Issue Indivisibility, Nationalism, and Civil War Recurrence*

Julian Wucherpfennig†

September 8, 2008

Abstract

The paper addresses the empirical regularity that approximately one in two civil wars was preceded by a previous civil war in the same country. While dominant explanations of civil war focus on contemporaneous conditions or future expectations, I argue that scholars have been all too quick to dismiss historical effects as irrelevant. Building on a combination of rationalist and constructivist insights, I adopt a more dynamic perspective. I show empirically that past violence is a determinant of at least one type of civil conflict, namely when the dispute is territorial in nature. For the ethnic group, prior conflict over territory reinforces the constructed legitimacy of the territorial claim, strengthens the salience of ethnicity, and renders the territory under dispute as effectively indivisible. For the government, past involvement in violence against a separatist group demonstrates clear determination to avoid precedent setting to other groups, thus also creating issue indivisibility. Taken in conjunction, this removes any bargaining space between the ethnic group and the government, which then leads to a recurrence of violence over territory.

*Paper prepared for presentation at the GROW-Net conference, Zürich, September 18-20, 2008. This paper has greatly benefited from comments by Lars-Erik Cederman and Simon Hug on a related paper. All remaining errors are course my own.

†ETH Zürich, Switzerland, Center for Comparative and International Studies, International Conflict Research. Email: wucherpfennig@icr.gess.ethz.ch.

1 Introduction

It is a key observation in the literature on political violence that post 1945, the majority of all wars fought were intrastate wars (as opposed to interstate wars) (Gleditsch et al., 2002). Yet, as Quinn, Mason and Gurses (2007, 168) rightfully point out, a less well-known fact is that "the number of civil wars is substantially greater than the number of nations that experienced civil war." Indeed, as Table 1[1] shows, recurrence is an empirical regularity in civil war data. Why then do some countries experience multiple civil wars, while other countries enjoy the merits of peace. Does conflict beget conflict? And if so, how? Or is it the case that some countries are simply more "prone" to conflict than others, which then shows in the frequency of conflicts they "generate". Thus, this paper is an attempt to systematically uncover and disentangle the causal mechanisms that explain *why* some civil conflicts recur, but not others.

Table 1: Recurrence of Civil War

dataset	Fearon&Laitin	Collier&Hoeffler	Doyle&Sambanis	UCDP25
initial onset	68	36	70	94
recurrence	43	42	52	126
rate in %	63	117	74	74

Yet, even a cursory look a the literature shows that dominant explanations of civil war see the causes of such violence in either contemporaneous conditions or future expectations, but rarely in path dependence. Although

[1]The table is based on the following datasets: Fearon and Laitin (2003); Collier and Hoeffler (2004); Doyle and Sambanis (2000); Gleditsch et al. (2002). See Sambanis (2004*a*) for coding differences. Recurrence is defined here as any onset which was preceded by an earlier onset.

important insights have been derived from these studies, I argue that scholars have been all too quick to dismiss historical effects as irrelevant, brushing them aside under the uniform label of "ancient hatreds" and thus rendering them as little scientific. Far from advancing the ancient hatreds argument, I argue in this paper that the past is by no means irrelevant to the study of civil war. History matters. Building on a combination of rationalist and constructivist insights, I show that past violence is a determinant of at least one type of civil conflict, namely when the dispute is territorial in nature.

Specifically, I argue that ethnicization (i.e., nationalism) is both cause and consequence of separatist violence (but perhaps less so a consequence of other forms of civil violence). The causal mechanism then operates at a disaggregated level and includes both the separatist group and the central government. For the former, the excruciating and costly experience of prior conflict over territory reinforces or strengthens the constructed legitimacy of the territorial claim, rendering the territory under dispute as effectively indivisible (Goddard, 2006). On the side of the government, past involvement in violence against a separatist group demonstrates clear determination to avoid precedent setting to other groups, thus also creating issue indivisibility (Walter, 2003, 2006*a*,*b*; Toft, 2002, 2003). Ultimately, the combination of these two consequences of prior violence removes any bargaining space between the ethnic and the government, which then leads to a recurrence of violence over territory.

The paper is organized as follows: I begin by arguing that the literature has overemphasized static and contemporaneous conditions, as well as future expectations, but has inadvertently neglected the role of the past. In section

3 I then outline a dynamic theory of recurrence that builds on repeated interaction between separatist groups and the government. Here, the crux is that prior war locks both parties in a situation where any bargaining space is eliminated, which then raises the probability of war due to a lack of alternatives. Section 4 offers some (meta-)theoretical considerations regarding the logic of recurrent events. In section 5 I discuss method and data. Section 6 is an empirical analysis that draws both on country-level, as well as group-level results, while section 7 discusses the findings and concludes.

2 Statics and Dynamics in Civil War Theory

2.1 The Role of the Present: The Snapshot Fallacy

Predominant explanations of the causes of civil war are inherently static, in particular those drawing on quantitative methods. For example, in what has become the dominant explanation of civil war, political economists emphasize structural conditions and state-characteristics as the general causes of civil war (for reviews, see Kalyvas, 2007; Hegre and Sambanis, 2006; Sambanis, 2002). What matters to the onset of civil war are "[t]he conditions that favor insurgency – in particular, state weakness marked by poverty, a large population, and instability" (Fearon and Laitin, 2003, 88) or the existence of an opportunity-structure favorable to 'greedy' bandit rebellion (Collier and Hoeffler, 2004). Similarly, many scholars have emphasized the role of natural resources as a source of conflict or means of financing civil wars (e.g. Ross, 2006). According to this literature, the presence of natural resources, such

as oil, gas, diamonds, timber, or narcotics, is said to associate with civil conflicts.

This strand of research stands in stark opposition to cultural approaches, which regard cultural composition and cultural conflict-lines as the prime sources of conflict (e.g. Huntington, 1997; Horowitz, 1985; Gurr, 1994), and which were oftentimes more qualitatively oriented. In this view not factors of greed, but grievances, such as long-standing cultural practices which define and distinguish ethnic groups are seen as the driving forces of conflict. In this context, some have argued that ethnic identities are "primordial" (or even genetically based) and thus more persistent than loyalties to other social units (e.g. Kaufmann, 1996), while others have contested that ethnic identities only become significant in certain political constellations (Wimmer, 2002; Cederman and Girardin, 2007), or when activated instrumentally by political entrepreneurs (e.g. Petersen, 2002).

While seemingly irreconcilable, one feature, however, which all these approaches have in common is their *static* nature. By focussing on structural variables and explanations, these scholars suggest that a 'snapshot' of a country's current conditions contains adequate information to estimate or determine its likelihood to experience a civil war. For example, the key variables to Fearon and Laitin (2003) are poverty, political instability, rough terrain and population size. If one were to know a country's values for these (and some other) variables during a given year, one could simply plug them into the equation and arrive at the probability of civil war. Strikingly, however, with the exception of political instability, each of these factors exhibits very little to no change over time within countries. A country's terrain, for instance,

is clearly invariant and can hardly serve as an explanation for why a civil occurred at time t and not at, say, $t-5$. In short, the bulk of the variance in the empirical data is found cross-sectionally, as opposed to longitudinally. As a consequence, this stream of research has provided valuable answers to the question *where* conflict occurs, but not *when*.

