and ideas, sending a country's political development on a detour that makes democratic consolidation more difficult and war more likely.

Other scholars have similarly noted that early post-conflict elections, held in the absence of genuine political parties and strong institutions, are likely to undermine democracy.[11] Early elections, they argue, tend to favor recent combatants, who renege on democratic procedures once in power and bias future elections in their favor.[12] The continuing grip on power of Serbian ethnic nationalists in eastern Bosnia following quick elections under the Dayton Accord is often cited as a prominent example.

In general, we side with the skeptics of early elections. However, we also argue that early elections are less likely to lead to renewed violence when the opposing sides are not well armed and have institutional guarantees of their security, as in the case of decisive victories, demobilization, peacekeeping, and power sharing. In contrast to current work on this topic, our theoretical argument about the conditional effects of election timing takes into account the causes of post-conflict election timing, which we analyze elsewhere.[13] In this paper, we show how these causes interact with election timing to influence the likelihood of a return to war.

---

[10] Edward D. Mansfield and Jack L. Snyder, *Electing To Fight: Why Emerging Democracies Go To War* (Cambridge, MA: The MIT Press, 2005); Edward D. Mansfield, and Jack L. Snyder, "The Sequencing "Fallacy"," *Journal of Democracy*, Vol. 18, No. 3 (2007), pp. 5-9.

[11] Reilly,"Post-Conflict Elections: Constraints and Dangers"; Jeroen de Zeeuw, *From Soldiers to Politicians: Transforming Rebel Movements After Civil War* (Boulder, CO: Lynne Rienner Publishers, 2008).

[12] Reilly,"Post-Conflict Elections: Constraints and Dangers"; Diamond,"Promoting Democracy in Post-Conflict and Failed States"; Roland Paris, *At Wars End: Building Peace After Civil Conflict* (New York: Cambridge University Press, 2004).

[13] Authors (2010).

Why Post-conflict Elections Go Bad

We argue that early elections are generally more likely to reignite conflict than ones held later because the environment in which early elections take place is one in which previously warring factions are the most powerful political actors and continue to mobilize supporters along wartime constituencies. Former combatants, turned politicians, reignite warfare by rejecting the results of unfavorable elections and returning to war in the short term, or by governing in an arbitrary, exclusionary, and exploitative manner, which creates new grievances and provokes renewed fighting in the long term. In this environment, the institutions need to help new actors arise and mobilize constituencies along alternative lines, particularly those emphasizing democracy and good governance, are generally weak.

When post-conflict elections are held soon after civil wars end, former combatants generally possess greater material resources, more extensive organizational networks, and stronger ties to society than newly formed, pro-reform groupings. The ability of new pro-reform groups to compete on an equal footing with former combatants typically depends on the development of new institutions that facilitate new political alignments that cut across old ethnic or patronage lines.[14] In post-conflict settings in Bosnia, Burundi, and Iraq, international actors hoped that liberal, secular, cross-ethnic coalitions would prevail in early elections, but such parties gained little support. Political organizing and communication followed lines that had been entrenched by earlier conflicts and traditional social networks based on religion, ethnicity, lineage, or clientelism.

Governments typically hold elections early not because they are committed democrats, but because they face significant international and domestic pressure to hold elections. Such pressures are particularly strong in the case of negotiated peace agreements, which are often forced on governments by pressure from the armed domestic opposition, which demand elections to gain access to the political system, or from the international community. Since the end of the Cold War, foreign

---

[14]Mansfield and Snyder, *Electing To Fight*; Mansfield and Snyder, "The Sequencing "Fallacy"."

countries have increasingly pressured civil-war-ridden countries to end their conflicts with negoti-ated agreements and to hold elections in the expectation that democracy will promote peace and stability.[15] As Séverine Autesserre shows in her research in eastern Congo, prioritizing electoral pol-itics – instead of directly addressing local security problems and building the institutional capacity of the state – failed to achieve these goals.[16] Elections that feature power sharing arrangements are often useful to legitimate the military-political stalemate embodied in a conflict-ending settlement, but as in the elections that followed the 1958 Lebanon conflict, this short-term expedient can lead to political rigidities and the reification of group identities, which lead to conflict later.

Governments are also more likely to cheat when elections are held early because they face weaker institutional restraints, and they are less likely to respect the election results if they do not win, increasing the likelihood of a military response from the rebels. Former combatants that can easily return to fighting are more likely to reject the results of early elections. In 1980, for example, Milton Obote stole the Ugandan election from Yoweri Museveni, his former ally in the struggle against the murderous dictator Idi Amin. This should have been no surprise, since Obote had ruled arbitrarily during his first tenure as president in the 1960s. Museveni correctly calculated that he could out-organize and out-fight the unpopular Obote, prompting him to launch a guerrilla struggle that eventually brought him to power.

Often early post-conflict elections do not immediately spark violence, but rather sow the seeds of future conflict by locking in a political pattern that is fraught with the potential for future conflict. A series of polarizing post-conflict elections in Cyprus in the 1960s, for example, contributed to the gradual accumulation of tensions that resulted in a return to war in 1974. In another pattern, dictators may sometimes use quick elections to lock in exploitative arrangements that lead to

---

[15] Virginia Page Fortna, "Where Have all the Victories Gone? War Outcomes in Historical Perspective," Paper presented at the annual meeting of the International Studies Association, Hilton Hawaiian Village, Honolulu, Hawaii, Mar 05, 2005.

[16] Séverine Autesserre, *The Trouble With the Congo. Local Violence and the Failure of International Peacebuilding*, New York: Cambridge University Press, 2011).

conflict later. For example, following the bloody 1955 military revolt in Argentina against the labor-backed Peronist regime, elections helped to lock in a pattern of military dictatorship, which returned to another phase of anti-leftist violence during the Dirty War of the late 1970s.

Post-conflict elections can reignite warfare in these ways whether the elections occur at the national or subnational level. Subnational elections are even more likely than national elections to spark renewed warfare when the previous civil war was fought over demands for regional autonomy or independence and when control over the subnational legislature is paramount. Former combatants with a territorial base may be well positioned to win regional elections if they are held soon after wars end. Rebels may not even compete for office at the national level following separatist wars because competing at this level would legitimize the national government. The very act of holding subnational elections before national elections may strengthen separatist parties with territorial bases, as occurred just prior to the breakup of Yugoslavia.[17] Where regional parties dominate subnational politics, holding subnational elections first is unlikely to promote more democratic national leaders as some scholar suggest.[18] In practice, the time lag between the first subnational and first national election is not very large (two years on average), giving subnational leaders insufficient time to gain experience in the practice of democracy at the subnational level before competing at the national level of government.

Conditions that Mitigate Early Election Risks

Although earlier elections are more likely to trigger a return to war in general, favorable conditions, such as decisive victories, demobilization, peacekeeping, power sharing, and the development of robust political, administrative, and judicial institutions, can make early elections less likely to result in renewed warfare. For its part, the international community has often exacerbated the

---

[17]Dawn Brancati, *Peace by Design: Managing Intrastate Conflict through Decentralization* (Oxford: Oxford University Press, 2009).

[18]Meyerson, "Federalism and Incentives for Success of Democracy."

problem of early elections by pressing for negotiated settlements followed by early elections, but has also sometimes helped assuage it by supporting demobilization, peacekeeping, and power sharing.

Early elections are less risky when one side has won a decisive military victory since the losing side lacks the ability to return to fighting if it fares poorly in the election. In the absence of a decisive victory, demobilization of one or both sides, or their integration into a new army, can mitigate the risk of early elections. Successful demobilization is a complicated and lengthy process, requiring rebels to return to their barracks, hand in weapons, find new sources of employment and rejoin civil society. Strong bureaucratic institutions and generous financing are needed to facilitate demobilization. The development of robust administrative institutions, international peacekeeping, and economic development can also facilitate this process.[19] Of these factors, peacekeepers are more likely to be in place if elections are held soon after war ends, whereas the other factors are more likely to be favorable if elections are held later.

Angola's two contrasting experiences with post-conflict elections illustrate the importance of demobilizing before holding elections. In the 1992 elections, held only one year after the Bicesse Accords, Angolas governing MPLA (Popular Movement for the Liberation of Angola) won a majority in the national legislature and a plurality in the first round of the presidential election. The rebel opposition, Jonas Savimbi's UNITA (National Union for the Total Independence of Angola), remained militarily mobilized during the election campaign, refused to accept what Savimbi claimed were rigged results, and resumed fighting. The 2008 elections, in contrast, took place six years after the second civil war had ended and UNITA had been demobilized. UNITA fared worse in this election than in 1992 and again questioned the validity of the election results. Unlike 1992, however, UNITA did not resume fighting and instead challenged the results unsuccessfully in the country's newly reformed courts.

