The Significance of Signing

Who Fights after Peace Agreements in Civil Wars?

Desirée Nilsson
Department of Peace and Conflict Research
Uppsala University, Box 514
S-751 20 Uppsala, Sweden
Desiree.Nilsson@pcr.uu.se
ABSTRACT

Common wisdom suggests that an exclusive peace agreement is more likely to be followed by armed conflict. However, the empirical foundations of this argument have so far not been explored. In this paper, it is examined if and how exclusion of parties in a peace agreement influences the likelihood of post-settlement armed conflict. New data on warring parties and peace agreements in civil wars during 1989–2002 are introduced, and these are analyzed employing a Cox proportional hazards model. This paper supports the notion that exclusion does matter, since the findings show that an exclusive peace agreement is indeed more likely to be followed by armed conflict. Moreover, in order to assess how exclusion may influence armed conflict it is examined who fights after peace agreements. The results indicate that the excluded parties are more likely to be involved in post-settlement armed conflict, which is consistent with the theoretical argument that excluded parties have higher incentives to fight. Interestingly, it is also found that excluded splinter groups and included strong parties are more likely to fight in the aftermath of a peace agreement. Although the findings are intriguing, it should be noted that the results are to be seen as tentative until more data has been collected.
INTRODUCTION

Many peace agreements are crafted and signed by the warring parties only to be followed by further violence. Why does peace prevail in some of the civil wars where a peace agreement has been reached, and not in others? A common argument in the conflict termination literature is that all warring parties should be included in the peace agreement in order for peace to prevail (e.g. Hampson, 1996; Darby and Mac Ginty, 2000; and Zahar, 2003). However, this proposition has so far not been properly examined. In particular, the theoretical argument concerning why we would expect an inclusive peace agreement to not be followed by armed conflict needs to be developed further. Hence, the purpose of this paper is to examine if and how exclusion of parties from a peace agreement influences the likelihood of post-settlement armed conflict.¹

There are studies that to some extent concern how the presence of several warring parties might influence the prospects of peace in the aftermath of civil war (e.g. Stedman, 1997; Atlas and Licklider, 1999; Kydd and Walter, 2002; Zahar, 2003; and Ayres, 2003). But in most studies, especially in quantitative research, only limited attention is directed towards the different rebel groups fighting against the government.² In order to give a comprehensive explanation of why armed violence takes place following a peace agreement, it is of importance to identify which parties are involved in the post-settlement violence. We know surprisingly little about who fights after an agreement, a piece of information that is crucial to answering the question of why armed conflict ensues.³ This paper contributes by examining precisely this issue, and identifies which rebel groups fight in the aftermath of a peace agreement. The focus is on the characteristics of the rebel groups, and more specifically: whether they are included or excluded from a peace agreement; if they are militarily strong or weak; and the nature of their relations to other

¹ To be precise, I will have two dependent variables that are count variables i.e., measuring the number of years without armed conflict following the peace agreement. The first variable Peace Duration captures the number of years without post-settlement armed conflict in the incompatibility. The second variable Dyad Peace Duration measures the number of years without post-settlement armed conflict in that dyad. Note that it is not necessary that the parties have ceased fighting, thus, continued armed conflict is also of interest.
² According to Dixon (2002: 2), there is an apparent need to gather information about non-state actors.
³ In some research a distinction is made between old and new wars depending on whether it concerns the same issue and parties (Walter, 2002b; Dubey, 2002; and Licklider, 1995). For instance, Dubey makes this distinction based on whether the actors and issues were ‘roughly the same or not’. While aware that the purpose of these studies are slightly different than in this paper, they provide only limited information about who fights.
rebel groups. In this study a rebel group which is a signatory to the peace agreement is seen as included, whereas a group that is a non-signatory is considered to be excluded.

New data on warring parties and peace agreements in civil wars during 1989–2002 are introduced, and employing a Cox proportional hazards model two main aspects related to the argument on inclusive peace agreements are analyzed. The first aspect addresses the general question of whether a peace agreement is more likely to be followed by armed conflict if one or more parties are excluded. The second aspect concerns the characteristics of the rebel groups and how these may affect the likelihood of post-settlement armed conflict involving those parties.