2.2 The Role of the Future: Why War instead of a Bargain?

As regards the role of the future, it is mainly theories driven by (neo-)classical rationalist considerations coming from the literature on interstate war (most prominently Fearon, 1995*b*) which have tended to focus on future expectations as determinants of conflict. Here, the fundamental puzzle is that war and conflict are ex-post inefficient: If war outcomes were known ex-ante, war would never occur because war always induces costs, so that a known outcome should be mutually accepted ex-ante. As Goemans (2000, 24) puts it: "If both sides knew how the pie would be divided after the war, both would be better off if they divided accordingly before the war." This implies that in order to understand why wars start, one has to understand why they end (Blainey, 1988), or phrased differently, why fighting has to precede reaching an agreement (Wagner, 2000). In this sense, then, fighting constitutes the von Clausewitzian notion of war as the continuation of politics by other means, and can thus be understood as part of a bargaining process (for a review, see Reiter, 2003).

In response to the above-mentioned inefficiency-puzzle, in his seminal

piece Fearon (1995*b*) identifies strategic dilemmas in which conflict is still possible under the rational choice paradigm. These are (1) information asymmetry, (2) problems of credible commitment, and (3) issue indivisibility. The former two conditions are clearly built on a forward-looking perspective in which expectations about the future are central to understanding contemporary action.[2] Prominent examples are concepts such as the (ethnic) security dilemma (Snyder and Jervis, 1999; Posen, 1993), or problems of credible commitment (Fearon, 1995*a*, 1998). Lake and Rothchild (1996, 41) synthesize this view by arguing that

> intense ethnic conflict is most often caused by collective fears of the future. As groups begin to fear for their safety, dangerous and difficult-to-resolve strategic dilemmas arise that contain within them the potential for tremendous violence. As information failures, problems of credible commitment, and the security dilemma take hold, groups become apprehensive, the state weakens, and conflict becomes more likely.

In sum, this view emphasizes contemporaneous conditions (which are observable) that lead to uncertainty and potentially fear about the other side's future actions (which is unobservable). As a consequence, the politics of bargaining breaks down and is continued by the politics of fighting. It is thus suggested that knowing about contemporaneous conditions , such as "emerging anarchy" that fosters the security dilemma, is again sufficient to learn about the causes of violence.

[2] I discuss issue indivisibility in section 3.

2.3 The Role of the Past: Ancient Hatreds and The Straw Man Fallacy

To be fair, rationalists have made references to the role of historical memory. For example, Posen argues that when ethnic groups seek information about other group's capacity, willingness or resolve for conflict,

> [t]he main mechanism that they will use is history: how did other groups behave the last time they were unconstrained? Is there a record of offensive military activity by the other? Unfortunately, the conditions under which this assessment occurs suggest that these groups are more likely to assume that their neighbours are dangerous than not (Posen, 1993, 31).

Similarly, Byman (2002, 17-18) writes: "One wellspring of fear is historical quarrels. [...] When groups fought in recent memory, even the most well-intentioned and peaceful individuals must worry that they will do so again in the future. [...] On the other hand, if groups see their neighbors as peaceful, they will be less likely to shoot and ask questions later". Lake and Rothchild (1996, 42) also make a reference to the past (albeit curtly) by arguing that "when ethnicity is linked with acute uncertainty, *a history of conflict*, and fear of what the future might bring, it emerges as one of the major fault lines" (emphasis added). This suggests that the forward-looking perspective championed by these authors is actually complemented by backwards-looking as a means of acquiring information (i.e., learning) about other groups in order to reduce uncertainty. Nonetheless, this important aspect has received at most cursory mention in the literature.

In similar vain, the literature that does emphasize historical effects falls prey to the implicit assumption that history is essentially fixed and static by treating it as given, while simultaneously equating hatreds with cultural heterogeneity (see, e.g. Huntington, 1997; Kaufmann, 1996). More frequently, however, the literature on civil wars has tended to simplistically equate the role of the past with primordial ancient hatreds and century-old feuds between rivaling groups. In fact, it seems almost a standard structure of many articles to begin by claiming explicitly that these are *not* the causes of civil violence, and then proceed by putting forward their respective arguments which, as was argued above, see the causes of civil violence in the present or as strategic, future-oriented action (for examples, see Lake and Rothchild, 1996, 1998; Fearon, 1995*a*; Toft, 2002; Gurr, 1994). While I do not want to make the case for primordialist hatreds, this quick dismissal of the role of history in civil conflict occurred seemingly prematurely, and I concur with Byman (2002, 18) who makes a simple, but important point when stating that "[a]lthough scholars are quick to dismiss "ancient hatreds" as a source of conflict, it seems difficult to argue that the past is irrelevant." History is by no means as simplistic as ancient hatreds. In other words, the literature has (perhaps disingenuously) set up a straw man argument that is easy to refute. This is all the more surprising given the close relation of political science to history (the discipline), needless to mention the widespread attention civil wars have received by historians, as well as case-study researchers in political science.

As a recent development against this tendency DeRouen and Bercovitch (2008) transferred the concept of enduring rivalries (e.g. Diehl and Goertz,

2000) from international relations theory to the field of civil war studies. According to enduring rivalry theory, interaction between actors (states or ethnic groups) occurs in a historical context of conflict and cooperation. In a repeated games fashion, the interacting actors update on their beliefs about each other based on observations of past behavior. If interaction goes well, for example through peace and cooperation, this will build trust, while past conflict induces distrust or fear. Yet, the findings by DeRouen and Bercovitch (2008) essentially reduce to the claim that conflict begets conflict, but remain vague as regards the actual causal mechanisms.[3] Thus, more precise research on the underlying dynamics of civil war is needed.

3 A Theory of Recurrence

3.1 Selection Bias and Theoretical Underspecification in Previous Research

To be sure, there exists a sparse *empirical* literature on civil war recurrence. Applying a broad brush, four categories of explanations have been suggested (Walter, 2004, 372): While some authors stress (1) the role of intervention and peacekeeping, others focus on (2) the characteristics of the previous war including its termination, (3) post-war institutional design, or (4) the general country characteristics. As a common denominator, all of these studies have been concerned with the duration of post-war peace (e.g. Doyle and Sambanis, 2000; Hartzell, Hoddie and Rothchild, 2001; Quinn, Mason and Gurses,

[3]Unfortunately, DeRouen and Bercovitch's piece is flawed because the research design selects cases on the dependent variable (see next section).

2007; Fortna, 2003, 2004*a*,*b*; Walter, 2004; Mukherjee, 2006; Collier, Hoeffler and Söderbom, 2008). In doing so, this literature is flawed because of its analytical restriction on merely a sub-sample of the cases, namely those countries with prior war experience. Put differently, the objective of such studies has then been to study the factors which make peace endure *given that it has failed previously*. But in order to observe recurrence, we must observe an initial conflict first. Yet we already know (through direct observation!) that these observations are prone to conflict. Thus, by exclusively focussing on this subset of cases, this literature suffers from the methodological problem of selection on the dependent variable (a.k.a. selection bias).