Power sharing agreements can also reduce the risk that early elections will provoke renewed

---

[19]Doyle and Sambanis, *Making War and Building Peace*; Fortna, "Peacekeeping and Democratization."

warfare. Power sharing guarantees that the side that loses an election will still retain meaningful representation in government, access to state resources, and/or some degree of autonomy. Because power sharing reduces the risk that elections pose to incumbents, it makes early elections more likely. Examples include the power sharing deals in South Africa following violence at the end of the apartheid regime, in Mozambique following the long civil war between Frelimo and Renamo, and in Sudan at the end of the civil war between North and South. Power sharing, however, can sometimes cause instability either in the short run or in the long run if it is not combined with other favorable conditions, such as peacekeeping or strong governmental institutions.

In the short term, powerful groups that are accustomed to ruling outright may resist the implementation of agreements that require them to share power. Shifts in relative power between groups as a result of electoral outcomes can trigger fears and struggles, especially when democratic institutions and security guarantees are weak. In Burundi in 1993, for example, international aid donors insisted that the military dictatorship led by the Tutsi minority hold elections. The elections were won by the majority ethnic Hutu candidate, Melchior Ndadaye. When the new president moved to institute power sharing arrangements that would have integrated Hutus into the formerly all-Tutsi officer corps, the military assassinated him, plunging Burundi into another, even more intense civil war. Power sharing imposed by international donors also contributed to the onset of the Rwanda genocide by excluding from power the militant Hutu government faction that controlled machete-wielding militias.

Power sharing can also increase the odds of a return to war in the long term by allowing leaders to govern in an arbitrary and exploitative manner with little risk of losing office. By locking former combatants into positions of authority, power sharing institutions provide group leaders with little incentive to broaden their support bases beyond old cleavage lines and tend to reduce democratic accountability to a process of out-bidding appeals to narrow constituencies. Power sharing arrangements tended to freeze and deepen lines of conflict for this reason in Lebanon and

Yugoslavia.

Finally, countries can offset the risk of early elections by deferring post-conflict elections until strong political, administrative and judicial institutions are in place. These institutions can help pro-reform political parties to arise and compete on an equal footing with former combatants. They can also facilitate demobilization. These institutions can keep the winners of post-conflict elections in check and prevent them from governing in an arbitrary and exploitative manner. Absent institutional checks, the winner will be tempted to take the election, whether fair or stolen, as a mandate to establish a corrupt dictatorship, as Charles Taylor did in Liberia after winning the internationally sponsored election in 1997. Taylor owed his victory to the common belief among voters that he would restart the civil war if he were not elected. However, a vote for Taylor turned out not to be a vote for peace. His continued predations soon provoked resistance and a renewed civil war in 1999.[20]

Institutions that make elections safer are not just ones that directly regulate voting, such as election commissions, but also the basic machinery of government, especially impartial, professionalized bureaucracies and independent courts. Also important is an independent, professionalized media, which can help prevent nationalist mythmaking by allowing citizens to publicly scrutinize the logic and facts underpinning political rhetoric. When mass electoral politics are put on the fast track after conflicts, as in Burundi in 1993, immature, unprofessional media are likely to be hijacked by former combatants, leading to hate speech rather than constructive free speech.[21] These institutions are more likely to be in place when countries were democracies before or during the war, when the previous civil war was short so that damage to the existing infrastructure was limited, and when countries are economically strong or receive international economic assistance to aid in

---

[20]Roland Paris, *At Wars End: Building Peace After Civil Conflict*, pp. 90-96; Adekeye Adebajo, *Building Peace in West Africa: Liberia, Sierra Leone, and Guinea-Bissau* (Boulder, CO: Lynne Rienner Publishers, 2002, pp. 231).

[21]Jack L. Snyder and Karen Ballentine, "Nationalism and the Marketplace of Ideas," *International Security*, Vol. 21, No. 2 (1996), pp. 5–40.

the development of these institutions.

Liberia's experience with elections in 1997 and 2005 illustrates these points. Liberia held presidential and legislative elections only two years after signing the Abuja Accords in 1995. Former warlord Charles Taylor was elected president in a landslide victory supervised by a West African peacekeeping force. Taylor wielded enormous advantages over his opponents, due to his pervasive organizational network, his monopoly over the media, as well as his extensive military and financial resources. Pre-election disarmament efforts were marred by bloody resistance from bands of local warlords. Many voters supported Taylor because they expected him to devastate the country in renewed fighting if he lost. An intimidated opposition accepted the outcome of the election. Once in power, Taylor brutally suppressed the opposition and did not fulfill his promises to democratize the country. Shortly thereafter, a new opposition force organized to overthrow Taylor.

Liberia's 2005 elections were much more successful, although they too were only held two years after signing a peace treaty. With Taylor having fled the country, the 2005 elections were not dominated by a single candidate or party. Demobilization occurred prior to the election, and more smoothly than it had before. Political institutions needed for democratic elections were better developed at the time as well. Prior to the election, Liberia's media was liberalized and some media outlets, such as Star Radio, offered reasonably balanced coverage of the election. An independent electoral commission, despite shortcomings, maintained neutrality, and unlike in previous elections, political groupings were genuine parties, not just unreformed rebel groups. Ultimately, disputes about the electoral process were settled in court, not on the battlefield.

Some of the conditions that mitigate the risk of early elections are rooted in long-standing features of a country's political landscape, such as its historical legacy of political institutions. However, others can be fostered in the post-conflict period through the astute policies of a country's political leaders or the international community, including the demobilization of former combatants, peacekeeping, power sharing, and the strengthening of administrative and legal institutions prior to

the first election. While international actors have often exacerbated the problem of early elections by pressing for negotiated settlements and early voting, they have also sometimes helped to mitigate its dangers by providing peacekeepers, promoting power sharing, and working with local authorities to strengthen state institutions.

Methodology

To evaluate the effect of post-conflict election timing on the recurrence of civil war, we conduct a quantitative analysis of all civil wars that have ended between 1945 and 2008. Making causal inferences about the effect of election timing on civil war in observational studies like this is difficult because factors that affect the likelihood of a return to war might also affect the likelihood of a country holding early elections. Failing to take these factors into account can lead to misleading results. Countries, for example, which hold elections early may be more prone to renewed warfare, not because early elections are destabilizing, but because rebel forces are strong enough militarily to compel governments to hold elections and also strong enough to return to fighting if an opportunity to win on the battlefield arises. Conversely, countries which hold elections early may be less war prone because the UN has helped them logistically to conduct elections and to disarm combatants so that rebels cannot return to fighting if an opportunity for a battlefield victory arises.

To address issues of causal inference, we employ matching methods in our analysis.[22] This technique helps us make inferences about the effect of election timing on post-conflict stability by matching cases of civil wars in terms of potentially confounding variables. Confounders are variables that influence the recurrence of civil war conditional on election timing, that are correlated with election timing and are also causally prior to it. Using this method, we can conclude when the matching is good and the data are balanced in terms of each of these covariates that a significant

---

[22]We do not use other methods of causal inference, such as instrumental variable (IV) regression and Heckman selection models, for several reasons. We know of no instrument that affects timing and is unlikely to be correlated with the error term. The orthogonality assumption of IV regression does not hold for models with non-linear dependent variables although methods have been developed for logistic regression used here, and both methods require strong modeling and functional form assumptions.

effect of election timing on renewed warfare is due to election timing and not these other covariates.

Since matching is conditional on observables, our analysis will still be biased if there are variables other than those we identify in our model that affect both election timing and post-conflict stability. Consequently, we have taken great care in a separate study to identify all the potential confounders of post-conflict election timing.[23] We examined in that study the effect of more than twenty distinct variables on post-conflict election timing and found that several factors that affect timing also affect the likelihood of renewed fighting, such as the outcome of the previous civil war, UN intervention, and power sharing.[24] Factors that do not affect the timing of post-conflict elections, according to our analysis, include international democracy assistance and several factors related to a country's institutional capacity to conduct elections, including when a country last held an election, its level of economic development, and the severity of the previous civil war (except in the case of population displacements). The effect of the post-Cold War period in shortening the time to first elections is explained by the increased proportion of negotiated settlements relative to decisive victories after 1989.

While we went to great lengths to identify all possible confounders in this analysis, it is impossible to know with certainty whether we have identified them all.[25] In principle, leaders might possess private information or insights about their circumstances that make them better able to estimate the consequences of early elections. We believe, however, that any unobservables would make us less likely to see destabilizing early elections and would strengthen our conclusions about

---

[23]Authors (2010).

[24]The variables examined are: Cold War era, UN intervention, previous civil war's outcome, power sharing (i.e., proportional representation, unitary executives and decentralization), history of past elections (i.e., regularity of elections and most recent election), civil war severity (i.e., deaths, duration and displacements), economic development (i.e., per capita income, electricity consumption or paved roads), and international electoral assistance (i.e., UN assistance and USAID funding).