This paper consists of four parts. The first part is devoted to the theoretical framework: previous research is discussed with particular emphasis on the argument on inclusive peace agreements, and I also elaborate some possible explanations concerning which parties that fight after a peace agreement. The second part consists of the research design, including description of the new data on warring parties and peace agreements, variables and statistical technique. In the third part the findings are analyzed, and in the fourth and final part conclusions are drawn.

THEORETICAL FRAMEWORK

The Argument of Inclusive Peace Agreements

Will the inclusion of all warring parties into a peace agreement reduce the likelihood of post-settlement violence? The importance of including all parties in the peace agreement is something stressed by several researchers (e.g. Hampson, 1996, Darby and Mac Ginty, 2000, and Zahar, 2003). For instance, Fen Osler Hampson argues that:

…it is absolutely essential that all the warring parties have a seat at the negotiation table and are directly involved in discussions about the new constitutional and political order that will be crafted after the fighting stops. A ‘good’ agreement is one that has been crafted by all parties to the conflict. If parties are excluded from these negotiations or if their interests are not represented at the bargaining table, they will have much stronger incentives to defect from the peace process and resort to violence to achieve their aims. (Hampson, 1996: 217)

4 For a review of the literature on conflict termination in general, see for instance Ohlson (1998), Licklider (2001b) and Stedman (2002).
Thus, if all warring parties are included in the settlement, the incentives for returning to war are weaker. John Darby and Roger Mac Ginty make a similar proposition when they claim that: “A lasting agreement is impossible unless it actively involves those with the power to bring it down by violence.” They suggest a principle of ‘sufficient inclusion’, meaning that the parties representing a significant part of the community, together with actors that have the capacity to destroy an agreement, should be included in the agreement.\(^5\) (Darby and Mac Ginty, 2000: 254) The issue then becomes one of dealing with potential spoilers to an agreement.\(^6\)

Stephen Stedman (1997: 5) deal with this particular issue and makes a distinction between inside spoilers, actors that are part of the peace agreement and choose to defect, and outside spoilers, which never have been part of the settlement. Thus, the debate on spoilers is of relevance for this study, and inside and outside spoilers, can roughly be seen as corresponding to included or excluded parties. According to Marie-Joëlle Zahar, a party outside of an agreement will derive high costs and very low benefits of peace, while an inside actor will see an increase both in the benefits of peace and the costs of resumed conflict the longer the peace endure (Zahar, 2003: 118-121). Whereas Zahar has elaborated upon possible mechanisms behind this proposition, there is nevertheless a need to further develop the theoretical arguments about why an exclusive peace agreement is more likely to be followed by armed conflict. Moreover, the empirical foundations of this argument need to be explored. Hence, based on previous research, I propose the following hypothesis:

**Hypothesis 1:** If one or more parties are excluded from a peace agreement, the likelihood of post-settlement armed conflict is increased.

This hypothesis does not specify if it is an included and/or excluded party that will be involved in the post-settlement armed conflict. It is merely suggested that a peace agreement which is exclusive, is more likely to be followed by armed conflict by any of

---

\(^5\) Thus, parties which have not been active in violence may represent such a large part of the population that they should have been included but it can be very difficult to assess which parties fulfill such a criterion.

\(^6\) Stedman (1997: 5) defines spoilers as: “…leaders and parties who believe that peace emerging from negotiations threaten their power, worldview, and interests, and use violence to undermine attempts to achieve it.” The concept of spoilers has received a lot of criticism, and I would like to point out that in this paper, all warring parties are seen as potential spoilers (Zahar, 2003: 114).
these actors. Below I develop three additional hypotheses that examines who fights in the aftermath of a peace agreement. I will begin by discussing whether a party that is excluded may be more likely to be involved in armed conflict. Another issue that can be of value to explore is if the violence in the aftermath of a peace agreement involves strong and weak parties alike. Moreover, the relationship between the parties might be of importance in this context, and more specifically whether the rebel groups are the result of a splinter or not.