As is well known, selection on the dependent variable occurs when the rule for case-selection is correlated with the dependent variable. It has the undesirable effect that it induces bias and leads to underestimation of the true causal effects because the error term is positively correlated with the dependent variable (Hug, 2003; King, Keohane and Verba, 1994; Geddes, 2003). Thus, previous research on recurrence systematically underestimates the causal effects of the initial conflict — when these are in fact the prime candidates for the causes of recurrence as well. To see this, consider an example: It is well-known that civil war is a problem of the poor; in quantitative studies GDP per capita is perhaps the single strongest predictor of conflict (Hegre and Sambanis, 2006). When selecting countries with prior war experience, one has ultimately *truncated* the (true) variance of the GDP per capita indicator because one has systematically excluded wealthy countries. Accordingly, the (true) causal effect of wealth on the likelihood of civil war onset is *underestimated* when analyzing partitioned data, such as a

sub-sample of post-war societies. Studying recurrence in the absence of relevant control cases thus underestimates the causal effects of the very causes of the initial war onset. However, the very causal factors are likely to *equally* operate in post-war settings and thus affect recurrent onsets. The point is then that due to selection on the dependent variable, their relative impact is underestimated *vis-à-vis* peacekeeping, characteristics of the previous war, etc.

Despite these shortcomings, in what to my knowledge is the only comprehensive study on the causes of civil war recurrence, Walter (2004) finds that neither the characteristics of the previous war, such as its duration, severity or costs in terms of displaced persons, nor its resolution, be it through decisive victory, settled grievances, or partition, can account fully for civil war recurrence. Instead, she argues, higher economic well-being and political freedoms make renewed conflict less likely. Here, interestingly, her key indicators are infant mortality and life expectancy, both of which are well-known to correlate highly with per capita income. Thus it can be argued that what Walter (2004) calls 'living conditions', is in fact very similar to the economic conditions championed by political economy approaches (e.g. Fearon and Laitin, 2003; Collier and Hoeffler, 2004). It is then remarkable that even though their causal effects are likely to be underestimated[4], they still outperform the indicators related to the previous war. In sum, while the focus of studies on the duration of post-conflict peace is primarily on intervening variables, most prominently peacekeeping, these studies are unable to estimate more general patterns of recurrence while controlling for the general

[4]In technical terms, the estimated effects are a lower bound of the 'true effects'

causes of civil war onset, such as those which caused the initial conflict.

On a more theoretical level, the concept of a conflict trap is perhaps most explicit concerning recurrent conflict. Collier and Sambanis (2002, 5) describe the conflict trap as follows:

> Once violence is initiated, it may follow a path-dependent process. It is an empirical regularity that the risk of war recurrence in postwar societies is higher than the risk of the onset of a new war in countries with no prior war history. The causal links are not clear in this case: it may be that the same underlying conditions that caused the first war also cause subsequent wars, or the heightened risk may be due to the effects of previous wars on a country's society and its political economy. We do observe, however, that civil wars generate a conflict trap. Hatred and other rebellion-specific capital accumulate during war, making further conflict more likely. The economy deteriorates, making resource-driven rebellion more viable.

Unfortunately, the literature does not get much more explicit; indeed, as stated in the quote, the causal mechanisms remain unclear. It is here where this article attempts to make a contribution by pursing the full logic of a concrete causal mechanism that postulates the recurrence of civil war.

3.2 Territorial Wars are Ethnic Wars

My theory of recurrence focusses on one specific type of civil war: territorial civil war. These are wars in which a rebel group and the central government

fight over "control and righteous authority of a limited territory within a state" (Buhaug, 2006, 691). In its extreme form, secession is the ultimate goal. Because I postulate a theory that involves ethnicity as a driving factor, in a first step I (briefly) demonstrate that such violence requires the salience of ethnicity. To show this, I rely on the dataset by Fearon and Laitin (2003) because it provides an independent coding along two key dimensions: First, it distinguishes between ethnic and non-ethnic wars. Second, it allows for a distinction between civil wars in which the rebels aim at "exit or autonomy" and those for which the aim lies at the "center", that is control over the central government (as well as middle categories for mixed or ambiguous cases).[5] A cross tabulation is given in table 2.

Table 2: Ethnic vs. Non-Ethnic Civil Wars by War Aim

	center	ambiguous	autonomy
non-ethnic war	33	3	0
ambiguous	12	4	3
ethnic war	16	7	32

The results are striking: amongst those wars in which the rebels aimed for autonomy or secession, not a single one was not ethnic. In other words, all wars of autonomy were ethnic wars (with three ambiguous cases).[6] This suggests that the salience of ethnicity can be considered a necessary condition in the strife for autonomy; at a minimum, separatism and ethnicity tend to

[5]This variable finds no mention in their article, but can be found in the replication dataset. The time-span of the dataset is 1946-1999.

[6]Pearson's $\chi^2_4 = 42.2$ ($p = 0.000$). Assuming ordinality, Spearman's rank correlation coefficient yields $\rho = .6$ ($p > |t| = .000$), while Kendall's tau-b for correspondence in square tables is $\tau = .6$ ($p > |z| = .000$). This rejects the null-hypothesis that war aim and the relevance of ethnicity are statistically independent.

go together.

Separatist movements are virtually always framed through an ethnic group's demand for autonomy and self-determination over the limited territory it resides in. This is the core claim of ethnic nationalism. Moreover, separatist claims are subject to two necessary conditions: First, they require legitimacy. In order to establish this for the territorial claim, widespread support by the "nation" is necessary, which in turn presupposes nationalism. Second, they must appear reasonable. While Fearon and Laitin (1999, 11) "hypothesize that when there is a perceived majority ethnic group, minority rebels will more likely aim for autonomy or secession", the strength of the minority group is crucial: if it wants to stand a chance against the more powerful state (i.e. the majority), it requires a degree of cohesion that only ethno-nationalism can provide. By contrast, civil wars which aim at controlling the state are (usually) driven by the intent to install a new ruling elite, for example in revolutionary wars (Sambanis, 2001, 261). Such wars do not necessarily require widespread (ethnic) support, but are already feasible for a relatively small group of rebels.

3.3 Indivisible Territory

Because separatism and (local) autonomy center around territorial claims, it is necessary to examine the role of territory in detail. Indeed, much recent work has explicitly focussed on the bargaining situation between the central government and an ethnic group demanding a higher degree of autonomy or independence. While a certain degree of geographic concentration allows

for the political, social, and economic self-sufficiency that is necessary for statehood in the first place (Jenne, Saideman and Lowe, 2007, 541), Toft (2002, 2003) has argued that territorial claims are most credible for ethnic groups which are territorially compact in their settlement pattern: "for ethnic groups, territory is often a defining attribute of a group's identity, inseparable from its past and vital to its continued existence as a distinct group." Based on this cultural legacy, ethnic groups will have an interest in controlling the territory, especially if it is their homeland, and because they believe their survival is intricately linked to the territory.