[25]It is not possible to test directly whether any unobservable variables affect selection into the treatment, or to test indirectly how large the effect of a confounding variable would have to be for the effect of the treatment to no longer be significant using Rosenbaum Bounds and tests like the Hodges-Lehman test and Wilcoxon sign rank test, since our analysis involves both a continuous treatment of time and a dichotomous outcome variable. See: Paul R. Rosenbaum, *Observational Studies* (New York: Springer, 2002).

the dangers of early elections. That is, any private information governments possess about the likelihood of elections triggering violence should normally lead them to delay holding elections and to undertake measures that prevent elections from turning violent.

In theory, it is possible that a government might try to use an election to provoke a conflict with rebels, but we find little evidence that this is the case. Hypothetically, a government that believes it could decisively defeat the rebels in a war might hold elections hoping that the rebels would disrupt them violently, placing the onus for the renewed fighting on the rebels. The government might also believe that its prospects in a war would be worse in the future, creating an incentive to use the elections to provoke a war in the short run that could be blamed on the rebels. If these calculations were based on private information not captured in our model, they would constitute unobservable factors that lead countries to hold early elections and also make early elections appear to cause instability, whereas in fact they would simply be a pretext for it.

We doubt, however, that these unobservables are confounding our results. We do not find empirically in any of our case studies of post-conflict elections that elections were held to create a pretext to return to war. Rather, we found that governments or rebels seek elections to legitimate their authority when they expect to win them, when they think they can get away with stealing them, or when they are under strong outside pressure to hold them. Even the leader of the minority Tutsi government of Burundi thought that his program of partial reforms would make him popular enough among Hutus to win the 1993 election.[26] In the results section to follow, we present the results of both the matched and unmatched analysis, which yield the same conclusions about the deleterious effects of early elections on the outbreak of renewed warfare.

Data and Measures

In first describing the data we use and the measures we employ in the statistical analysis, we

---

[26]Renè Lemarchand, *Burundi: Ethnocide as Discourse and Practice* (New York: Cambridge University Press, 1994), pp. 187.

provide in the following section an explanation of our dependent variable – civil war recurrence –

followed by a description of the different measures of our independent variable – election timing,

based on both calendar time and institutional sequencing. Finally, we present the various controls

we use in the analysis.

Post-conflict Stability

Civil wars are armed conflicts that result in at least 1,000 deaths from relatively continual

fighting between the government of a sovereign internationally recognized state, and one or more

armed groups that recruit mostly locally and control part of a country's territory.[27] Since the end of

World War II, 164 civil wars have occurred, 16 of which were ongoing as of December 2008 and not

included consequently in our analysis.[28] We have also excluded from the dataset an additional 12

civil wars because they resulted in two or more states, that no longer participate in joint elections,

leading to a total of 136 civil wars included in our post-civil war dataset.[29] In order to evaluate

---

[27]Doyle and Sambanis, *Making War and Building Peace*, pp. 133-136.

[28]We constructed the dataset used in this study in the following way. We used the 151 civil wars included in Doyle and Sambanis (2006) as the basis for this dataset. We then compared the cases of civil war included in Doyle and Sambanis (2006) with those included in Fearon and Laitin (2003) and PRIO (2006) to determine if there were cases of civil war in the latter datasets, which fit the exhaustive criteria of Doyle and Sambanis (2006) but were not included in the dataset either because they were borderline cases or because they occurred after the completion of the dataset. In total, we added 13 cases to the original Doyle and Sambanis (2006) dataset, for a total of 164 civil wars. We also updated the end dates of 2 civil wars (i.e., Liberia 1999-2003; Nepal 1996-2006), which were ongoing in the Doyle and Sambanis (2006) dataset but which have since ended, following the authors' explicit and detailed criteria for determining the end date of a civil war based on combatants, deaths, victories, peace treaties and cease-fires. Separately, we tracked the datasets in which each civil war is included and the potential reasons why a civil war is not included in every dataset. We identified at least 7 such reasons related to ambiguity over whether the cases meet the Doyle and Sambanis criteria for battle-deaths, two-sidedness or being internal in nature, the division of a civil war into multiple wars due to a gap in violence or a change in actors, as well as differences in time periods covered by the datasets, or another unknown reason. In order to ensure that our results are not driven by case selection, which they are not, we performed various robustness tests dropping cases according to each of these different reasons. See Doyle and Sambanis, *Making War and Building Peace*; James D. Fearon and David D. Laitin, "Ethnicity, Insurgency and Civil War," *American Political Science Review*, Vol. 97, No. 1 (2003), pp. 75-90; PRIO, *Armed Conicts 1946-2006* (Oslo, Norway: International Peace Research Institute, 2006).

[29]Following the state death literature, we consider a country to be a sovereign state when at least two major powers (i.e., China, France, USSR/Russia, United Kingdom and the United States – the 5 veto powers on the UN Security Council) recognize it. See: Tanisha M. Fazal, *State Death: The Politics and Geography of Conquest, Occupation, and Annexation* (Princeton, NJ: Princeton University Press, 2007). We exclude the following civil wars as a result (the sovereign state created from each war is in brackets): France/United Kingdom [Cameroon] (1960-1961); China [Taiwan] (1946-1949); Ethiopia [Eritrea] (1974-1991); France [Algeria] (1960-1961); India [Pakistan] (1946-1948); Indonesia [East Timor] (1975-1999); Israel [Palestine] (1987-1997; 2000-ongoing); Korea [North and South Korea]

post-conflict stability in each of these cases, we identify whether or not a new war occurs within a country. We code this variable *civil war recurrence* as a 1 if a new civil war occurs in a country and 0 otherwise. If a new war occurs before an existing war has ended, it is not coded as a new war. New wars occur in almost half of the cases. We do not attempt to distinguish between civil wars involving actors in the previous war and those that do not, a task that is nearly impossible anyway given the complexity of group membership, because our theory broadly encompasses both types of civil wars recurring.

Post-Conflict Election Timing and Sequencing

First post-conflict elections, we define as, the first direct national or subnational election in a country following the end of a civil war. We code these elections based on a 12-point coding criteria.[30] According to this criteria, only direct elections, excluding by-elections, are included in the study. For national elections, all presidential and legislative elections are included, even constituent assemblies. National elections in which one or more actors to a conflict are not allowed to or choose not to participate are included.[31] For subnational elections, only direct elections at the level of the municipality/village or above are included and in countries where rebel groups have fought for control over a specific territory and/or purport to represent a group constituting the dominant group in a particular territory, only subnational elections in that territory are included.

We identified the dates of these elections using various sources, including official government sources (e.g., electoral commissions and legislatures) and other primary resources (e.g., newspapers, Keesing's World Archives, and electoral observer reports), as well as a multitude of secondary

---

(1949-1953); Pakistan [Bangladesh] (1971-1971); South Africa [Namibia] (1973-1989); Yugoslavia [Croatia] (1991-1991).

[30] Authors (2010). Since the date of the election is essential to this study, we tracked the extent to which the end date of civil wars in the Doyle and Sambanis (2006) dataset is the same as the end date in the Fearon and Laitin (2003) and PRIO (2006) datasets, and executed various robustness tests using alternative end dates specified in these other datasets. Our results are robust to the different end dates.

[31] These cases are few in number and include: Georgia (1995), Greece (1950), Russia (1999) and Cyprus (1976).

resources. In most cases, we were able to verify each date with at least two resources. Using this information, we have measured *post-conflict election timing* as the number of months that have elapsed since the end of a civil war and the first post-conflict election.[32] We measure election timing separately for all first post-conflict elections (FPEs) and first post-conflict national elections (FPnEs) in particular. We denote the level at which FPEs take place with separate variables representing elections occurring at the national and subnational level simultaneously (*FPE level concurrent*), those occurring at the national level first (*FPE level national*), and finally, those occurring at the subnational level first (*FPE level subnational*), using the latter as our base category.

Election timing, measured in terms of calendar months, tests our argument that the sooner elections occur after a conflict the more likely they are to result in renewed fighting, especially when elections are held before demobilization and before the development of institutions needed to move politics beyond old cleavage lines. Empirically, we find this to be the case. That is, the average number of months that have elapsed since the end of a civil war and the first post-conflict election in a country is significantly higher when demobilization begins before an election than when it begins afterwards according to t-tests. Like demobilization, institutional development is also positively and significantly related to post-conflict election timing. Specifically, bureaucratic strength and the rule of law are higher, while corruption is lower, when more time elapses between the end of a civil war and the first post-conflict election.

Since election timing is not a perfect proxy for either demobilization or institutional development, we also measure these conditions directly. We measure *demobilization* with a dichotomous variable coded 1 if demobilization began prior to a post-conflict election and 0 otherwise. This variable is coded according to when demobilization was first implemented, not when it was first authorized, based on primary resources, including information from the United Nations and World

---

[32]We used the first day of the election to calculate timing. In 5 cases, we were not able to determine precisely whether the election proceeded or followed the end of the civil war. We, therefore, performed robustness tests using the two most immediate elections and found no differences in the results.

