Building Out of the 'Conflict Trap': The Role of Legal Institutions in the Prevention of Civil War Recurrence

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Abstract

Among all predictors of civil war onset, knowing whether a country has faced prior civil war has the greatest effect on the likelihood it will experience war again. This is attributed to an affliction known as the 'conflict trap'. That is, the conditions rendering a country susceptible to war in the first place further deteriorate throughout the conflict, compromising lasting post-conflict peace. Fortunately, many states have found stable peace after war. The question is how? The qualitative literature advocates an institutional solution through restored government, constitution-building, and elections. Empirical studies, however, find that political institutions have no significant impact on preventing future war in post-conflict countries. The theory I advance is that political institutions do matter, but some matter more than others. Quality legal institutions which uphold the rule of law through an independent judiciary, fair and impartial penal processes, and effective sanctioning of law will have a marked impact on reducing the risk of recurring war in post-conflict countries. I test the relationship between legal institutions and the duration of post-conflict peace by employing a Cox proportional hazard model. I use variables obtained from Forta (2004), Walter (2004), and Collier, Hoeffler, and Soderbom (2008) as a baseline.

Introduction

Out of all predictors of civil war onset, knowing whether a country has faced a prior civil war has the greatest effect on the likelihood that it will experience war again. In fact, about half of all civil wars started in the last two decades are recurring civil wars (Collier et al. 2003; Collier, Hoeffler, and Soderbom 2008). The theory is that countries mired in war tend to find themselves in a position known as the 'conflict trap' (Collier and Sambanis 2002; Collier, Hoeffler, and Soderbom 2004; Collier et al. 2003). That is, the very conditions that made the countries susceptible to war in the first place (e.g. poverty, poor governance, ethnic tensions) further deteriorate throughout the conflict, making lasting post-conflict peace a challenging prospect. If this theory is correct, it follows that once a country enters into a state of civil conflict, it is destined to stay there. Fortunately, this does not always appear to be the case. Many states have found lasting peace post-conflict. But how?

This is a question that has become increasingly important to international peacekeepers over time. According to Fortna (2004), since the 1980's the international community has become involved in more peacekeeping missions than ever before. Not only is the presence of peacekeepers more frequent, it is also more comprehensive. While peacekeepers in the past intervened to oversee conflict settlement processes alone, today peacekeeping mission have a greater, more encompassing task: institution building. From the burgeoning qualitative literature on the matter, it seem that most attempts at restructuring institutions have similar objectives. In addition to ensuring that ceasefire is maintained through proper security forces, outside intervention virtually always includes a plan to develop democratic institutions in some form or another. Yet, despite their efforts, many attempts at peacekeeping through enhancing democracy fail. Variation in success is then attributed to the strategies used to achieve these objectives, not the objectives themselves. Suggested implications of these case studies, especially in instances of failure, prescribe policy measures that would have peacekeepers expend even more effort and resources on institution building (Brinkerhoff 2005;

Samuels 2006; Horowitz 2007; Stromseth 2008). Empirical studies of civil war recurrence, however, tell another story.

Much of the recurrence literature shares common parallels with studies of civil war onset. Like onset, recurrence happens when conditions make rebellion feasible and create incentives to rebel. At least this is the economic explanation behind renewed rebellion (Walter 2004; Collier, Hoeffler, and Soderbom 2008). Other conditions which make war more likely include geopolitical factors like ethnic polarization, education levels, infant mortality, etc (Walter 2004; Fortna 2004). These are all variables that factor into the 'conflict trap' argument. Most of the recurrence literature is very attuned to the way characteristics of the prior war affect the likelihood that war will recur (Hartzell and Hoddie 2003; Doyle and Sambanis 2000; Fortna 2004; Walter 2004). All in all, most empirical analyses find political institutions to play a decidedly subsidiary role in peacekeeping, at best (Collier, Hoeffler, and Soderbom 2008; Walter 2004; Doyle and Sambanis 2000; Hartzell and Hoddie 2003).

The theory I advance in this paper is that political institutions do matter, but some matter more than others. I also suggest that the theory behind why institutions matter to prevent war recurrence is flawed. The principles of democracy that bolster accountability will not be enough to keep the peace. These institutions are also unlikely to instill democratic norms, at least not in the short-run. Because of this, strategies to build peacekeeping institutions such as constitutions, elections, or power-sharing agreements can fall short. However, legal institutions, which work as third party enforcement of contracts, protect both majority and minority interest, and enhance legitimacy of new regimes, will matter. In this analysis I test the relationship between legal institutions and the duration of post-conflict peace, against major competing indicators, including other political institutions.

Unfortunately, it is difficult to find an appropriate baseline with which to measure the focal independent variable against. Findings vary widely across studies as most scholars employ different models, statistical techniques, and are concerned with different temporal

coverage. More importantly, few scholars seem to be able to agree on a standardized definition of post-conflict peace and which events count as recurring war. The analysis I present is an attempt to overcome this problem by testing four primary models of civil war recurrence with the inclusion of my focal independent variables that approximate the rule of law [1]. Utilizing only the most robust indicators of peace failure I construct a more parsimonious model and incorporate legal institutions proxies to test my theory against the strongest features of dominant theories.