For states, on the other hand, it is not the value of the land, but the fear of precedent setting which draws them into disputes with separatist groups. If a government fears that granting independence to one group will encourage other groups to posit similar demands, this would endanger the integrity of the entire territory, which could ultimately lead to the break-up of the entire state. Thus, states must equally ensure their survival. This threat of discontinued existence is most pronounced when the risk of precedent setting is acute due to the presence of other peripheral groups (Toft, 2002, 2003). Because governments know that these groups will closely observe whether territory is treated as divisible by granting autonomy to a separatist group, precedent setting is equivalent to reputation building by demonstrating that secession or autonomy is indeed feasible (Walter, 2003, 2006*a*,*b*). Thus, fear of precedent setting renders territory as indivisible to governments. This in turn leads governments to invest in building a reputation that deters other groups from separatist demands. Accordingly, ethnic war over territory occurs when territory is regarded as indivisible by both the government and the ethnic

groups because neither is in a position to accept a compromise. In rationalist terms, war then occurs because issue indivisibility eliminates the bargaining space.

3.4 Ethnic War over Territory is Self-Reinforcing

What if ethnic war over territory does occur? In this case, territorial division, shared sovereignty, compensation and other bargaining comprises have failed. While the explanation for ethnic war over territory given above is not new, the literature has only partly assessed the consequences of territorial wars. At the extreme, successful secessions result in new states. These have been studied, in particular the relation to their old rump state and the prospect for peaceful co-existence (e.g. Tir, 2005). What has been overlooked, however, are the consequences of violent, but unsuccessful territorial war as a cause for recurrence. This is not surprising, given the strong tendency of the literature to focus on contemporaneous rather than dynamic causes of civil war.

The causal mechanism emphasized in this paper then operates at a disaggregated level. As before, I distinguish between the government and the separatist ethnic group. As regards the former, past conflict demonstrates that the government is unwilling to allow *any* group to secede, and that it considers its territory as indivisible. In game theoretic lingo, the government reveals its type and builds a reputation upon which future separatist movements can update their expectations as to what is likely to occur if they declare secession or undermine the territorial integrity of the state in other ways. Additionally, domestic audience costs trap the government into a situ-

ation in which consistency in its behavior across time and space (i.e. towards other ethnic groups) becomes central to its credibility and survival.

For the ethnic group, the painful and costly experience of prior territorial conflict reinforces the ethno-nationalist cause. As Kalyvas (2008, 4) puts it: "insofar as civil wars shape ethnic identities, they do so by hardening them". More specifically, if the ethnic identity is closely linked to territory, as it clearly is the case for separatist ethnic groups, prior war "hard-wires" the territorial claim. This is the very principle of nationalism and presupposes the constructivist notion that territoriality is a social fact and the product of the ethnic group's representation of territory (Goddard, 2006, 36). According to Gellner (1983) classic definition of nationalism as a political principle, which holds that the political and the national unit should be congruent, an ethnic group qualifies as a nation only if it aspires to self-rule. Thus, territorial indivisibility manifests itself in the *subjective belief* that the ethno-nationalist claim is legitimate—in a post-war situation more so than ever before.

This has two consequences. First, it provides further leverage on the well-known result that civil war over territory is hard to resolve. For example, Toft (2002, 115-116) shows that the overwhelming majority of all territorial conflicts ends in a ceasefire or stalemate – in fact, *vis-à-vis* governmental conflicts the likelihood is three times as high. Second, if war does come to an end (observationally by ceasefire or stalemate), the probability of recurrence is latent. Consider the paradigmatic case of Chechnya. Here, the Russian invasion of the first war (1994-96) resulted in a unification of the Chechen population and various factions (Zürcher, Baev and Koehler, 2005), and ethnicization (nationalism) was at least as much a consequence as it was a cause

of the separatist movement in the first place. This then showed in the second war (1999-2004) when against the odds of Russian military superiority, the local Chechen population engaged in hitherto and traditionally unthinkable acts of resistance - such as female suicide bombings - to support the ethno-nationalist territorial claim.

Moreover, against the subjective legitimacy of the territorial claim, local populations will perceive any physical losses, wounded or casualties as even more severe, resulting in hatred and a demand for vengeance. Indeed, a history of violence then enters the repertoire of potential sources for mobilization (Petersen, 2002; Kaufman, 2001), and this historical effect will be stronger the fresher the memories.

In short, the experience of prior war locks the actors into their claims. Once separatist violence has been triggered, it unleashes a path-dependent process that makes violence recur because bargaining solutions are unachievable. Consequently, I hypothesize that much of the recurrence of civil wars we observe is caused by the mere fact that the issue under dispute (territory) is likely to become indivisible, which in turn makes bargaining much more difficult or even close to impossible if the memories related to the perceived injustice are still fresh.

4 The Logic of Recurrence: Disposition, Conditions, and Habituation

Before subjecting these theoretical considerations to empirical testing, I present some considerations regarding the logic of recurrent events, both more generally, as well as more specifically regarding civil war. In doing so, I describe three meta-theoretical mechanisms, which I link to aspects of measurement and analysis.

It was argued above that prevailing explanations of civil war focus on structural and contemporaneous conditions. This approach implicitly suggests that recurrences of civil war are *independent* of previous onsets, and merely caused by contemporaneous factors. Needless to say that this is a very strong assumption. As IR scholars have made clear for the case of interstate conflict, "multiple conflicts may indeed be unrelated, but this must be demonstrated, not assumed as is frequently the case" (Goertz and Diehl, 1993, 148). Yet, it equally holds true that one needs to demonstrate that conflict frequency exceeds "what probability theory would lead us to expect from a system in which [conflicts] *are unrelated*" (Gartzke and Simon, 1999, 778, emphasis in original). Following these considerations, in principle, three meta-theoretical causal mechanisms are plausible to account for the recurrence of civil war, i.e. the empirical regularity that relatively few countries draw the bulk of all civil wars. I label these as disposition, condition and habituation. Table 3 provides a summary.

First, it is plausible that due to certain *static* characteristics, some countries are simply more prone to conflict than others. It is then a country's

Table 3: Meta-Theoretical Mechanisms of Civil War Recurrence

meta-mechanism	*effect*
disposition	static
condition	contemporaneous
habituation	dynamic

time-invariant *disposition* (i.e. between country heterogeneity) which explains why some countries or ethnic groups engage in warfare repeatedly. Because the disposition to war is time-invariant, a cross-sectional design is sufficient in this case, and the hazard-rate of civil war outbreak is time-constant. Moreover, given that many of the variables deemed key, such as ethnic fractionalization or rough terrain, are time invariant, the time-series dimension merely inflates the number of observations. If the disposition is (in part) unobserved, the analyst can resort to making assumptions about its distribution by employing random effects models.