Bank, as well as other secondary resources. Unfortunately, this variable does not capture the extent to which combatants have demobilized prior to an election since it is impossible to reliably measure this issue without information on total combatants and weapons stocks within countries. We do not use the end date of demobilization programs as a proxy for full demobilization because these programs often end for various reasons other than full disarmament, including funding shortages and the expiration of UN missions.

To evaluate post-conflict institutional development, we measure bureaucratic strength, corruption, and rule of law using data from the *International Country Risk Guide (ICRG), 1984-2004*.[33] *Bureaucratic quality* measures the following: the strength and expertise of the bureaucracy to govern without drastic changes in policy or interruptions in government services, the autonomy of the bureaucracy from political pressure, and the existence of an established mechanism for recruitment and training. It ranges from 0 for low bureaucratic quality to 4 for high bureaucratic quality.

Corruption measures actual or potential corruption in the form of excessive patronage, nepotism, job reservations, favors-for-favors, secret party funding, and suspiciously close ties between politics and business. Originally, this variable ranged between 0 and 6, with higher scores indicating lower levels of corruption, but we have reversed the order of the values on this index so that higher values represent lower levels of corruption. Finally, *law and order* measures the strength and impartiality of the legal system as well as popular observance of the law. As a result of the latter component, this measure may be partially conflated with political stability, and, thus, taken with a grain of salt. Law and order ranges between 0 representing a modicum of law and order and 6 signifying high levels of law and order.

Of these three institutional variables measuring bureaucratic quality, corruption, and law and order, only the latter is significantly related to election timing, with law and order being greater

---

[33]The Political Risk Services (PRS) Group Inc., *International Country Risk Guide* (East Syracuse, NY: The PRS Group Inc, 2008).

as more time elapses between the end of a civil war and a country's first post-conflict election. Bureaucratic quality is also positively related to election timing but it is not significant, which is not surprising given the limited time period for which these data are available. To cross-validate the ICRG data with other data on institutional strength, we compare it to the *World Governance Indictors (WGI) 1996-2008*, and its measures of government effectiveness, corruption, and rule of law. Although the WGI measures are available for a much shorter time period, the ICRG measures are strongly and significantly correlated with the WGI measures, giving use added confidence in the ICRG measures.

Control Variables

In addition to measuring the timing and sequencing of post-conflict elections, we identify a number of domestic and international factors that also affect post-conflict stability. A number of these factors, including the outcome of the previous civil war, peacekeeping and power sharing, mediate the effect of election timing on post-conflict stability or affect the ability of countries to meet conditions that do.[34]

To measure the outcome of the previous civil war, we code *victory* as a 1 if a civil war ended in a victory for the government or the rebels and 0 otherwise.[35] Early elections are less likely to lead to renewed fighting in the case of victories since former combatants have a diminished capacity to restart civil wars in this case. Since rebels should also have a reduced capacity to fight in the post-Cold War era without the US-Soviet rivalry sponsoring wars in this period, we identify wars that ended in the post-Cold War era with a single indicator variable coded 1 for the *post-Cold War*

---

[34]We also include in separate analyses not presented here a measure of ethno-linguistic heterogeneity since scholars have hypothesized that heterogeneity is related to the onset and resurgence of civil wars, although we are highly skeptical about the quality of the heterogeneity data and the ability of heterogeneity, absent information about the treatment of ethnic groups, to predict civil wars. In these models, ethno-linguistic heterogeneity is not significant and does not change the substantive or statistical significance of our main findings in line with the findings of other studies. See: Barbara Walter, "Does Conflict Beget Conflict? Explaining Recurring Civil War," *Journal of Peace Research*, Vol. 4, No. 3 (2004), pp. 371-388; Paul Collier, Anke Hoeffler and Måns Söderbom, "Post Conflict Risks," *Journal of Peace Research*, Vol. 45, No. 4 (2008), pp. 461-478.

[35]Data are based on Doyle and Sambanis (2006) updated to take into account our expanded dataset.

era (1989 onwards) and 0 otherwise.

Since peacekeeping operations can reduce the likelihood of early elections resulting in renewed fighting in the case of settlements and truces by facilitating demobilization, monitoring treaty compliance, and rebuilding political institutions, we distinguish between civil wars involving *UN intervention* and those lacking it, with an indicator variable coded 1 for cases of UN intervention and 0 otherwise.[36]

Power sharing institutions also make early elections less risky in the short term by reducing the odds of either the government or the rebels suffering an electoral defeat that jeopardizes their core interests and prompts a return to war. We measure power sharing with separate indicators representing the extent to which power is shared within the executive and legislative branches of the national government and between the national and subnational levels of government. These variables are: proportional representation, unitary executive systems, and decentralization.

Proportional representation (PR) systems distribute seats in multi-member districts in proportion to the number of votes that parties receive. We code proportional representation as a 1 if national legislatures used PR in the post-conflict period and 0 otherwise. *Mixed electoral systems* employ two different electoral systems – proportional representation and majoritarian or plurality rule, and are identified with a separate indicator coded 1 if national legislatures used a mixed system in the post-conflict period, and 0 otherwise. *Majority/plurality systems*, coded 1 if countries had single-member districts in the post-conflict period where parties or candidates earning a majority or plurality of the vote win the seat and 0 otherwise, are our base category.

A *unitary executive system* is one in which national executive power can only rest in the hands of a single individual and, thus, a single political party. Presidential systems have unitary executives while semi-presidential and parliamentary systems do not. In semi-presidential systems, a single party can control the presidency and the prime ministership, just as a single party can control all

---

[36]Ibid. While the UN has different mandates, there are too few cases of each to reliably estimate each effect.

the seats in the cabinet of a parliamentary system. In both these systems, however, parties have an opportunity to share power even though they may not in any given year. We code unitary executives with a 1 if countries had a presidential system in the post-conflict period, and 0 otherwise.

Decentralization is coded 1 if the subnational level of government was elected in the post-conflict period and had either administrative, fiscal, or political decision-making authority over at least one issue area and 0 otherwise. Decentralization is measured broadly here, including administrative as well as political decision-making authority, since there is limited information available about decentralization in many of these countries, while in others, the systems are not fully delineated.

In addition to the above, we also control for a number of factors that do not directly mediate the effect of election timing on civil war resurgence, but that help countries meet certain conditions that do, such as the severity of the civil war. We measure war severity in terms of *war duration (months)* as well as the number of *deaths* and *displacements* incurred in the war.[37] Rebels may be more willing to demobilize and less capable of fighting if the previous civil war was very severe, but more severe wars can also weaken institutions and make countries less likely to have effective institutions in place at the time of an election.[38]

Economic development can help countries build strong political, administrative and legal institutions. It can also independently affect post-conflict stability by enabling countries to effectively suppress any opposition that arises, reducing people's grievances against the government, and undermining the ability of rebels to attract new recruits.[39] We measure economic development in this study in terms of *per capita income* based on data from Fearon and Laitin (2003).[40] As expected,

---

[37]Ibid.

[38]Barbara Walter, "Does Conflict Beget Conflict? Explaining Recurring Civil War," *Journal of Peace Research*, Vol. 41, No. 3 (2004), pp. 371-388.

[39]Paul Collier and Anke Hoeffler, "On the Economic Causes of Civil War," Oxford Economic Papers 50, 1998, pp. 563-573.

[40]James D. Fearon and David D. Laitin,"Ethnicity, Insurgency and Civil War," *American Political Science Review*, Vol. 97, No. 1 (2003), pp. 75-90.

bureaucratic quality as well as law and order are significantly related to per capita income, with both stronger as per capita income is higher.

Countries may also be more capable of holding clean elections and building effective institutions if they receive international democracy assistance. Using data from the UN Electoral Assistance Division (EAD), we measure UN electoral assistance with an indicator variable called *UN assistance*, coded 1 if a country received any form of electoral assistance from the United Nations for a particular post-conflict election and 0 otherwise. We also distinguish among 7 types of electoral assistance: (1) technical assistance and advisory services, (2) coordination and support for international observers, (3) observation, (4) organization and conduct of elections, (5) supervision regarding the validity of all aspects of the electoral process, (6) verification of the elections in the extent to which they are free and fair, and (7) support for national observers including training. Technical assistance is the most common type of assistance that the UN has given over the post-WWII period with two-thirds of FPEs receiving this type of assistance.

To evaluate international assistance, we also measure the amount of aid countries receive from the USAID (1990-2004), a major contributor of democracy assistance to post-conflict countries.[41] For each election, the variable *USAID* is equal to the total amount of money a country received from the USAID (millions of constant 2000 US dollars) for the purpose of "democracy and governance" the year after their civil war ended through the year in which their first post-conflict election took place. Expecting strongly democratic elections to be more pacifying than other elections, we also measure the overall level of democracy in a country, which we expect to enhance post-conflict stability. We measure democracy based on a country's score on the Polity IV index (-10 autocracy to +10 democracy) the year in which an election occurs, and explore alternative measures, which yield the same results, including Freedom House, elsewhere.