The remainder of the paper is organized as follows. I will first discuss the literature on both post-conflict institution building and civil war recurrence. Next I lay out the theory behind why the rule of law is so important to prevent recurring civil war. I then identify and describe my empirical strategy and discuss the data I will use. The following section reports major findings. Finally, I conclude with implications and suggestions for future research.

Literature Review

Conflict Trap

Civil war is a devastating and increasingly common feature of the underdeveloped world. Aside from the obvious human costs, civil war deteriorates economies and destroys state mechanisms of order. Collier et al. have described civil war as being "development in reverse" (2003:6). Most of the circumstances which provide the incentives or conditions for civil war onset in the first place are likely made even worse during the course of the civil war. This renders post-conflict countries to a condition of fragile peace, characterized by high risk of recurring conflict. Offsetting this risk entails a concerted effort, often with international assistance, to rebuild war torn countries.

[1] Due to restrictions presented by limited data, in some models I must truncate the sample size to include post-conflict peace country-years from 1985 to 1999. Results from these models will be interpreted with caution.

Building Post-Conflict Institutions

Building institutions is at the heart of all peacekeeping processes, international as well as local. Collier, Hoeffler, and Soderbom (2008) identify six distinct stages of post-conflict institution building typically employed by international peacekeepers. The first stage occurs as conflict is dying down, when peace settlements are initially negotiated. The second stage involves the establishments of peacekeeping forces to police the area. Third, is the development of a constitution that is satisfactory, at least to the state side of conflict. This stage is the priming for the implementation of 'democracy'. Fourth is the process of widespread stabilization through continued monitoring or policing. The fifth stage includes elections which are intended to seal the peace by legitimating the ruling regime. Finally, the sixth stage involves a careful exit strategy which often occurs at the same time as the first election. Collier, Hoeffler, and Soderbom (2008) point out that this program of peacekeeping efforts often fails.

Much of the qualitative literature on the subject would concur. Scholars analyzing cases of post-conflict circumstances find that the common plan for establishing stable peace falls short of what is actually necessary to make this happen. The problem is that drafting settlement plans, constitutions, and setting up elections is only propping up the appearance of democracy, while in actuality, institution-building is exceedingly complex (Horowitz 2007; Stromseth 2008). Keeping lasting peace requires much more than the dressings of democracy, but a far more totalizing plan to secure the institutions being built. In fact, the installment of democratic institutions discussed by Collier, Hoeffler, and Soderbom (2008) is effective for a period of time, but only due to the presence of international peacekeeping forces. Most scholars suggest that far more effort is required to boost institutional quality over extended periods of time (Stromseth 2008; Brinkerhoff 2005).

A few studies explains that in order for political institutions to stand and flourish, a post-conflict state must develop adequate rule of law (Horowitz 2007; Samuels 2005; Stromseth

2008). That is, without the ability to make credible commitments to negotiated settlements, uphold constitutional law, and hold fair elections, political institutions alone will not prevent conflict. As rule of law can be such a broad theoretical concept, none of the qualitative literature offers concrete causal mechanisms explicating the way rule of law might work to instill peace. While much of the quantitative literature on civil war recurrence devotes some attention to democratic institutions to explain war recurrence, the aptitude that a state has in upholding the law post-conflict has not yet been considered empirically.

Civil War Recurrence Literature

While a great deal of research focuses on indicators of civil war onset, the recurrence of civil war yields less attention. The dearth of quantitative research on the subject is mostly attributable to poor data availability, understandably so, as war torn countries do not make for ideal collection sites. From the recent quantitative studies that have been conducted several categories of existing predictors of war recurrence have emerged including external intervention, social conditions, state of the economy, and features of the initial war.

External intervention is one of the most obvious indicators of the risk that post-conflict peace will fail. There is a great deal of variation in the types and degree of peacekeeping endeavors. Types of peacekeeping missions matter to the successful prevention of future war. Whether an intervention is led by the UN or not, and whether or not it is multilateral will influence its effectiveness (Fortna 2004; Doyle and Sambanis 2000). Peacekeeping by external forces may also be able to successfully prevent recurring war by erecting power-sharing institutions (Hartzell and Hoddie 2003). Furthermore, some studies assess the UN's monetary expenditures on peacekeeping as a proxy to measure the degree of involvement and find that the greater the UN spends, the less likely it is that civil war will recur (Collier, Hoeffler, and Soderbom 2008).

Consideration of the social conditions which make the recurrence of civil war most prob-

able is the main task of Walter (2004). To Walter (2004), war will recur when country-level conditions create incentives for individuals to renew fighting, rather than go back to peaceful, productive activities. There are two major components to creating these conditions. First, an individual must be faced with severe hardship or dissatisfaction and second, there must be few or no opportunities to change this situation without using violence (2004:374). These relationships are measured by assessing the quality of living conditions, through infant mortality, life expectancy, illiteracy, and level of democracy. All primary explanatory variables were significant in Walter's models except for level of democracy.