Second, it is well possible that recurrence of conflict is indeed the result of contemporaneous *conditions*. A natural extension of the *disposition*-mechanism, the causes of civil wars can then be found during the year prior to its onset.[7] I call this the *conditions* meta-mechanism, and it requires time-varying covariates. While this meta-mechanism corresponds to the snapshot fallacy outlined above, it implies that the assumption *ceteris paribus* is applicable. However, due to an assumed constant baseline-hazard, their relative sizes of any causal effects (the coefficients) do not vary over time. Clearly, this is the dominant view in the literature.

[7] All independent variables are commonly lagged by one year, but this is merely to avoid endogeneity concerns, not because of a theoretically motivated AR(1) process.

Third, it is equally plausible that conflict is in itself a cause of future conflict. In this view, which I label *habituation*, conflict is the effect of a causal pathway which is triggered by past conflict. In this case, knowing about a given country's disposition or its contemporaneous conditions is insufficient. In order to arrive at a complete understanding of the 'true causal mechanism', one should then resort to study civil war onset as dynamic process. This is the type of mechanism that is suggested by my theory of recurrence driven by hard-wired territorial indivisibility.

5 Method and Data

5.1 Two Ways to Think About the Same Problem, and A Simple Solution

Testing for the habituation mechanism imposes certain challenges. When conflict begets conflict, earlier events affect the likelihood of subsequent events to occur. Accordingly, the hazard-rate changes changes across (but not necessarily within) spells. In methodological terms this is known as event or duration dependence. As Beck, Katz and Tucker (1998, 1272) note, "[d]uration dependence may manifest itself in the finding that conflicts are more likely to follow other conflicts". In this context, unless the phenomenon of study has a life of its own, any change in the hazard is then driven by one or more causal factors relevant to the process (Bennett, 1999, 262). This points to the importance of time-varying coviariates, because only time-varying covariates can explain time-varying phenomena. However, as was discussed

above, time-varying covariates are sparse in studies of civil war, which in turn implies that the problem of duration dependence can be phrased as omitted variable bias.

My theory of recurrence suggests that civil wars over territory are more likely to recur. Naturally, this is equivalent to the statement that territorial civil wars are likely to be followed by short periods of peace. However, as was argued above, an analysis restricted to post-conflict societies induces selection bias. Thus, I rely on a simple method: in order to capture event dependence, I introduce a count variable which sums up the number of previous onsets.[8] This allows the hazard-rate to vary across peace spells. In addition, in order to allow for non-constant hazard-rate within spells I follow the Carter and Signorino (2007) extension of the well-known approach by Beck, Katz and Tucker (1998), that is I introduce a more user-friendly cubed polynomial of the spell count (peaceyears) into the equation. Since my focusses on a particular type of war, I employ (Bayesian) multinomial logit/probit models to distinguish different types of civil war.

5.2 Data

I rely on two different datasets. First, I reanalyze the well-known dataset by Fearon and Laitin (2003) in order to make my estimations comparable to well-known results in the field. Given its popularity, I refer the reader to the original article for detailed descriptions of the codings and related hypotheses. Here it suffices to say that their dependent variable conceptualizes civil war

[8] To my knowledge the only study on civil wars which employs such a count is Sambanis (2001) who does not interpret the results substantively.

as fighting between a state and a non-state actor, and it relies on a 1000 battledeaths threshold, with a yearly average of at least 100 and at least 100 on both sides. The measure is coded 1 for the first year of a given conflict, and coded 0 otherwise. As an additional dependent variable I rely on the Uppsala/PRIO Armed Conflicts Dataset (ACD) (Gleditsch et al., 2002), which is based on a threshold of at least 25 battledeaths per conflict-year. Compared to other measures of civil war with higher thresholds, this definition allows for a more fine-grained capturing of civil conflict across time. Thus, the expectation is that dynamic effects are most pronounced under the lower threshold coding.

Because my theory focusses on territorial civil war, a disaggregation of the dependent variable by conflict objective is necessary. Fortunately both dependent variables have been coded accordingly, thus I distinguish between civil conflicts which are territorial or separatist rebellions on the one hand, and conflicts which aim at overthrowing the government or at modifying the political system on the other hand.

Analyzing the recurrence of conflict begs the question when an initial conflict stops so that a recurrence can occur. For the case of the Fearon and Laitin (2003) this means two years of inactivity below the threshold, for the ACD this means one year of inactivity. Since my interest is recurrence, I drop all ongoing war years of a given country from the analysis. This excludes onsets which occurred during the course of another conflict elsewhere in the country.

The Fearon and Laitin (2003) dataset is not without problems, however. Being measured at the country level, the dataset potentially conflates dis-

tinct wars with distinct participants across the country. Thus, an analysis at the group level is more likely to uncover the real causal mechanisms. Thus, I also analyze a new dataset called Ethnic Power Relations (EPR) compiled by Min, Cederman and Wimmer (2008, see also: Cederman, Wimmer and Min, 2008). EPR identifies *all* politically relevant ethnic groups around the world in all years from 1946 to 2005 and measures in how far they differ in terms of access to state power. Thus, unlike alternative sources, such as MAR (minorities at risk), the EPR does not suffer from selection bias by merely identifying marginalized groups. Additionally, EPR provides demographic data on the size of groups, etc. In order to control for country-level effects, EPR primarily draws on the set of covariates provided by Fearon and Laitin (2003). Unfortunately, however, the EPR dataset is also not without problems. When linking ethnic groups to ethnic conflict, EPR draws "primarily on version 3-2005b of the ACD dataset which provides two levels of conflict identification, a more general war ID number and a disaggregated sub-ID that identifies whenever the constellation of rebel organizations changes completely or when more than ten years elapse between episodes of violence" (Cederman, Wimmer and Min, 2008, 49). Thus, for a recurrence to be coded, a peaceful period of at least ten years must have passed. This is likely to suppress many conflicts which follow an on-off pattern, such as the paradigmatic case of Chechnya, which in EPR is coded as a single onset. As a consequence, much of the dynamics this paper focusses are likely to be artificially suppressed in the group-level analyses.[9]

[9]We intend to rework the conflict coding in the near future.

6 (Preliminary) Results

To recall the theory, it was hypothesized that recurrence of civil war is largely affected by the ethnicization induced by the experience of prior war. This hard-wires the legitimacy of the territorial claim and thus renders it as indivisible. Simultaneously, prior war against separatist groups locks the government in a situation in which it has revealed itself as unwilling to accept separatist tendencies because it needs to maintain the territorial integrity of the state. Accordingly, I expect recurrence to affect more heavily to territorial civil war than to war over control of the state.

6.1 Country-Level Results

I begin with some descriptive results. Table 4 presents the cross-tabulations for civil war distinguished by war type for both the Fearon and Laitin, as well as the ACP coding. Both times the numbers convey the clear message that territorial conflicts are much more likely to be preceded by an earlier civil war in the same country than their governmental equivalent.