---

[41] Steven E. Finkel, Aníbal Pérez-Liñán, and Mitchell Seligson, "The Effects of U.S. Foreign Assistance on Democracy Building, 1990-2003," *World Politics*, Vol. 59, No. 3 (2007), pp. 404-439.

Results

In presenting the results of the analysis, we first report our findings on the effect of election timing measured in terms of calendar time on the likelihood of a return to war, and subsequently our findings on the sequencing of elections relative to demobilization and institutional development. Tables 1 and 2 present the results of our analysis for post-conflict election timing measured in terms of calendar time without matching. In these analyses, we use logistic regression with standard errors clustered by country because our dependent variable, civil war recurrence, is measured dichotomously and because some countries experience more than one civil war.[42]

[Tables 1 and 2 About Here]

The results for all post-conflict elections are reported in Table 1 (Models 1-6) and those for national elections are reported in Table 2 (Model 7-12). According to the results in Table 1, elections that occur later reduce the probability of a new war breaking out. The effect, though, is not robust across models.[43] The effect is much stronger, however, if we restrict our analysis to only national elections as we do in Table 2, with national elections being held later significantly reducing the probability of a new war breaking out over ones held earlier. In Model 8, for example, the probability of a new war decreases by about 0.09 points (or 31%) if national elections occur 5 years after a civil war ended rather than 1 year after a war ended, holding all other variables constant at their means.

---

[42]To address the fact that having experienced one civil war may affect a country's propensity to experience another, we also include in the analysis a variable called *previous civil wars*, which represents the number of prior civil wars in a country. See Nathaniel Beck, Jonathan N. Katz and Richard Tucker, "Taking Time Seriously: Time- Series-Cross-Section Analysis," *American Journal of Political Science*, Vol. 42, No. 4 (1998), pp. 1260-1288. We also address the issues of multiple events and duration dependence by including separate indicator variables in the analysis for the number of civil wars when a Likelihood Ratio Test suggests that duration dependence is a concern, and when the models fit the data better. The results are statistically and substantively the same as the models using the sequential variable for the number of previous civil wars. We do not use cubic splines in the models since we have a manageable number of time indicators, nor do we use country fixed effects since countries in which wars do not recur appear only once in the dataset and all countries experiencing multiple wars do not exhibit variation in the dependent variable.

[43]We also explored non-linear specifications of election timing but the linear one used here is the most appropriate theoretically and empirically.

The effect of election timing is also mediated by several factors according to the results. One of these is not, however, the sequencing of national and subnational elections. As expected, whether a country's first elections are national, subnational or concurrent does not have a significant, or even a consistent, effect on the outbreak of a new civil war.[44] The results do suggest, though, that victories, UN intervention and power sharing all significantly reduce the likelihood of early elections leading to violence in support of our argument.

The effect of civil war victories on post-conflict stability is quite large. According to Model 4, if post-conflict elections are held 1 year after a civil war ended, the probability of a new civil war decreases by 0.19 points (or 40%) if the previous war ended in a victory rather than a settlement or truce, holding all other variables constant at their means. According to Model 10, the probability of a new war decreases by 0.25 points (or 49%) if national elections are held 1 year after a civil war has ended in a victory rather than a settlement or truce, holding all other variables constant at their means.[45]

UN intervention also has a large mediating effect on post-conflict stability in the case of national elections, but not in the case of all post-conflict elections. According to Model 11, if national elections are held 1 year after a civil war ended in a settlement or truce, the probability of a new civil war decreases by 0.33 points (or 60%) if the UN intervenes than if it does not, holding all other variables constant at their means.[46]

Power sharing also reduces the likelihood of elections leading to renewed fighting with decentralization having the largest effect. According to Model 6, if post-conflict elections are held 1 year after a civil war ended, the probability of a new civil war decreases by 0.66 points (or 78%) if the

---

[44]FPE level (national) and FPE level (concurrent) are not individually or jointly significant in any model in Table 1.

[45]Main effects for election timing and victories and the interaction between the two are jointly significant at the p≤0.05 level for both models.

[46]Main effects for election timing and UN intervention and the interaction between the two are jointly significant at the p≤0.05 level.

political system is decentralized than if it is not, holding all other variables constant at their means. For national elections occurring 1 year after a civil war ended, the probability of a new civil war decreases by 0.72 points (or 84%) according to Model 12, if the political system is decentralized than if it is not, holding all other variables constant at their means.[47] In alternative models, we interact each of the other power sharing variables individually with election timing. According to these models, unitary executive systems significantly increase the probability of a new civil war occurring while mixed systems significantly reduce this probability, although both of their effects are weaker statistically and substantively than those for decentralization.

In terms of the remaining control variables, we find that the extent to which post-conflict elections are democratic does not significantly affect the outbreak of a new war. Countries that score higher on the Polity IV index the year in which their first post-conflict election is held are less likely to experience a new civil war than those that score lower on the Polity IV index, but this effect is not significant. Democracy is still not significant if we use different functional forms or alternative measures of democracy. Per capita income and the duration of the war do not affect renewed fighting, but longer wars are less likely to result in new civil wars while increasing numbers of displaced persons are more likely to result in them. Experiencing more than one civil war puts a country at a higher risk of experiencing another civil war, while the post-Cold War period significantly reduces the likelihood of a new war occurring.[48]

In order to adjust for the non-random nature of election timing, we repeat the previous analyses

---

[47]Main effects for election timing and decentralization and the interaction between the two are jointly significant at the p≤0.01 level for both models.

[48]While civil wars may be less likely to occur in the post-Cold War era because of US and Soviet support drying up in this period, countries whose wars end in this period have the opportunity to experience a new war for a shorter period of time than those in the Cold War era. In alternative models, we include decade fixed effects rather than an indicator for the post-Cold War era, because civil wars ending more recently have had fewer years in which to experience another civil war than those that have ended in the more distant past. In these models, the effect for election timing is slightly stronger and more significant. Wars ending in the later decades are less likely to relapse than those ending in earlier decades and those ending in the middle of the post-Cold War era are the most likely to recur.

using generalized propensity score (GPS) matching.[49] We use GPS matching in this analysis since election timing is measured as a continuous variable in this analysis. GPS matching allows us to estimate the marginal treatment effect of conducting a post-conflict election at a specific time on the outbreak of a new civil war, comparing the effect for countries that held an election at this time with those that did not. To implement this procedure, we calculate the GPS based on covariates described previously and shown in separate work to predict post-conflict election timing.[50] These covariates are: post-Cold War, victory, regular cycle, UN intervention, UN electoral assistance, number of previous civil wars, PR system, mixed system, unitary executive, decentralization, per capita income, war duration, deaths, and displacements. Our balance checks indicate that the mean differences between the treatment and control groups are not significant for any of these covariates, indicating that the data are balanced. The full results for the balance tests are available in a supplementary appendix.[51]

In Figure 2, we estimate the dose-response function. It depicts the conditional expectation of the outcome, the onset of a new civil war, given the treatment in this case post-conflict election timing, and the GPS evaluated at any level of the treatment. To estimate the dose-response function at a particular level of the treatment, this conditional expectation is averaged over the GPS at that level of the treatment; it is not averaged over the GPS, but rather over the score evaluated at a

---

[49] Keisuke Hirano and Guido W. Imbens, *The Propensity Score with Continuous Treatments* (West Sussex, England: John Wiley and Sons, Inc., 2004).

[50] Authors (2010).

[51] To check for balance, we first divide our treatment variable into 3 equally-sized groups and multiple intervals within these groups based on the GPS. Then, we test if the means (weighted based on the number of observations) for each interval are the same using t-tests. In our base models presented here, we use the following covariates for which we do not have missing information to balance the data: post-Cold War, victory, regular cycle, UN intervention, UN electoral assistance, number of previous civil wars, PR system, mixed system, unitary executive and decentralization. The balancing property is satisfied at the 0.01 level for FPEs (meaning we cannot reject the null that they are different at the 0.01 level but we can reject it at lower levels) and 0.10 for FPnEs. In separate analyses, we also balance the data using those covariates that have a lot of missing data: per capita income, war duration, deaths, and displacements. We meet the balancing assumption in these analyses at the 0.01 level or better for both FPEs and FPnEs. The results of which also suggest that post-conflict election timing increases the likelihood of renewed warfare.

given treatment level. We use bootstrapped standard errors with 1,000 replications to estimate the standard errors for the dose-response function.

[**Figure 2 About Here**]

As Figure 2 illustrates, the outbreak of a new war declines as more time elapses between the end of a civil war and the first post-conflict election. Consistent with our results on the unmatched data, the effect of national elections on civil war recurrence is stronger and more robust than for all elections. The confidence intervals are generally wider for elections occurring within a few years of a civil war and those occurring after many years, places where there are fewer cases in the data.