The state of the economy is considered to play a dominant role in conflict recurrence, as it is a central condition of the 'conflict trap' (Collier, Hoeffler, and Soderbom 2008). A productive economy can stave off future war by raising the opportunity cost of rebellion. The factors most important to reducing the risk of renewed war are high levels of GDP and economic growth. Walter's (2004) argument is also economic at its roots, only the proxies for development are different. However, her theory makes different assumptions about the implications of stagnant economic circumstances (i.e. grievance).

Finally, features of the initial war, or how the first civil war was waged, how it played out, and how it ended, are crucial controls incorporated into virtually all models of recurrence (Walter 2004; Fortna 2004; Hartzell, Hoddie, and Rothschild 2003). When wars are originally waged as a consequence of flaring tensions between ethnic identity groups or by rebels with extreme demands, it is difficult to imagine a post-war settlement process that would satisfy all and prevent future outbreaks of violence. When wars play out in a way that complicates the future peace process, recurrence is also more likely. There are three different means by which this is thought to occur. First, the greater the human cost of war, measured in total number of battle deaths, the more likely it is that the legacy of atrocity will live on to see a future war (Lacina 2006; Fortna 2004). Second, the longer an initial war drags on, the less likely it is that war will recur after the peace process, as combatants face war fatigue. Third, and related to the second, the longer a war continues the more information both sides have

about their rival's capabilities. This allows both parties to make more realistic assessments about the chances of winning, reducing the likelihood that renewed war will occur. When a war ends in a way which settles the grievances that originally triggered the war or in a decisive victory of one side over the other, recurrence of war is less likely. On the other hand, when a war ends in partitions to keep the peace war is more likely to recur (Doyle and Sambanis 2000; Walter 2004).

There is not a great deal of discussion on political institutions in the literature (beyond those to hold cease-fire formed in the immediate aftermath of war). Democratic institutions included as controls typically show no statistical relationship to war recurrence. According to most empirical findings, a state's level of democracy has no impact on the likelihood that renewed war would occur (Walter 2004; Collier, Hoeffler, and Soderbom 2008). Collier, Hoeffler, and Soderbom (2008) include a host of political institution measures such as presence of a constitution, presence and timing of elections, and economic freedom, finding that most variables have a very mild impact, if any, upon risk of war recurrence.

Theory of Legal Institutions

Despite the lack of empirical evidence to support a theory that democratic political institutions matter for reducing the risk that a post-conflict country will revert to further war after a spell of peace, I contend that institutions do matter. The institutional theory I adopt parallels the arguments advanced by Hartzell, Hoddie, and Rothschild (2001). The design of political institutions in post-conflict states has the power to mitigate the security concerns of groups and can determine the stability of peace. However, I propose that not all political institutions are equally up to the challenge. Some of the institutional safeguards for peace are not typically effective. For instance, most institution-building efforts of peacekeepers include creating constitutions, setting up elections, or implementing power-sharing strategies to facilitate cooperation between formerly warring factions of society. Yet, many constitu-

tions cannot be enforced[2], elections are fraught with corruption, and power-sharing merely holds warring factions at bay, sometimes just long enough for each side to bolster military capabilities necessary to resume warfare.

I argue that legal institutions are different. Quality legal institutions which uphold the rule of law through an independent judiciary, fair and impartial penal processes, and effective sanctioning of law will have a marked impact on reducing the risk of recurring war in post-conflict countries. First, quality legal institutions enhance third party enforcement. This is important as it is less likely for any warring faction to renege on peace settlements. Legal institutions can provide enhanced security that can be so precarious in the face of divided post-conflict states (Hartzell, Hoddie, and Rothschild 2001). Enforcement capabilities also give teeth to uphold newly formed powersharing agreements (Hartzell, Hoddie, and Rothschild 2001), treaties (Powell and Staton 2009), and partition settlements (Fortna 2004). Secondly, legal institutions enhance legitimacy to the government in general (Gibson, Caldeira, and Baird 1998; Gibler and Randazzo 2011). The strength of a state's rule of law opens channels to redress collective or individual grievance through legal means, making populations more apt to support the state.

Hypothesis 1: Post-conflict states with stronger legal institutions will be less likely to experience a renewed civil war.

Third, these institutions have the unique ability to protect both majority and minority rights. In several case studies it is found that elections can cause more war (especially in cases of ethnic war) for one of two reasons: the majority that was formerly without power comes into power and seeks retribution against the minority, or the majority that controlled the state during war regains power and continues to abuse it. This can prove to be particularly troublesome after identity based wars. Hartzell, Hoddie, and Rothschild (2001) identify that "exclusion of representatives from authentic minority groups from critical decision-

[2]Some, in fact, are written in a language that much of the population cannot understand (or read due to high rates of illiteracy).

making processes at the political center can also gravely heighten a community's sense of exposure and vulnerability to other powerful elements in the society" (2001: 185). These scholars advocate for power-sharing settlements to reduce the vulnerability of minorities. Yet, credibility in the enforcement of these agreements is crucial to make them work. I argue that legal institutions requiring a check on power from an independent judiciary, credible, impartial commitments can be made to all sectors of society.

Hypothesis 2: Post-conflict states with an independent judiciary will be less likely to experience renewed civil war.