Table 4: Recurrence of Civil War by War Type

dataset	FL		ACP	
war aim	territory	state	territory	state
initial onset	23	45	24	70
recurrent onset	26	16	66	60
rate in %	113	36	275	86

Of course, these are only bivariate results and thus perhaps not much more than a first cut. With the caveats induced by over-aggregation in

mind, I resort to (multinomial-)logit analysis for a full test of the *disposition*, *condition* and *habituation* mechanism. Table 5 contains the estimates for both the Fearon and Laitin coding (models 1 and 2), as well the ACP coding (models 3 and 4). While models 1 and 3 were estimated as multinomial logit models, models 2 and 4 are random intercept models in order to account for unobserved heterogeneity (disposition).[10]

These estimates yield strong support for the theory. Above all, across all models the coefficient for the count variable of previous conflicts over territory is a strong and statistically significant predictor or (then recurrent) territorial civil war. By contrast, prior war over control of state does not seem to increase the probability on a recurrent onset that aims at control over the state. These results are robust to controlling for unobserved heterogeneity (models 2 and 4).

In addition, the results confirm the suspicion that "[t]he [Collier and Hoeffler (2004)] and [Fearon and Laitin (2003)] tests are based on a pooled sample of all civil wars, reflecting a strong assumption of unit homogeneity. If this assumption is violated, it can bias causal inferences from the model" (Sambanis, 2004*b*, 262-263). While governmental wars appear to be driven by poverty, rough terrain, and perhaps new states and instability, I find rather strong evidence in favor of the cultural argument that ethnicity is indeed a

[10]For convenience I merge the ambiguous conflict cases with territorial wars. Merging them with governmental wars or keeping them as a separate category did not change the substantive results. Note that the multinomial logit model requires *independence of irrelevant alternatives (iia).* I verify this assumption by means of a Hausman-test. Moreover, in case of *iia*, multinomial logit can be estimated by separate logit models (Alvarez and Nagler, 1998), which is what models 2 and 4 rely on, since to my knowledge there is no 'canned' version of a random-intercept multinomial logit model. Hence I present separate log-likelihood values. Note that a random effect is assumed to be (1) independent of explanatory variables and (2) time constant.

driving force of civil war, namely when territory is at stake. First, ethnic fractionalization is positively and statistically significantly associated with territorial war (see also Buhaug, 2006). Second, it was argued that ethnic identities are very much shaped by the experience of prior war over territory.

I also conducted further robustness checks.[11] Specifically, it has been argued that much of the separatist violence is an artifact of the breakup of the Soviet Union at end of the cold war. Thus, I introduce a series of decade dummies, but fail to find any such evidence. In fact, the dummy for 1990s is not even significant. In addition I also control for a linear time trend (year), as well any 'age'-effects by holding constant the number of years a given polity has existed since its independence.[12] Here the argument is that even though most countries included in the study enter the dataset after the end of WWII in 1946, new states are subject to a particularly high risk of civil conflict. Likewise, it goes without saying that "old" countries have had more time to accumulate a history of conflict. However, neither of these controls affects the substantive results. In sum, the finding that prior territorial civil war makes subsequent war over territory more likely is remarkably robust at the country level, and is not matched by a similar effect for governmental wars.

[11] All models referred to in this section can be found in the appendix.
[12] This data comes from Gleditsch (2004).

Table 5: Country Level (Multinomial-)Logit Estimates of Recurrence of Civil War

	Fearon & Laitin Coding				ACP Coding			
	1		2		3		4	
	center	territory	center	territory	center	territory	center	territory
gpd per capita (lagged)	-0.409***	-0.207**	-0.521***	-0.203*	-0.175***	-0.141*	-0.185***	-0.149*
	[0.136]	[0.086]	[0.172]	[0.106]	[0.049]	[0.081]	[0.055]	[0.081]
log population (lagged)	-0.006	0.313**	0.019	0.313**	-0.072	0.381***	-0.065	0.702***
	[0.116]	[0.158]	[0.177]	[0.154]	[0.066]	[0.095]	[0.083]	[0.195]
log mountainous terrain	0.280**	0.074	0.362**	0.069	0.181***	0.144	0.210***	0.063
	[0.112]	[0.169]	[0.171]	[0.163]	[0.068]	[0.148]	[0.080]	[0.169]
non contiguous territory	0.066	0.830***	0.186	0.825*	0.002	0.414	-0.074	0.756
	[0.506]	[0.314]	[0.676]	[0.463]	[0.312]	[0.316]	[0.326]	[0.506]
oil	0.663	0.249	0.749	0.236	0.971***	0.658**	0.938***	0.753*
	[0.447]	[0.420]	[0.537]	[0.519]	[0.282]	[0.310]	[0.258]	[0.453]
new state	1.738**	1.935***	1.748***	1.886***	0.31	0.727	0.151	0.648
	[0.687]	[0.706]	[0.667]	[0.691]	[0.498]	[0.506]	[0.485]	[0.561]
instability	0.630*	0.555	0.596*	0.548	0.515**	0.317	0.571***	0.134
	[0.339]	[0.379]	[0.356]	[0.441]	[0.229]	[0.289]	[0.219]	[0.375]
democracy	0.001	0.072***	0.003	0.072**	0.007	0.052**	0.009	0.051*
	[0.025]	[0.027]	[0.028]	[0.030]	[0.017]	[0.024]	[0.016]	[0.027]
ethnic fractionalization	-0.326	1.484**	-0.535	1.489**	0.639*	1.886***	0.683*	2.661***
	[0.512]	[0.616]	[0.741]	[0.757]	[0.376]	[0.431]	[0.401]	[0.888]
religious fractionalization	0.647	-0.619	0.764	-0.632	0.393	-0.469	0.533	-0.885
	[0.729]	[1.001]	[0.933]	[0.974]	[0.481]	[0.816]	[0.491]	[1.027]
war history center	0.423	0.295	-0.263	0.292	0.163	-0.214	0.157	0.035
	[0.344]	[0.435]	[0.657]	[0.486]	[0.112]	[0.215]	[0.153]	[0.214]
war history territory	-0.692	1.359***	-0.826	1.369***	0.266**	0.547***	0.142	0.225**
	[0.763]	[0.360]	[0.841]	[0.331]	[0.125]	[0.164]	[0.093]	[0.114]
peaceyears	-0.035	-0.103	-0.02	-0.103	-0.089	-0.388***	-0.107**	-0.342***
	[0.100]	[0.122]	[0.096]	[0.112]	[0.055]	[0.097]	[0.053]	[0.087]
peaceyears^2	0.003	0.005	0.003	0.005	0.005	0.018***	0.006**	0.016***
	[0.005]	[0.006]	[0.005]	[0.006]	[0.003]	[0.005]	[0.003]	[0.005]
peaceyears^3	0	0	0	0	0	-0.000***	-0.000*	-0.000**
	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]
$\sigma_{\beta 0}$			1.147	0.001			0.388	1.171
			[0.620]	[0.009]			[0.339]	[0.305]
Constant	-4.882***	-8.453***	-5.669***	-8.451***	-3.568***	-8.000***	-3.711***	-11.800***
	[1.270]	[1.251]	[1.779]	[1.497]	[0.680]	[1.034]	[0.812]	[2.170]
Observations	5478		5478		5499		5499	
Log-Likelihood	-442.1		-277.912	-164.36	-811.17		-580.67	-266.93

* significant at 10%; ** significant at 5%; *** significant at 1%
Robust standard errors clustered by country in brackets

6.2 Group-Level Results

Are these findings supported by a more disaggregated analysis that focusses on ethnic groups and thus relies on the real actors as its unit of analysis? While a small number of studies have been conducted on the level of ethnic groups , these have relied on the minorities at risk data, and have thus been confined to a sample of marginalized groups and therefore omitted relevant control groups.