**Excluded or Included?**

As mentioned earlier, the logic of why inclusive peace agreements are expected to be more stable than an agreement in which some party is standing outside of this process is not clearly spelled out. We need to identify which parties are involved in post-settlement violence. For instance, do signatories resume violence or is the peace agreement followed by armed conflict involving parties outside of the agreement? In Burundi the included parties remained committed to the agreement they signed in August 2000, while the excluded parties, PALIPEHUTU-FNL and CNDD-FDD, continued to fight (ICG, 2002). Other times it is signatories to the settlement, as well as parties standing outside the agreement, that carry out the violence. Armed violence involving both included and excluded parties followed the 1993 peace agreement signed between the government of Chad and CNR. Thus, whether the parties that are involved in post-settlement armed conflict constitute included or excluded parties is an issue that needs to be addressed.

Zahar (2003) suggests that we should think about spoiling in terms of the incentives and capabilities that the groups face on the inside and outside of an agreement. Since a party on the inside is likely to stand to gain from the benefits of peace, an inside party is probably less likely to fight than an outside party. This is not to say that included parties lack incentives to fight, only that an excluded party is more likely to have high incentives to do so (Hampson, 1996; Darby and Mac Ginty, 2000; Zahar, 2003). Based on the above discussion I present the following hypothesis:

**Hypothesis 2:** If a party is excluded rather than included, that party is more likely to be involved in post-settlement armed conflict.
A Strong Party on the Outside

Whereas the incentives for fighting surely are important, the capabilities to do so are likely to be of central importance. The military capabilities of the rebel groups is a factor that could influence whether the parties become involved in post-settlement armed conflict or not. At least some level of military capabilities is of importance (Darby and Mac Ginty, 2000; Zahar, 2003). Moreover, it can be argued that given that a rebel group has the incentives, a group that is militarily strong should be more likely to continue the fight than a weak actor. Zahar (2003: 118) makes an important point in that a small group might view peace as a threat since they may be afraid of losing whatever marginal influence the conflict may have brought. But to what extent such a group may be successful in its endeavor can though be discussed, and it is probably easier for a large rebel group to continue the warfare.

The military strength of a rebel group should preferably be analyzed in the context of whether the group is standing on the inside or the outside of an agreement, since it can be of importance for whether armed conflict will ensue. A group that is excluded probably has the incentives to fight after an agreement, and the capabilities may also play a role in this context. Whereas an excluded group that is strong can continue fighting on its own, a weaker group should be less likely to do so. A strong group and a weak group can both be willing to continue the fight, but they do not possess the same capabilities to do so. Although a party for some reason has decided to not take part in the negotiations, there is still a possibility that they will refrain from using violence as the conditions for continued conflict may change. If there are groups that cease fighting, the costs of continued conflict for an excluded party may be increased. A weak group outside an agreement might find it more difficult to persist in the fighting since the government no longer has to fight on several fronts, having made peace with at least some of the rebel groups. An excluded rebel group that is strong should thus be more likely to be involved in post-settlement armed conflict.

Hypothesis 3: If a strong party is excluded rather than included, that party is more likely to be involved in post-settlement armed conflict.
A Splinter Party on the Outside

The relationships within and between rebel groups could also influence the incentives of these groups to engage in violence after an agreement. The importance of intra-party dynamics in the negotiation process has been highlighted in the literature. For instance, Hugh Miall et al. (1999: 157) argue that intra-party conflict is “...often crucial to the resolution of inter-party conflict (...) Splitting of parties and integration of parties are important forms of change”. Whereas some have identified this as a crucial factor in the pre-negotiation phase others claim that it also plays a pivotal role in the post-settlement phase (e.g. Mitchell, 1981: 246; Zartmann, 1995: 14–15; Hoddie and Hartzell, 2002: 6). Mitchell for example, states that “factionalism inevitably affects intra-party consensus about any negotiation”, and moreover, that this will be important for ‘selling’ the final peace agreement.