Finally, legal institutions have important effects on the economy. Growth is thought to be crucial in the prevention of recurring war (as well as initial onset) (Collier Hoeffler and Soderbom 2008). Growth suggests the increase in available opportunities for productive activity in a society that is necessary to raise the individual opportunity cost of engaging in rebellion. Yet this economic theory of growth gives short shrift to the role of institutions in the process. Institutional theories explain that in order for individuals to have the incentives for productive activity and investment, institutions must protect property rights (North 1981; 1990). It is also empirically established that strong legal institutions create the conditions necessary for economic recovery (Acemoglu, Johnson, Robinson 2002) that is key to building out of the 'conflict trap'.

Hypothesis 3: Post-conflict states that exhibit greater ability to protect contracts will be less likely to experience renewed civil war

Data and Methods

There is no standard model of civil war recurrence[3]. Researchers attempt to determine the probability of post-conflict peace failure by building models that include specific indicators to test their theoretical propositions. Unsurprisingly, different models yield different results.

This issue is more than just a matter of conflicting opinions on which independent variables to matter, but extends to problems with deciding how to define war recurrence, which time-frames to cover, and what statistical technique is the most appropriate to employ. As a result, I encounter a challenge while attempting to assess how legal institutions fair in predicting recurrence in comparison to competing explanatory factors. In other words, finding that rule of law significantly impacts the risk of renewed war in one model means very little in the overall context of the field. To remedy this, my strategy is to identify four dominant models of peace failure: a baseline which accounts for features of the previous war, an intervention model, a living condition or grievance model, and an economic model. I begin by producing the results of these models and incorporate my focal independent variables into each model for comparison. The usage of these models provides an ideal backdrop of competing theories against which to test my institutions theory. By incorporating the focal independent variable, rule of law, in each of these models, I can offer a range of tests to assess the robustness of this measure in multiple model specifications. Finally, I select the most robust indicators from each separate theoretical model and combine them in a full model to test against my focal independent variables.

Method

The technique I employ to analyze the hazard of failed post-conflict peace is Cox proportional hazard modeling. My approach mirrors that used by Collier, Hoeffler, and Soderbom (2008) and is used much more frequently in studies of recurrence than in the past. To test my hypotheses I estimate the following hazard function of the risk of failed post-conflict peace:

$$h(x_\tau, \beta; t) = exp(x_\tau \beta) h^b(t) \tag{1}$$

[3]However, there are a set of standard control variables measuring features of the prior war that are incorporated in most peace failure models.

where the hazard h is a function of x_τ, a vector of exogenous variables observed at time τ, β is a vector of unknown parameters, t is the total duration of a peace spell, and h^b is the baseline hazard. The subscript τ on x is required to account for possible variation in an indicator over time to appropriately deal with exogenous time variant covariates (TVCs). The logic of constructing the hazard function with respect to TVCs is to evaluate the function in the duration interval in which TVCs remain constant (Box-Steffensmeier and Jones 2004). Many of the independent variables in the models are time invariant. This means that they will be interpreted as increasing or decreasing the hazard rate uniformly over time. However, the indicators that are the key focus of this study are all TVCs. For TVCs the beta coefficients indicate how the hazard rate changes for a unit change in the TVC at each point in time. I assume that the hazard is exponential and proportional [4](Collier, Hoeffler, and Soderbom 2008).

The reason this approach is superior to that of using a logit model to assess the probability of a recurring war, is that event history modeling speaks to the process of deteriorating peace in a way that just looking at the influence of independent variables lagged one year cannot. Other studies also use the Cox model to look at hazard of peace failure, but some, like Fortna (2004), use peace spells as the unit of analysis, incorporating only time invariant indicators as independent variables. This strategy is clearly inappropriate here as many of the most important indicators are time variant, requiring a sample of country-years.

I use the same universe of cases that Collier, Hoeffler, and Soderbom (2008) use for practical reasons[5]. The sample includes 826 post-conflict country-years, covering the years between 1960 and 1999. As in Collier, Hoeffler, and Soderbom, I use a censoring variable in order to only focus on the first post-conflict decade. This is done to provide "a benchmark for calibrating the importance of each explanatory variable" across countries (2008:7). Findings are reported not as hazard ratios, but as standardized exponentials of hazard ratios which

[4]I test for proportional hazards for two of the focal indepedent variables and report findings graphically in the results section of the paper

can be interpreted as percentages of change. The signs on the coefficients indicate whether the explanatory variable has a positive or negative impact on the hazard of failed peace in a particular period.

Focal Independent Variables

In order to test my hypothesis I employ three different measures to approximate the presence and quality of legal institutions in a post-conflict state. I use various measures for a few reasons. First, there is a lot of debate in the literature concerning which measures are truly appropriate to estimate the rule of law. To ensure the results are maximally satisfying to advocates of alternate measures I use various indicators. Secondly, data availability is severely limited for at least one of the variables, so I use alternative measures to support my results in various temporal samples. Furthermore, I have selected measures that speak to the institutional and behavioral dimensions of the rule of law. Each is important to assess my theoretical claims.