A first (bivariate) glance at the data (table 6) shows that recurrence is perhaps not as frequent at the group-level, and less it appears that recurrence is more frequent as war over control of the state. In any case, one should keep in mind the conservative coding and thus group-level results are to be taken with a considerable grain of salt.

Table 6: Group-Level Recurrence of Civil War

	territory	state
initial onset	62	62
recurrent onset	8	15
rate in %	13	24

With these caveats in mind, I conduct some multivariate analyses. Because I cannot verify the *iia*-assumption for the group level data, and because the dependent variable is an extremely rare event[13], I rely on a Bayesian multinomial probit model (Imai and van Dyk, 2005) for the analysis at the group

[13]This also holds for the independent variables of interest, i.e. prior territorial and governmental war.

Table 7: Group Level Bayesian Multinomial Probit Estimates of Recurrence of Civil War

	1				2			
	territory		center		territory		center	
	b (st.d.)	z	b (st.d.)	z	b (st.d.)	z	b (st.d.)	z
Intercept	-3.320	-4.462	-0.933	-1.442	-2.590	-4.274	-1.530	-2.881
	(0.744)		(0.647)		0.606		0.531	
group in power	-0.616	-2.281	-0.221	-1.214	-0.510	-3.696	-0.475	-4.060
	(0.270)		(0.182)		(0.138)		(0.117)	
number of groups (lagged)	-0.021	-1.830	-0.010	-1.187	-0.008	-1.783	-0.031	-3.079
	(0.011)		(0.008)		(0.005)		(0.010)	
group size (lagged)	0.138	1.478	0.074	1.220	0.082	1.737	0.147	3.379
	(0.093)		(0.060)		(0.047)		(0.044)	
war history territory	0.548	2.796	-0.017	-0.137	0.395	2.423	0.123	0.583
	(0.196)		(0.127)		(0.163)		(0.211)	
war history center	0.004	0.018	0.343	1.552	-0.152	-0.639	0.600	4.286
	(0.233)		(0.221)		(0.238)		(0.140)	
war history territory (other groups)					0.062	1.768	0.006	0.087
					(0.035)		(0.068)	
war history center (other groups)					-0.457	-3.436	0.176	2.184
					(0.133)		(0.081)	
GDP per capital (lagged)	-0.209	-2.124	-0.092	-1.242	-0.153	-2.747	-0.187	-3.175
	(0.098)		(0.074)		(0.056)		(0.059)	
population (lagged)	0.163	2.953	-0.001	-0.055	0.113	2.671	-0.009	-0.246
	(0.055)		(0.023)		(0.042)		(0.039)	
anocracy	0.401	2.318	0.055	0.686	0.271	2.631	0.167	1.731
	(0.173)		(0.081)		(0.103)		(0.097)	
democracy	0.117	0.951	-0.136	-1.063	0.127	0.962	-0.195	-1.242
	(0.123)		(0.128)		(0.132)		(0.157)	
peaceyears	-0.098	-2.142	-0.020	-0.802	-0.068	-2.737	-0.055	-2.304
	(0.046)		(0.025)		(0.025)		(0.024)	
peaceyears^2	0.004	2.203	0.001	0.894	0.003	2.768	0.003	2.658
	(0.002)		(0.001)		(0.001)		(0.001)	
peaceyears^3	0.000	-2.197	0.000	-0.905	0.000	-2.676	0.000	-2.698
	(0.000)		(0.000)		(0.000)		(0.000)	
Observations	26798				26798			

level.[14] The estimations are given in table 7. Model 1 is a baseline model that includes both group-level, as well as country-level effects.[15] At the group level I control for whether the group is in power, that is part of the government or not[16], the relative size of the group, a count for prior governmental and territorial wars, as well as cubic polynomial of peaceyears. Country level controls are the number of groups, GDP per capita, population size, and dummies for democracy and anocracy based on Polity IV data. While the control variables "behave" similar to the country level analysis, I find strong evidence for the hypothesized effect of prior civil war over territory. While the coefficient for this variable is statistically significant, its counterpart for the case of prior governmental war is generally smaller and not statistically significant.

Introducing country-level count variables of the number of territorial and governmental wars fought by other groups is equivalent to controlling for the number of prior wars the government fought (model 2). While the effect for prior territorial war remains robust, the effect of such demonstration effects is small and only marginally statistically significant for territorial war, but more seizable for governmental wars. While not central to this paper, in this model I also find a strong direct effect of a history of such wars. These

[14] A further advantage of Bayesian multinomial probit over the frequentist (maximum-likelihood) solution is that the former is computational much less demanding.

[15] Given the multilevel structure of the data, a hierarchical model would perhaps be more appropriate. However, to my knowledge there exists no 'canned' hierarchical multinomial probit model.

[16] I exclude groups which are a monopoly because these by definition cannot challenge the government. Moreover, I do not employ the more nuanced coding of political status by Cederman, Wimmer and Min (2008) because this includes a category of "separatist group", which is highly collinear (endogenous) to my main independent variable territorial war history.

patterns appears to be rather robust: controlling for a linear time-trend, post cold-war period or age of polity does not change the results (not shown).

6.3 Limitations

The group-level analysis is far from perfect, especially due to the problems related to the conservative coding of the dependent variable. If anything, however, this exclusion of conflict onsets leads to a downward bias, such that the effects of prior wars are systematically *underestimated*. Moreover, while not subject to the selection-bias that is so common in the literature, the analysis does not take into consideration characteristics and consequences of prior conflicts, such as conflict intensity or the effects of peace-keeping missions. Thus, the results are preliminary at best. In future research I intend to overcome these deficiencies by coding and assembling the relevant data.

7 Interpretation and Conclusion

This paper has argued that the quantitative literature on the causes of civil war has prematurely dismissed and erroneously neglected historical factors. Free from selection bias I investigated patterns of recurrence of war and found that prior wars are a strong determinant of subsequent civil wars, especially when the object of conflict is/was related to territory. Thanks to controlling for static and contemporaneous causes, my findings demonstrate that conflicts do not occur in a historical vacuum, but shape the trajectories of countries and ethnic groups in distinct and path dependent ways. Here, one

important aspect is nationalism. Supported by empirical evidence, conflict reinforces identities and strengthens collective desires to obtain correspondence between the political and the cultural map.

Do these findings yield support to the notion that conflict is inevitable? In my view, the answer is a clear no. Throughout the estimations conducted in this paper, the cubic polynomial of peaceyears is jointly statistically significant. This suggests that the risk of recurrence–while increased by prior war experience–fades as peace time progresses. Taken together, this suggests that many conflicts observationally follow an on/off-pattern that is guided by a latent and dynamic conflict process.