Zahar (2003: 121) makes a distinction between the inside and outside actors in terms of their potential support from their constituencies. She argues that an excluded party is not likely to be faulted for not participating in the peace talks, especially if this group has not been recognized as a legitimate party by those on the inside. In Burundi, the two rebel groups PALIPEHUTU-FNL and CNDD-FDD were initially barred from the peace process leading up to the Arusha agreement. One of the rules for the talks was that these splintering factions should not be seen as full participants in the peace negotiations, that the existing parties from which they had splintered already were taking part. It was only at a later stage that these factions were invited to the talks but the rebel groups then proposed conditions for agreeing to participate (ICG, 2002: 2; ICG, 2000: 2).

Getting at the intra-party dynamics is a difficult task, and often all we can observe is the result of intra-party conflicts that have been so severe that the group has splintered into different groups. I argue that the groups that have emerged as the result of a splinter could behave differently in the post-settlement phase than rebel groups that have not undergone this process. In addition, whether these groups later end up on the inside or the outside is of significance in this context. Stedman (1997: 8) points out that outside spoilers either are excluded from agreements or they may have excluded themselves. This can be of importance for understanding under what conditions a splinter may be involved in post-settlement violence. If a rebel organization is the result of a splinter, the incentives for fighting in the aftermath of an agreement are likely to be higher if that party is standing on
the outside. A splinter could have a more coherent organization, and thus have an easier
time ‘selling’ the agreement to their constituency, but it is also possible that at least one of
the splintering groups is more of a ‘hardliner’. Therefore, a rebel group resulting from a
splinter, and which is standing on the outside, probably has higher incentives to carry on
the fight.

**Hypothesis 4:** If a *splinter* party is *excluded* rather than included, that party is more
likely to be involved in post-settlement armed conflict.

**RESEARCH DESIGN**

**Civil War**

Most research on conflict termination is carried out on negotiated settlements signed in
civil wars. To facilitate comparison with previous research I focus on civil wars which
have resulted in an accumulated total of at least 1000 battle-related deaths during the
course of the conflict (e.g. Doyle & Sambanis 2000; Fortna 2002). Therefore, I include
all peace agreements signed during the period 1989-2002, where the armed conflict has
reached this level (Eriksson ed., 2004: 70). The Uppsala Conflict Data Program (UCDP)
defines an intrastate armed conflict as a contested incompatibility over government and/or
territory, between a government and at least one opposition organization. Thus, the
incompatibility between the parties is at the core of the problem, and the focus is how it
can be regulated or resolved through a peace agreement.

---

7 There are also examples of research where the focus is on civil wars that reach at least 1000 battle-related
deaths per year (e.g. Walter, 2002). However, to include also the civil wars that do not reach this level
yearly, will enable comparisons with previous studies using either definition.
8 For further definitions of concepts, see the Uppsala Conflict Data Program (http://www.ucdp.uu.se).
Peace Agreement

The existing lists of peace agreements use several different criteria for inclusion. The negotiated settlements that receive most attention are oftentimes the ones that to some extent have been successful: the conflict behavior has ended for some time, or some efforts have been made towards implementing the agreement (e.g. Licklider, 1995; Hartzell, 1999; Wallensteen, 2002). However, Peter Wallensteen points out that there is a need to include other agreements in a more systematic analysis of conflict resolution processes, and he argues that these failed agreements also can provide valuable information (Wallensteen, 2002: 80–82). By examining only the agreements that have lasted for a certain period of time, previous research might have introduced an unnecessary bias. Other lists of peace agreements require that all, or the major warring parties, have signed the settlements (Walter, 1999: 127; 2002a: 52; Kreutz and Wallensteen, 2003).