The first independent variable I utilize to proxy the rule of law is a subjective assessment of the quality of legal institutions derived from the International Country Risk Guide's (ICRG) indexes on the rule of law. The ICRG, distributed by the Political Risk Services, provides monthly reports on a host of economic and political risk factors intended to provide foreign investors with a profile to assess risk of investment. The fact that this indicator is observed makes the measure ideal to assess the de facto level of the rule of law. "Law and order" is a subcomponent of a broader political risk index. Scores are determined by expert assessment based on information availability. Law and order is measured as a rating

[5]For the purposes of the analysis a civil war is defined as an armed conflict that meets the following criteria (COW):
a) the war has caused more than 1,000 battle deaths;
b) the war represented a challenge to the sovereignty of an internationally recognized state
c) the war occurred within the recognized boundary of that state
d) involved the state as one of the principal combatants
e) the rebels were able to mount an organized military opposition to the state and to inflict significant casualties on the state.

of strength and impartiality of a nation's legal system. Scores range from 0 to 6, with higher scores indicating better quality. Rankings are based on interrelated factors including effective sanctioning of law and just, impartial penal practices. Low scores identify legal systems in which legal outcomes do not necessarily resolve or prevent conflicts, and high scores describe the opposite. Data are available between 1985 and 1999.

This measures has been applied extensively in empirical economics (Acemoglu, Johnson, and Robinson 2001; 2002; Knack and Keefer 1995) as well as in a recent paper published in ISQ on the effects of judicial independence on human rights treaty violations (Powell and Staton 2009). These authors explain that "[s]everal scholars have used the ICRG scores to measure legal system quality and the rule of law (e.g., Kelley 2007; Powell 2006), and critically, they have been used in models of CAT ratification to measure the domestic costs of legal enforcement (Goodliffe and Hawkins 2006)" (Powell and Staton 2009).

The second measure I use is a measure of newly established judicial independence obtained from Gibler and Randazzo (2011). For a judiciary to be considered newly independent it must have been independent for at least one year. The measure was constructed by Gibler and Randazzo (2011) to test the differences between established judiciaries and new judiciaries based on the length of time they exist. They hypothesize only established courts will garner the legitimacy necessary to lend authority to the current regime. According to their definition, established courts are those that have been in place for over three years. As an indicator of when judicial independence is established they utilize the Henisz measure of judicial independence which is a combination of the ICRG rule of law measure described above and a portion of the Polity IV democracy measure that indicates that there are checks on the executive. I chose the weak judicial independence institutional variable partly as a matter of necessity. The fact that I censor after ten post-war years drops most cases of developed judiciaries out of the sample. But another reason to use this measure of weak independence is theoretical. Nearly all states rebuilding after conflict will have new legal institutions. The importance of rule of law may depend on how strongly it is felt over time. In other words,

it is not enough to merely assess the likelihood of peace failure based on whether or not legal institutions exist (de jure vs. de facto). The existence of an independent judiciary can be just as ineffectual as the existence of a new peace agreement or a new regime. It is possible that its credibility comes with time. Therefore, this specific measure will provide for a rigorous test of de jure judicial independence. This indicator is binary, with a score of one for at least weak independence and zero otherwise.

Finally, I employ behavioral measure which approximates the rule of law through a state's level of contract intensive money (CIM). CIM has grown in popularity as a proxy for rule of law (Clague et al. 1999; Fjelde and de Soysa 2009; Powell and Staton 2009). This measure is intended to capture the public's perception of property rights and contract enforcement by indicating the proportion of money held in banks and contracts relative to the total money supply. According to Fjelde and de Soysa, CIM "measures the extent to which people trust institutions to be a credible guarantor of property rights and contracts so that individuals are willing to hold their assets via financial intermediaries" (2009:11). Original data comes from the World Bank, calculated by taking the difference of broad money (M2) and total currency in circulation (M1) over broad money (M2-M1/M2).

Independent Variables

The independent variables used in each model of peace failure were obtained from the primary source which developed the model. The baseline model, which identifies the effects of features of the previous war, consists of four key independent variables. *Duration of war* is measured in months, obtained from the Correlates of War (COW) dataset. *Cost of war* is a measure of battle deaths for the war prior from the COW. *Decisive Victory* is a dummy variable which indicates whether a war was won by one side outright (1) or not (0). *Ethnic* is also a dichotomous variable indicating whether a war was an ethnic, religious, or identity conflict (1) or began based on ideological, revolutionary, or other circumstances (0).

The living conditions or grievance model includes four rather self-explanatory primary indicators: *infant mortality, life expectancy, literacy rates,*(all from the World Bank) and *level of democracy* (from Polity IV). As this model of war recurrence is based on that presented in Walter (2004), the variables were obtained from Walter's publicly available dataset with temporal coverage extending from 1960-1999.

The intervention model is largely based on Fortna (2004)[6], and I obtain two of the main indicators directly from Fortna's original dataset. These are *Treaty*, or whether or not a prior war was resolved through a negotiated settlement, and *UN Peacekeeping* which identifies whether or not the UN deployed peacekeeping forces to settle the prior war. *Partition* is a variable used in the Walter (2004) study, but applies well to the type of intervention strategy. Partition indicated whether or not the state was partitioned to keep warring factions apart. Finally, *UN Peacekeeping expenditures*, which is used in Collier, Hoeffler, and Soderbom (2008), is a World Bank measure that proxies the level of involvement on behalf of the UN.