The previous results capture the effect of election timing on post-conflict stability in terms of calendar time. Herein we analyze the effect of election timing in terms of the relationship of post-conflict elections to different conditions, namely demobilization and institutional development. We analyze these effects first by using standard regression techniques on the full data and then by applying these same techniques to the data after having matched the data based on the confounders previously discussed.[52] In the regression analyses, standard errors are clustered by country and the variable *previous civil wars* is again included in the analysis to address the fact that some countries experience multiple civil wars.

To match the data, we use genetic matching implemented through MatchIt.[53] Genetic matching uses an evolutionary search algorithm to find a set of weights for each covariate that achieves an optimal balance. For robustness sake, we explore alternative techniques, including full matching and nearest neighbor matching, and report these results, which are substantively the same in both

---

[52]In the matched analysis, each observation is weighted based on its probability of being in the treatment group, making the analysis "doubly robust." This means that if the matching is not perfect but the regression model is properly specified or, alternatively, if the regression model is not properly specified but the matching is adequate, the causal estimates will be consistent.

[53]See Jasjeet S. Sekhon and Alexis Diamond, "Genetic Matching for Estimating Causal Effects: A General Multivariate Matching Method for Achieving Balance in Observational Studies," Unpublished Manuscript, 2008; Daniel Ho, Kosuke Imai, Gary King and Elizabeth Stuart, "Matching as Nonparametric Pre-processing for Reducing Model Dependence in Parametric Causal Inference," *Political Analysis*, Vol. 15 (2007), pp. 199–236.

cases and even stronger in the case of full matching, in a supplementary appendix. The matched data are balanced in terms of the covariates. These results of the balance tests are provided in a supplementary appendix.[54]

According to the analysis, beginning to demobilize prior to an election significantly reduces the likelihood of elections leading to renewed fighting, according to both our pre- and post-matching analyses. Figure 3 graphs the change in the probability of civil war resurgence given demobilization for both the matched and unmatched data. We present the full results of the regression analysis in a supplementary appendix but due to space constraints present only a graph of the results here.[55]

[**Figure 3 About Here**]

Finally, the results also suggest that having a stronger bureaucracy, a higher level of law and order, and a lower level of corruption in the year in which the first post-conflict election is held, reduces the probability of a new civil war occurring. All three measures of institutional development presented in Table 3 reduce the probability of a new civil war occurring, although only bureaucratic quality is significant. Given the small number of civil wars included in this analysis due to the limited coverage of the ICRG data, the results are noteworthy, but still only suggestive.

[**Table 3 About Here**]

---

[54] In the unmatched data, there were significant differences between the treatment and control groups for two covariates – election timing and the post-Cold War era. After matching, we examined the balance by plotting the data and using paired t-tests comparing the mean for each covariate in the models when demobilization occurred prior to the election and when it did not. In the matched data, there are no statistically significant differences in the means between the treatment and control groups for any covariate, indicating that the data are balanced. The few cases that are dropped in the matched data seem to follow two patterns: they involved China, which is a strong state that has not yet held a national election but has de facto demobilized its rebels, or they involved weak forms of UN intervention (i.e., observation only) during the Cold War era, which could not have facilitated demobilization. Dropping the first set of cases works against our argument since China experienced renewed fighting despite rebels demobilizing. The effect of dropping the second set of cases is mixed. In none of these cases, did rebels demobilize and yet war did not break out in several of them.

[55] In the analyses, we tested the effect of demobilization on renewed warfare, by substituting demobilization for the election timing variable in Tables 1 and 2, and found the effect of demobilization significant at the $p<0.05$ or above in all models.

Conclusion

Stable democracy brings a host of benefits, including international peace among democracies, domestic peace within them, regime stability, economic prosperity, and human rights. The road to democracy is often violence-ridden, however. Thus, both scholars and policy-makers have begun to focus on understanding how countries can reach the end goal of democracy while minimizing the risk of violence along the way. One element to this story is the timing of post-conflict elections. As this paper shows, an issue as seemingly small as the timing of the first election after a civil war can have pronounced effects on the likelihood of renewed fighting. In post-conflict settings, holding elections too soon after a civil war ends generally increases the likelihood of a return to war.

Equally important for understanding this process is determining the conditions that reduce the risk posed by early elections. Early elections, we find, are less likely to lead to renewed fighting when the opposing sides are not well armed and have institutional guarantees of their security, as in the case of decisive victories, demobilization, peacekeeping, and power sharing. Often international actors, though, push for elections in exactly those circumstances most likely to lead to renewed fighting, that is, in cases of settlements and truces, where both sides to the conflict are likely to dominate politics and are capable of returning to war.

International actors, however, have also offset these risks by helping to demobilize former combatants after settlements and truces, by providing peacekeeping to facilitate demobilization, and by working with post-conflict regimes to strengthen their bureaucratic capacity for impartial administration and justice. Frequently, international actors also back power sharing agreements between opposing sides, but power sharing is only likely to reduce the risk of renewed fighting in the short term. In seeking to promote peace following civil wars, international actors must therefore be wary to not only promote elections in the right context, but also to build the right context wherever possible. While international actors have often supported initiatives that reduce the risk of early elections, they have yet to fully appreciate the importance of undertaking these initiatives prior to

the first post-conflict election.

Figure 1: Post-Conflict Electoral Trends (1945-2008)
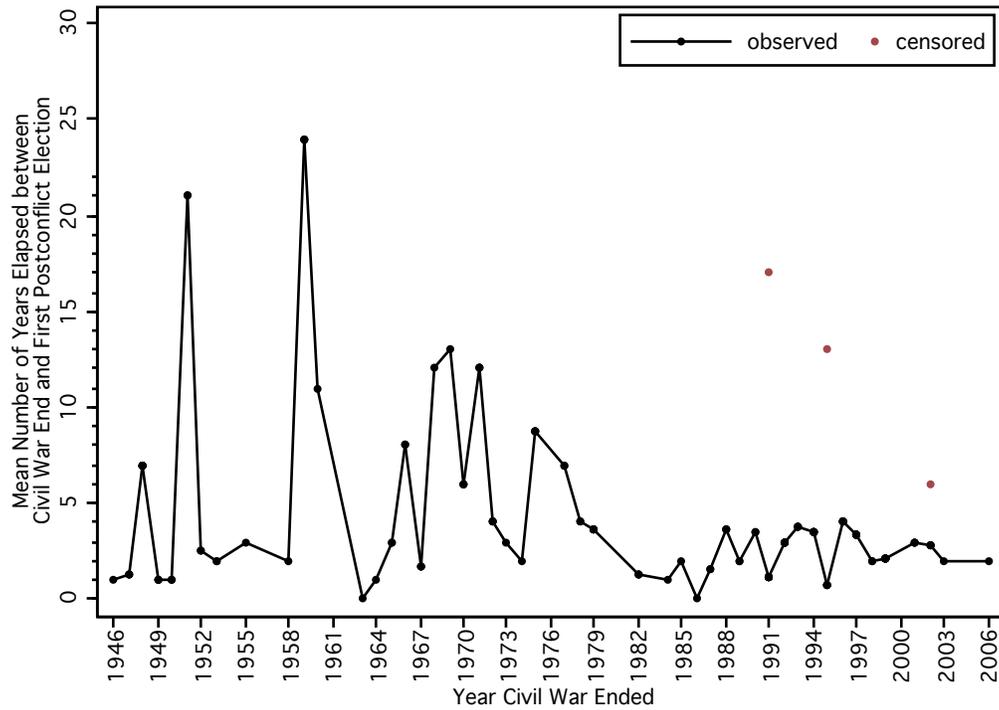
Note: Elections did not occur prior to 2008 in 3 countries after the following civil wars: Burma/Mynamar (1960-1995), Somalia (1988-1991) and Sudan (1983-2002). These countries are denoted by the unconnected circles in the graph, representing the minimum number of years that could possibly elapse in these countries between the end of their civil wars and the date of their first postconflict election. These figures are determined by subtracting the year 2008 from the year each country's civil war ended.