Further research will have to assess the intervening effect of peacekeeping, post-war institutional design, and other, deliberate efforts to reduce recurrence. When studying these, however, their impacts should not be studied in historical isolation. As this paper demonstrates, civil wars occur as the result of deliberate effect of both present conditions and historical trajectories. Understanding in more detail how these two aspects interact will greatly improve our understanding of the causes of civil war, and therefore also the causes of civil peace.

8 Appendix

Table 8: Robustness Checks: Country Level Multinomial Logit Estimates of Recurrence of Civil War

	Fearon & Laitin Coding						ACP Coding					
	1		2		3		4		5		6	
	center	territory	center	territory	center	territory	center	territory	center	territory	center	territory
gpd per capita (lagged)	-0.417***	-0.268***	-0.413***	-0.243***	-0.382***	-0.210**	-0.185***	-0.190**	-0.177***	-0.178**	-0.175***	-0.141*
	[0.142]	[0.099]	[0.141]	[0.092]	[0.129]	[0.084]	[0.049]	[0.086]	[0.049]	[0.082]	[0.049]	[0.081]
log population (lagged)	0.008	0.410**	0.005	0.379**	0.004	0.322**	-0.057	0.453***	-0.063	0.435***	-0.072	0.382***
	[0.124]	[0.164]	[0.121]	[0.177]	[0.118]	[0.156]	[0.068]	[0.106]	[0.067]	[0.108]	[0.066]	[0.096]
log mountainous terrain	0.275**	0.089	0.280**	0.075	0.279**	0.076	0.189***	0.181	0.185***	0.171	0.181***	0.145
	[0.112]	[0.149]	[0.112]	[0.152]	[0.113]	[0.165]	[0.070]	[0.140]	[0.069]	[0.140]	[0.068]	[0.148]
non contiguous territory	0.005	1.111***	0.082	1.025***	-0.205	0.823***	0.029	0.600*	0.025	0.541	0.003	0.425
	[0.505]	[0.334]	[0.503]	[0.338]	[0.551]	[0.319]	[0.312]	[0.365]	[0.312]	[0.353]	[0.311]	[0.320]
oil	0.626	0.228	0.66	0.183	0.658	0.207	0.989***	0.648**	0.964***	0.628**	0.971***	0.649**
	[0.460]	[0.407]	[0.445]	[0.397]	[0.445]	[0.419]	[0.284]	[0.316]	[0.283]	[0.307]	[0.282]	[0.312]
new state	2.092***	1.804**	1.708**	1.923***	1.499	2.316***	0.25	0.632	0.295	0.716	0.387	1.347**
	[0.684]	[0.726]	[0.682]	[0.688]	[0.912]	[0.780]	[0.512]	[0.494]	[0.496]	[0.495]	[0.640]	[0.552]
instability	0.605*	0.43	0.627*	0.47	0.712**	0.521	0.521**	0.196	0.508**	0.21	0.514**	0.308
	[0.344]	[0.380]	[0.341]	[0.379]	[0.343]	[0.373]	[0.232]	[0.273]	[0.231]	[0.275]	[0.229]	[0.290]
democracy	0.006	0.077***	0.001	0.069**	-0.003	0.074***	0.009	0.048*	0.006	0.047*	0.007	0.051**
	[0.027]	[0.030]	[0.025]	[0.028]	[0.026]	[0.027]	[0.017]	[0.028]	[0.017]	[0.027]	[0.017]	[0.024]
ethnic fractionalization	-0.285	1.325**	-0.379	1.324**	-0.291	1.481**	0.564	1.742***	0.591	1.764***	0.639*	1.904***
	[0.537]	[0.543]	[0.517]	[0.571]	[0.519]	[0.615]	[0.368]	[0.421]	[0.367]	[0.405]	[0.375]	[0.432]
religious fractionalization	0.538	-0.958	0.584	-0.787	0.816	-0.631	0.333	-0.645	0.354	-0.593	0.393	-0.46
	[0.749]	[0.965]	[0.756]	[0.938]	[0.734]	[0.999]	[0.494]	[0.764]	[0.493]	[0.763]	[0.481]	[0.818]
war history center	0.431	0.114	0.365	0.147	0.471	0.271	0.112	-0.356**	0.122	-0.334*	0.163	-0.219
	[0.317]	[0.374]	[0.315]	[0.406]	[0.344]	[0.435]	[0.130]	[0.182]	[0.130]	[0.187]	[0.112]	[0.213]
war history territory	-0.754	1.046**	-0.761	1.140***	-0.701	1.350***	0.229*	0.419**	0.237*	0.443**	0.265**	0.541***
	[0.799]	[0.412]	[0.797]	[0.433]	[0.753]	[0.361]	[0.127]	[0.191]	[0.127]	[0.198]	[0.124]	[0.163]
peaceyears	0.055	-0.116	-0.037	-0.104	0.011	-0.134	-0.09	-0.379***	-0.090*	-0.388***	-0.090*	-0.403***
	[0.104]	[0.117]	[0.100]	[0.120]	[0.099]	[0.122]	[0.057]	[0.101]	[0.055]	[0.098]	[0.055]	[0.098]
peaceyears^2	-0.001	0.004	0.003	0.004	0.001	0.006	0.004	0.017***	0.005	0.018***	0.005	0.019***
	[0.005]	[0.006]	[0.005]	[0.006]	[0.005]	[0.006]	[0.003]	[0.006]	[0.003]	[0.005]	[0.003]	[0.005]
peaceyears^3	0	0	0	0	0	0	0	-0.000***	0	-0.000***	0	-0.000***
	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]
1950s	-1.379**	-0.103					-0.209	-0.304				
	[0.601]	[0.928]					[0.512]	[0.483]				
1960s	-1.473**	0.639					0.153	0.471				
	[0.612]	[0.843]					[0.486]	[0.629]				
1970s	-0.437	1.093					0.333	0.576				
	[0.654]	[1.044]					[0.542]	[0.684]				
1980s	-1.021	1.289					0.237	0.712				
	[0.793]	[1.087]					[0.544]	[0.781]				
1990s	-0.64	1.102					0.224	1.012				
	[0.653]	[0.895]					[0.555]	[0.719]				
year			0.006	0.021					0.006	0.021		
			[0.013]	[0.014]					[0.008]	[0.013]		
year of independence					0.859	-1.134					-0.158	-1.469*
					[0.847]	[0.823]					[0.816]	[0.771]
Constant	-4.472***	-9.530***	-16.639	-50.697*	-5.361***	-8.377***	-3.722***	-8.893***	-15.007	-49.070*	-3.567***	-7.998***
	[1.301]	[1.683]	[25.791]	[29.149]	[1.266]	[1.241]	[0.826]	[1.468]	[16.383]	[27.209]	[0.681]	[1.039]
Observations	5478		5479		5480		5499		5500		5501	
Log-Likelihood	-435.11		-441.07		-435.55		-807.12		-809.15		-809.61	

* significant at 10%; ** significant at 5%; *** significant at 1%. Robust standard errors clustered by country in brackets. In models 1 and 4, 1940s is the base category.

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