The indicators used in the economic models are mostly standard and straightforward. I utilize the measures from Collier, Hoeffler, and Soderbom (2008): which proxy both economic well-being and political institutions. Economic variables include a measure of real GDP per capita and economic growth (*GDP* and *Growth*) between 1960 and 1999. The political institutional variables included are Democracy (the same used in the living conditions model), *Regional Autonomy*, and *Election* which is measure from the World Bank indicating whether the state held elections in the years following the first year out of conflict.

Results

Before analyzing the models, it is important to establish that the assumption of proportional hazards does in fact hold. That is, I must test to be sure different levels of the independent

[6]As Fortna uses peace-spells as the unit of analysis, and I use post-conflict country-years, I expand her data to fit.

variables have similarly shaped hazard functions to indicate that their effects are independent of time. The simplest way to do so is demonstrate visually that the hazards between groups are parallel. Figure 1. reports the diagnostic graphically. Figure 1. shows that when *Law and Order* is grouped into a high and low category, the hazards are proportional over time. For the ICRG measure, the assumption of proportional hazards does hold[7].

Table 1. begins in column 1 by assessing the effects of the baseline characteristics of prior war on the hazard of failed peace. The only significant variable in the model is the duration of the previous war, which has the expected sign. Column 2 demonstrates the effect of quality legal institutions with the ICRG law and order variable. For every one unit increase in the quality of legal institutions on a scale of 0 to 6, the hazard of peace failure decreases by 68%. Results should be interpreted carefully, as due to limited data for the law and order variable, the model only speaks to post-conflict peace failure from 1985-1999. Column 3 indicates that the newly independent judiciary variable is insignificant. A newly independent judiciary is shown to have no infuence on the hazard of failed peace. Finally, column 4 shows that CIM has no independent effect on renewed conflict risk, although holding it constant, appears to make the other variables in the model significant.

Table 2. reports the results of the living conditions model, which looks quite similar to Table 1. Column 1 indentifies a couple of significant relationships between both life expectancy and the level of democracy on the hazard of peace failure. Greater life expectancy significantly reduces the chance of renewed war, however, greater levels of democracy have the opposite effect. Columns 1 through 3 reveal the same relationships between the rule of law proxies as in the characteristics of prior war model. Greater law and order reduces the hazard of war by 80%, new judicial independence increases and CIM have no statistical impact.

Results of the intervention model are presented in Table 3. The baseline model shows

[7]The assumption of proportionality does not hold for the weak judicial independence measure

no significant indicators predicting the hazard of failed peace. Columns 1 through 3 again demonstrate the impact of the rule of law proxies in the same way, though proving to be even more powerful in the case of law and order.

Table 4 reports the results of the economic model. Column 1 reveals a strong negative relationship between economic growth and the risk of renewed war. Democracy is also significant, though higher levels of democracy again predict an increase in risk of failed peace. More notably, perhaps, is what is not significant in the model: GDP. Per capita income, which is a common explanation for the onset of civil war, appears to have no effect on the risk of recurring war. This finding has implications that will be further discussed below. Column 2., interestingly, shows that the inclusion of law and order variable (in a sample from 1985-1999) wipes out the effect of growth, and all other indicators in the model. In column 3., newly independent judiciary is not a significant predictor of the increased risk of renewed war. In this column, growth is again strongly significant. Finally, in column 4, CIM is again insignificant and economic growth is the primary indicator of the hazard of peace failure.

Table 5. displays the most robust model of post-conflict peace failure. After testing all of the dominant models of peace failure, the most important indicators appear to be economic growth, democracy, life expectancy, ethnic conflict, duration of war and cost of war. The first column demonstrates that when including all of these independent variables in one model, surprisingly, the only significant variable is democracy, in the wrong direction. Holding all the characteristics of prior war constant apparently can cancel out even the powerful impact of economic growth. Column 2 shows that when including law and order, the relationship between democracy and conflict risk is washed out, and rule of law is significant. Finally, column 3 presents the model with the inclusion of the newly independent judiciary, showing the same relationship as in all of the other models.

Discussion

The findings presented above reveal interesting relationships, some which support the hypotheses and some that do not. First, the ICRG measure of quality legal institutions has a substantial, robust relationship with the risk of post-conflict peace failure. This relationship held in all of the predominant models, in many cases wiping out the significance of indicators thought to have a great impact on the hazard of war. As I have already noted, this relationship may be at least partially driven by the reduced sample size, though this still suggests that in more recent post-conflict countries, legal institutions play a large role in reducing the risk of renewed war.

One notable nonfinding worthy of some discussion lies within the relationship between the newly established judicial independence measure and the hazard of war. On one hand, this directly contradicts hypothesis 2, which states that post-conflict states with an independent judiciary will be less likely to experience renewed civil war. Yet, looking more closely at the theory behind why this should be the case, perhaps the results make sense. I theorized that an independent judiciary should prevent renewed war as it provides some credibility to the regime and to negotiated post-war settlements. According to Gibler and Randazzo (2011), newly established judiciaries cannot provide stability or lend credibility to new governments. Their analysis of the effects of judicial independence on democratic backsliding reveals similar results. Unfortunately, due to the nature of my data, which only looks at post-conflict peace years 10 years after the end of war, there are too few instances of established judiciaries to assess whether these institutions can successfully enforce the peace. New political institutions built in the aftermath of war take time to develop. Building out of the conflict trap clearly requires more than simply erecting the foundation.