Table 1: Effect of Post-conflict Election Timing (Calendar Time) on New Civil War Onset (Pre-Matching)

|	(1)	(2)	(3)	(4)	(5)	(6)
Election Timing	-0.003	-0.01	-0.02**	-0.09**	-0.003	-0.01***
	(0.004)	(0.01)	(0.01)	(0.04)	(0.004)	(0.005)
FPE Level (National)	0.72	-0.31	2.59	0.83*	0.72	-0.22
	(0.45)	(0.66)	(1.76)	(0.46)	(0.45)	(0.65)
FPE Level (Concurrent)	0.34	-0.02	2.09	0.40	0.34	0.06
	(0.63)	(0.77)	(2.17)	(0.68)	(0.64)	(0.80)
Polity IV	-0.01	-0.03	0.08	-0.01	-0.01	-0.03
	(0.06)	(0.06)	(0.08)	(0.06)	(0.06)	(0.06)
Post-Cold War Era	-1.70**	-1.93*	-3.38***	-1.71**	-1.70**	-1.96*
	(0.67)	(0.98)	(1.29)	(0.67)	(0.67)	(1.04)
Victory	-0.69	-0.83	-2.05**	-1.84**	-0.69	-0.94
	(0.76)	(1.11)	(0.89)	(0.76)	(0.75)	(1.18)
UN Intervention	-1.42*	-1.63	-3.72***	-1.36	-1.41*	-1.74
	(0.75)	(1.38)	(1.23)	(0.85)	(0.85)	(1.46)
UN Assistance	0.65	0.79	1.34	0.77	0.65	0.79
	(0.77)	(1.04)	(1.33)	(0.77)	(0.77)	(1.07)
Previous Civil Wars	0.44**	0.33	1.86**	0.52**	0.44**	0.30
	(0.19)	(0.21)	(0.88)	(0.21)	(0.20)	(0.21)
PR System		0.19				0.23
		(0.56)				(0.58)
Mixed System		-0.32				-0.40
		(0.95)				(0.94)
Unitary Executive System		0.71				0.71
		(0.69)				(0.68)
Decentralization Ever		-2.85***				-3.29***
		(0.72)				(0.86)
Timing*Victory				0.08**		
				(0.04)		
Timing*UN Intervention					-0.001	
					(0.02)	
Timing*Decentralization						0.01
						(0.01)
War Duration			-0.02**			
			(0.01)			
Deaths			9.24e-07			
			(9.47e-07)			
Displaced			1.84e-06**			
			(7.76e-07)			
GDP per capita			0.002			
			(0.29)			
Constant	-0.03	2.64	0.69	0.89	-0.03	2.92
	(0.68)	(1.65)	(1.84)	(0.72)	(0.68)	(1.81)
Log Likelihood	-54.96	-43.90	-17.78	-52.36	-54.96	-43.26
Observations	98	98	55	98	98	98

*** $p<0.01$, ** $p<0.05$, * $p<0.10$. Standard errors are in parentheses.

Table 2: Effect of Post-conflict National Election Timing (Calendar Time) on New Civil War Onset (Pre-Matching)

	(7)	(8)	(9)	(10)	(11)	(12)
Election Timing	-0.01*	-0.01**	-0.02**	-0.06**	-0.01*	-0.01***
	(0.004)	(0.005)	(0.01)	(0.03)	(0.003)	(0.01)
Polity IV	-0.01	-0.03	0.06	-0.002	-0.01	-0.04
	(0.05)	(0.06)	(0.10)	(0.06)	(0.06)	(0.06)
Post-Cold War Era	-1.78***	-2.38*	-3.08***	-1.78***	-1.77***	-2.44*
	(0.66)	(1.26)	(1.18)	(0.68)	(0.67)	(1.28)
Victory	-0.66	-1.14	-1.05	-1.70**	-0.69	-1.25
	(0.69)	(1.25)	(0.75)	(0.87)	(0.69)	(1.32)
UN Intervention	-1.56**	-2.54*	-2.73**	-1.82**	-0.79	-2.64*
	(0.70)	(1.44)	(1.23)	(0.79)	(0.84)	(1.55)
UN Assistance	0.74	1.48	0.87	0.75	0.73	1.48
	(0.69)	(1.16)	(1.16)	(0.70)	(0.70)	(1.15)
Previous Civil Wars	0.42**	0.32	1.60**	0.48**	0.46**	0.30
	(0.18)	(0.23)	(0.76)	(0.23)	(0.21)	(0.23)
PR System		0.66				0.72
		(0.64)				(0.65)
Mixed System		-0.34				-0.38
		(1.03)				(1.05)
Unitary Executive System		0.91				0.95
		(0.66)				(0.66)
Decentralization		-3.32***				-3.71***
		(0.83)				(1.03)
Timing*Victory				0.05**		
				(0.03)		
Timing*UN Intervention					-0.06	
					(0.05)	
Timing*Decentralization						0.01
						(0.01)
War Duration			-0.02*			
			(0.01)			
Deaths			1.02e-06			
			(1.09e-06)			
Displaced			1.84e-06**			
			(8.17e-07)			
GDP per capita			-0.29			
			(0.23)			
Constant	0.56	2.77	2.82***	1.51*	0.53	3.03
	(0.68)	(1.85)	(1.09)	(0.79)	(0.67)	(2.00)
Log Likelihood	-51.02	-36.18	-18.47	-49.37	-50.33	-35.87
Observations	94	94	52	94	94	94

*** p<0.01, ** p<0.05, * p<0.10. Standard errors are in parentheses.

Figure 2: Effect of Post-conflict Election Timing (Calendar Time) on New Civil War Onset (Post-Matching)
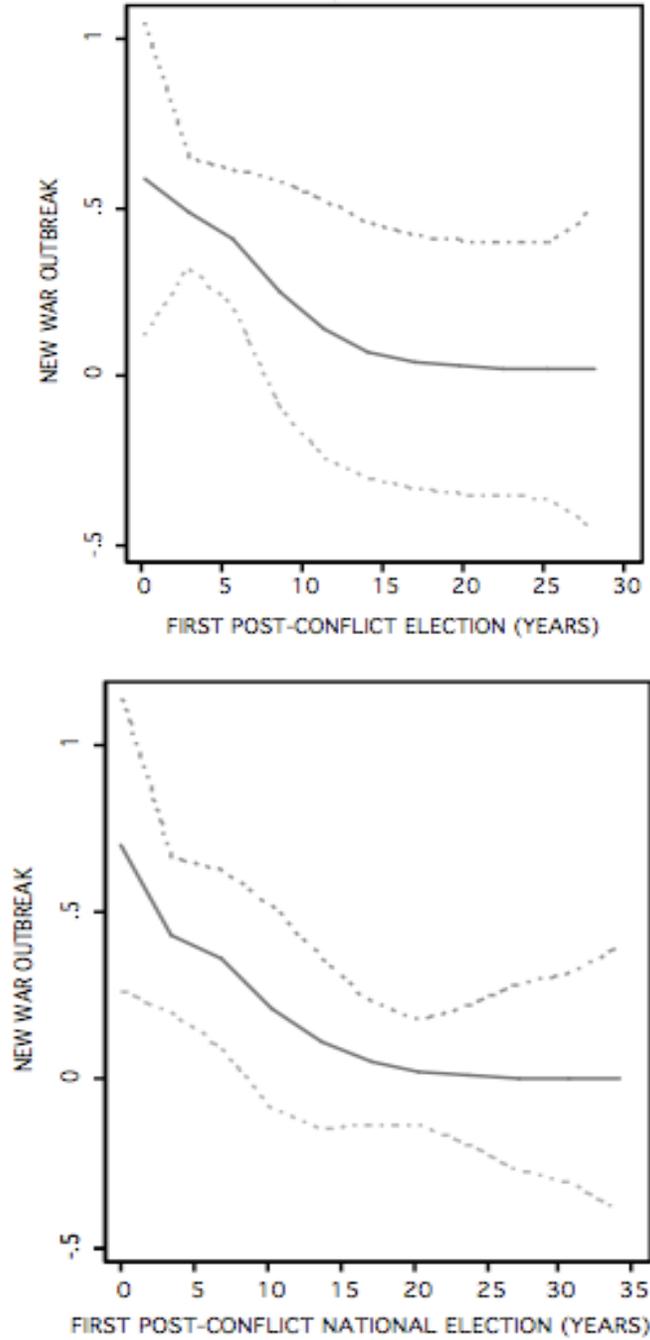
Note: Dashed lines represent confidence intervals at the p≤0.05 level.

Figure 3: Effect of Demobilization Prior to First Post-Conflict Election on Civil War Resurgence
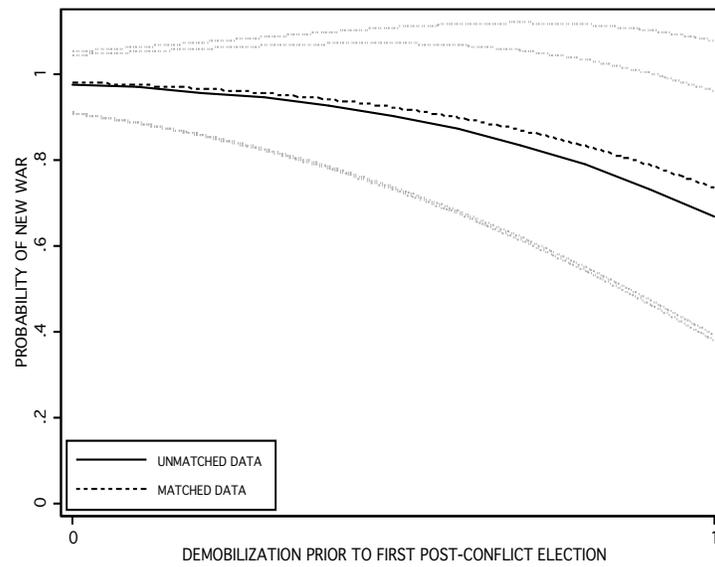
Note: In these models, FPE level (concurrent), Polity IV, post-Cold War era, and previous civil wars are set to 0, while victories, FPE level (national), UN intervention and UN assistance are set to 1. The gray dotted lines represent 95% confidence intervals.