Finally, results show that CIM has no statistical impact on the hazard of war. I speculate that this has something to do with the amount of variation in the measure. This could also be an explanation for the lack of significance in the relationship between GDP and post-

conflict peace failure. Though, there may be a viable solution. Perhaps instead of analyzing how the level of contract intensive money impacts the risk of war it is more important to look at the change in contract investment over time. This is probably why growth appears to matter for renewed war and GDP does not. That is, maybe what matters is not where you are, but where you have been and where you are going. An individual's relative economic position should impact the way they perceive the greater opportunity structure more than their nominal position. Following this line of reasoning, the relative level of contract intensive money should speak to the increase in protection of property rights and have a greater impact on reducing the hazard of war.

Conclusion

Most practical efforts to instill peace after a state has experienced civil war are centered on (re)building democratic institutions. Yet, most empirical research would suggest that the work of these programs may be in vain. Democratic institutions, such as constitutions, elections, and powersharing agreements appear to have little or no impact on the prevention of future conflict.

This paper has argued that legal institutions have an independent effect on preventing recurring war. Some findings presented confirm the theory that legal institutions are crucial to lasting post-conflict peace, others are indeterminate, or require further prodding to understand the ways these institutions may be working in concert with other indicators. The subjective assessment of the quality of legal institutions is the most influential indicator of the risk of war. As this measure covers only post-conflict years between 1985 and 1999, it may be that more recent post-conflict peace spells can be lengthened by the construction of strong legal institutions. The institutional measure indicating when a newly independent judiciary has been established is not a significant predictor of failed peace. The finding suggests that legal institutions only harbor the credibility required to prevent conflict when

they are reasonably established. Finally, the behavioral measure of investment contracts has no significant relationship with the hazard of peace failure. I discuss how it may be fruitful to consider the change in investment over time rather than the actual amount of money tied up in contracts.

Based on these results, I conclude with two take away points. First, to understand why legal institutions might matter to prevent recurring war in a precise way, it will be necessary to further explore the way rule of law works in tandem or interacts with other political institutions and economic outcomes. Second, it is obvious that the way institutions are measured greatly affects how meaningful they are in empirical models. De facto measures of institutions, such as the ICRG Law and Order indicator, predict a decrease in hazard of failed peace. De jure measures of institutions, such as the newly independent judiciary measure, have no effect. These findings have important implications for both researchers interested in the way institutional measurement works and to peacekeepers interested in the best policy objectives to advance to prevent recurring war. This study speaks to the importance of being cautious in measurement selection. It can also inform policy by showing that constructing institutions can be a successful way to build out of the conflict trap. However, the barrier is high, and only through the development of strong, credible institutions can the trap be overcome.

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Figure 1. Proportional Hazards Law and Order

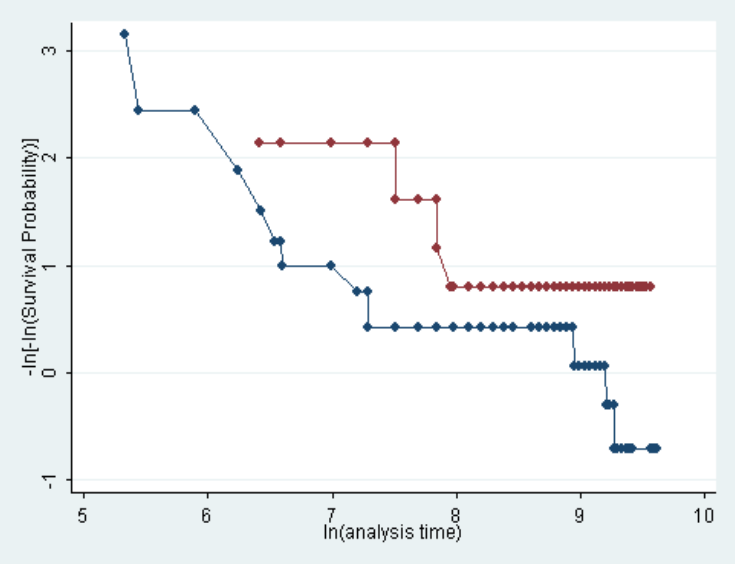

Table 1. Features of Prior War Model

	(1)	(2)	(3)	(4)
Rule of Law				
Law and Order		-0.681**		
		(0.275)		
Judicial Independence			-0.433	
			(0.753)	
CIM				0.660
				(0.997)
Features of War				
Duration of War	-0.216*	-0.002	-0.148	-0.304*
	(0.130)	(0.261)	(0.141)	(0.141)
Cost of War	0.173	0.066	0.103	0.217**
	(0.108)	(0.196)	(0.118)	(0.115)
Decisive Victory	-0.460	-1.067*	-0.502	-0.556
	(0.416)	(0.601)	(0.432)	(0.443)
Ethnic	1.10	0.730	1.004**	1.318**
	(0.469)	(0.658)	(0.471)	(0.544)
Constant	-9.347	-7.648	-9.132	-9.670
	(0.567)	(1.229)	(0.584)	(0.803)
Number of Subjects	64	38	58	62
Failures	30	14	28	27
N	694	305	596	656
Log Likelihood	-78.667	-32.054	-72.386	-71.458