Table 3: Effect of Institutional Development on New Civil War Onset

	Unmatched Data		Matched Data	
	FPE	FPnE	FPE	FPnE
	(25)	(26)	(27)	(28)
DDR	-1.10	-1.56*	-0.18	-1.66
	(0.91)	(0.95)	(1.13)	(1.11)
Bureaucratic Quality	-0.72*	-0.80**	-0.73	-0.81*
	(0.37)	(0.38)	(0.45)	(0.48)
Corruption	-0.22	0.22	-0.61	-0.14
	(0.46)	(0.43)	(0.52)	(0.53)
Law and Order	-0.06	-0.12	-0.24	-0.54
	(0.29)	(0.30)	(0.29)	(0.37)
Previous Civil Wars	0.66**	0.51**	1.02***	1.00***
	(0.31)	(0.25)	(0.33)	(0.35)
Constant	0.92	-0.08	1.33	1.76
	(1.63)	(1.57)	(1.94)	(1.87)
Log pseudolikelihood	-29.516	-26.956	-23.566	-20.491
N	57	56	53	54

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$. Standard errors are in parentheses.

Appendix - Civil War Cases

.

Civil War	Post-Conflict Election	New War	Civil War	Post-Conflict Election	New War
Afghanistan (1978-1992)	09/10/2004	1	Iraq (1985-1996)	03/02/2000	1
Afghanistan (1992-1996)	09/10/2004	1	Iraq (1991-1993)	15/10/1995	1
Afghanistan (1992-1996)	09/10/2004	1	Jordan (1970-1971)	08/11/1989	0
Afghanistan (1996-2001)	09/10/2004	1	Kenya (1963-1967)	22/08/1968	1
Algeria (1962-1963)	15/09/1963	1	Kenya (1991-1993)	29/12/1997	0
Angola (1975-1991)	29/09/1992	1	Korea (1948-1949)	30/05/1950	1
Angola (1992-1994)	05/09/2008	1	Laos (1960-1973)	11/01/1976	0
Angola (1997-2002)	05/09/2008	0	Lebanon (1958-1958)	12/06/1960	1
Angola (1994-1999)	05/09/2008	0	Lebanon (1975-1991)	23/08/1992	0
Argentina (1955-1955)	23/02/1958	1	Liberia (1989-1990)	19/07/1997	1
Argentina (1975-1977)	30/10/1983	0	Liberia (1992-1997)	19/07/1997	1
Azerbaijan (1991-1994)	30/04/1995	0	Liberia (1999-2003)	10/10/2005	0
Bangladesh (1974-1997)	03/01/2000	0	Mali (1990-1995)	13/04/1997	0
Bolivia (1946-1946)	05/01/1947	1	Moldova (1991-1992)	27/02/1994	0
Bolivia (1952-1952)	17/06/1956	0	Morocco (1975-1991)	16/10/1992	0
Bosnia (1992-1995)	30/06/1996	0	Mozambique (1976-1992)	27/10/1994	0
Bosnia (1993-1994)	30/06/1996	0	Myanmar (1948-1951)	12/06/1951	1
Burundi (1965-1969)	22/10/1982	1	Myanmar (1948-1988)	27/05/1990	0
Burundi (1972-1972)	22/10/1982	1	Myanmar (1960-1995)	-	0
Burundi (1988-1988)	01/06/1993	1	Nepal (1996-2006)	10/04/2008	0
Cambodia (1970-1975)	20/03/1976	1	Nicaragua (1978-1979)	04/11/1984	1
Cambodia (1975-1991)	23/05/1993	0	Nicaragua (1981-1990)	25/02/1990	0
Central African Republic (1996-1997)	22/11/1998	0	Nigeria (1967-1970)	31/08/1977	1
Chad (1965-1979)	08/07/1990	1	Nigeria (1980-1985)	12/12/1987	0
Chad (1980-1994)	02/06/1996	1	Oman (1971-1975)	10/04/2003	0
Chad (1994-1997)	20/05/2001	1	Pakistan (1973-1977)	25/02/1985	1
China (1947-1947)	21/11/1947	0	Pakistan (1994-1999)	31/12/2000	0
China (1950-1951)	15/05/1993	1	Papua New Guinea (1988-1998)	15/06/2002	0
China (1956-1959)	15/05/1993	1	Paraguay (1947-1947)	15/02/1948	0
China (1967-1968)	15/02/1980	1	Peru (1980-1996)	11/10/1998	0
Colombia (1948-1966)	17/03/1968	1	Philippines (1950-1952)	10/11/1953	0
Congo-Brazzaville (1993-1997)	10/03/2002	1	Philippines (1972-1992)	25/03/1993	0
Congo-Brazzaville (1998-1999)	10/03/2002	0	Russia (1994-1996)	27/01/1997	1
Congo-Zaire (1960-1965)	01/11/1970	1	Rwanda (1963-1964)	03/10/1965	1
Congo-Zaire (1967-1967)	01/11/1970	1	Rwanda (1990-1993)	29/03/1999	1
Congo-Zaire (1977-1978)	15/09/1982	1	Rwanda (1994-1994)	29/03/1999	1
Congo-Zaire (1996-1997)	30/07/2006	1	Rwanda (1997-2002)	25/08/2003	0
Congo-Zaire (1998-2001)	30/07/2006	0	Senegal (1989-1999)	27/02/2000	0
Costa Rica (1948-1948)	04/10/1949	0	Sierra Leone (1991-1996)	14/05/2002	1
Croatia (1992-1995)	29/10/1995	0	Sierra Leone (1997-2001)	14/05/2002	0
Cuba (1958-1959)	09/10/1976	0	Somalia (1988-1991)	-	1
Cyprus (1963-1967)	25/02/1968	1	South Africa (1976-1994)	26/04/1994	0
Cyprus (1974-1974)	20/06/1976	0	Sri Lanka (1971-1971)	21/07/1977	1
Djibouti (1991-1994)	19/12/1997	0	Sri Lanka (1983-2002)	02/04/2004	1
Dominican Republic (1965-1965)	16/05/1966	0	Sri Lanka (1987-1989)	11/05/1991	1

Civil War	Post-Conflict Election	New War	Civil War	Post-Conflict Election	New War
Egypt (1994-1997)	18/10/2000	0	Sudan (1963-1972)	22/09/1972	1
El Salvador (1979-1992)	20/03/1994	0	Sudan (1983-2002)	-	0
Ethiopia (1978-1991)	21/06/1992	0	Syria (1979-1982)	10/02/1985	0
Ethiopia (1976-1988)	21/06/1992	1	Tajikistan (1992-1997)	06/11/1999	0
Georgia (1991-1992)	11/10/1992	1	Thailand (1966-1982)	18/04/1983	0
Georgia (1992-1994)	05/11/1995	0	Turkey (1984-1999)	18/04/1999	0
Greece (1944-1949)	05/03/1950	0	Uganda (1966-1966)	06/12/1980	1
Guatemala (1966-1972)	03/03/1974	1	Uganda (1978-1979)	06/12/1980	1
Guatemala (1978-1996)	07/11/1999	0	Uganda (1981-1987)	22/12/1987	1
Guinea-Bissau (1998-1999)	28/11/1999	0	Uganda (1990-1992)	28/03/1994	1
Haiti (1991-1995)	25/06/1995	0	United Kingdom (1971-1998)	25/06/1998	0
India (1984-1993)	27/04/1996	0	USSR (1944-1947)	12/03/1950	0
Indonesia (1950-1950)	14/06/1951	1	USSR (1944-1948)	12/03/1950	0
Indonesia (1953-1953)	29/09/1955	1	USSR (1944-1948)	12/03/1950	0
Indonesia (1956-1960)	05/07/1971	1	USSR (1944-1950)	25/02/1951	0
Indonesia (1976-1978)	04/05/1982	1	Vietnam (1960-1975)	25/04/1976	0
Indonesia (1990-1991)	09/06/1992	1	Yemen (1994-1994)	27/04/1997	0
Indonesia (1999-2002)	05/04/2004	0	Yemen AR (1948-1948)	27/02/1971	1
Iran (1978-1979)	03/08/1979	1	Yemen AR (1962-1970)	27/02/1971	0
Iran (1979-1982)	09/12/1982	0	Yemen PR (1986-1986)	28/10/1986	0
Iran (1979-1984)	16/08/1985	0	Yugoslavia (1998-1999)	24/09/2000	0
Iraq (1959-1959)	20/06/1980	1	Zimbabwe (1972-1979)	14/02/1980	1
Iraq (1961-1970)	20/06/1980	1	Zimbabwe (1983-1987)	28/03/1990	0
Iraq (1974-1975)	20/06/1980	1			