Exponential hazards reported with standard errors in parentheses. .*p0.10; **p0.05; ***p0.01

Table 2. Living Conditions Model

	(1)	(2)	(3)	(4)
Rule of Law				
Law and Order		-0.804*		
		(0.406)		
Judicial Independence			-0.300	
			(1.105)	
CIM				-0.735
				(1.390)
Living Conditions				
Infant mortality	-0.022	0.011	-0.033	-0.027
	(0.016)	(0.034)	(0.019)	(0.018)
Life expectancy	-0.116**	0.002	-0.164*	-0.076
	(0.056)	(0.124)	(0.068)	(0.060)
Illiteracy	0.023	0.015	0.015	0.044
	(0.021)	(0.046)	(0.021)	(0.027)
Level of	0.102**	0.096	0.094*	0.099**
Democracy	(0.037)	(0.065)	(0.040)	(0.041)
Constant	-1.670	-8.797	2.265	-4.294
	(4.211)	(9.276)	(5.133)	(4.617)
Number of Subjects	41	24	37	40
Failures	19	7	17	16
N	485	216	444	459
Log Likelihood	-39.239	-12.018	-34.118	-34.187

Exponential hazards reported with standard errors in parentheses. .*p0.10; **p0.05; ***p0.01

Table 3. Intervention Model

	(1)	(2)	(3)	(4)
Rule of Law				
Law and Order		-1.037***		
		(0.284)		
Judicial Independence			-1.085	
			(1.083)	
CIM				-0.465
				(1.035)
Intervention				
No Peacekeeping	0.119	1.673**	0.421	-0.038
	(0.447)	(0.747)	(0.496)	(0.497)
UN Peacekeeping	0.043	0.093	0.070	0.041
Expenditures	(0.058)	(0.082)	(0.054)	(0.065)
Treaty	0.052	0.350	-0.029	0.034
	(0.409)	(0.648)	(0.422)	(0.434)
Partition	1.113	-13.195	-14.173	1.216
	(1.084)	(18.807)	(21.33)	(1.109)
Constant	-9.147	-7.988	-9.109	-8.944
	(0.354)	(0.790)	(0.352)	(0.553)
Number of Subjects	49	29	46	47
Failures	25	10	23	22
N	563	258	501	528
Log Likelihood	-69.135	-23.064	-62.909	-63.11

Exponential hazards reported with standard errors in parentheses. .*p0.10; **p0.05; ***p0.01

Table 4. Economic Model

	(1)	(2)	(3)	(4)
Rule of Law				
Law and Order		-0.620*		
		(0.336)		
Judicial Independence			-0.592	
			(1.074)	
CIM				0.103
				(1.195)
Economy				
GDP	-13.046	-15.658	-12.65	-13.091
	(1535.1)	(10049.2)	(1158.7)	(1588.6)
Growth	-0.664**	-0.261	-0.687**	-0.592**
	(0.267)	(0.484)	(0.267)	(0.290)
Political Institutions				
Democracy	0.060*	0.099	0.065	0.046
	(0.035)	(0.063)	(0.038)	(0.038)
Regional Autonomy	1.008	2.752	0.541	1.242
	(0.845)	(2.740)	(0.875)	(0.928)
Election	-0.402	-15.944	-0.362	-0.172
	(1.033)	(4219.6)	(1.036)	(1.038)
Constant	-5.450	-7.673	-4.924	-6.150
	(1.753)	(4.480)	(1.737)	(1.877)
Number of Subjects	48	27	45	46
Failures	24	9	22	21
N	541	232	476	507
Log Likelihood	-58.080	-15.392	-51.513	-53.208

Exponential hazards reported with standard errors in parentheses. .*p0.10; **p0.05; ***p0.01

Table 5. Robust Model

	(1)	(2)	(3)
Rule of Law			
Law and Order		-0.772*	
		(0.423)	
Judicial Independence			-0.210
			(1.119)
Growth	-0.263	-0.511	-0.328
	(0.365)	(0.565)	(0.379)
Democracy	0.113**	0.127	0.125**
	(0.041)	(0.087)	(0.048)
Life Expectancy	-0.027	-0.030	-0.029
	(0.043)	(0.082)	(0.046)
Ethnic	1.035	0.771	1.011
	(0.687)	(1.172)	(0.760)
Duration of War	-0.182	0.347	-0.091
	(0.159)	(0.457)	(0.172)
Cost of War	0.132	-0.364	0.023
	(0.141)	(0.394)	(0.158)
Constant	-6.333	-2.944	-5.733
	(2.727)	(5.582)	(2.721)
Number of Subjects	41	27	38
Failures	19	7	17
N	487	216	445
Log Likelihood	-38.303	-10.899	-34.411

Exponential hazards reported with standard errors in parentheses. .*p0.10; **p0.05; ***p0.01