The Uppsala Conflict Database, covering the period 1989–2002, also includes data on the peace agreements that fail in the short term. Moreover, this database does not make any restrictions based on which warring parties, other than the government, have signed the agreement. Note, however, that all peace agreements are signed by at least two warring parties of which one is the government. This data seems suitable for this study, since it does not exclude agreements where only some of the rebel groups are signatories: an aspect that is pivotal to my argument. For the purposes of this paper, a peace agreement should address the incompatibility by settling all or part of it, and “address more than just the termination of the use of armed force.” More specifically, a peace agreement should meet one of the following criteria: “(a) comprehensive agreement signed by all parties regulating or resolving the incompatibility; (b) partial peace agreement (agreement signed by all parties regulating or resolving part of the incompatibility); (c) dyadic agreement (comprehensive agreement signed by the parties, but not in all dyads, regulating or resolving the incompatibility)” (Sollenberg, 2002: 14). 9 The data includes 53 peace agreements signed in 25 civil wars.

---

9 In line with previous research I will not include ‘peace process agreements’ since these are merely “outlining a process for regulating or resolving the incompatibility”.
Data and Unit of Analysis

All data used in this paper comes from the Uppsala Conflict Data Program if not otherwise mentioned. A crucial issue in order to understand what is examined and how to interpret the findings, is the setup of the two different data sets. I would therefore like to specify some rather technical issues concerning the data. The unit of analysis when examining the first aspect, that is if exclusion has an effect on post-settlement armed conflict, is the post-peace-agreement-year. A separate dataset has been created to test this proposition. The variables refer to aspects in direct relation to the peace agreement, for instance, whether the agreement was signed by all parties or not. In this dataset, each peace agreement constitutes a row, and the dependent variable is a count variable which accounts for the number of years without post-settlement armed conflict in that particular incompatibility. This dataset consists of 53 observations, i.e. 53 peace agreements.

In contrast, the unit of analysis concerning the second aspect, that is how exclusion may influence post-settlement armed conflict, is the post-peace-agreement-dyad-year. In order to examine which rebel groups fight, a dataset was constructed with the dyad, consisting of the government and a rebel group, in focus. For every peace agreement signed in the incompatibility, there is a dyad-peace agreement which the rebel group in that particular dyad may, or may not, be a signatory to. All dyads in the same incompatibility share the same government, and the variables used refer primarily to factors that concern the rebel group in that particular dyad. In this dataset, each dyad-peace agreement (regardless of whether it was signed by the rebel group in that dyad) constitutes a row, and the dependent variable is a count variable accounting for the number of years without post-settlement armed conflict concerning that particular dyad. This dataset consists of 95 observations, i.e. 95 dyad-peace agreements that may or may not be signed by the rebel group in that dyad.11

10 Note the central position of the state in this data, and that consequently all dyads involve the government.
11 However, in the dyad-peace agreement dataset, data is missing for Chad, Burundi and Israel/Palestine. The fact that some cases are not included in the analysis could potentially bias the results, and therefore, the findings on dyad-level should be seen as tentative.
**Dependent Variables**

I argue that it is reasonable to focus on the inclusion of the *warring* parties, since these have been involved in the armed struggle and at some point had both the incentives and capabilities to use armed violence.\(^\text{12}\) These are here defined as rebel groups involved in an armed conflict with the government that has reached the level of 25 battle-related deaths in at least one year.\(^\text{13}\) In this paper a party that *prior* to the peace agreement met this criterion of ‘warring parties’ is of interest and whether this rebel group is involved in post-settlement armed conflict with the government that results in at least 25 battle-related deaths.\(^\text{14}\) The post-settlement armed conflict is measured the year following the peace agreement in order to ensure that the violence has taken place *after* the agreement was signed. There are two dependent variables: the first is *Peace Duration* which measures the number of years without armed conflict in the whole incompatibility, whereas the second variable *Dyad Peace Duration* measures the number of years without armed conflict for that dyad. Note that since the dependent variables are measured the year following the peace agreement, also data for 2003 is used for these two variables.

**Independent Variables**

The first independent variable is called *Exclusive-PA* and is coded 1 if one or more warring parties did not sign the peace agreement, and 0 otherwise. The second variable *Excluded* is coded 1 if the rebel group in the dyad did not sign the peace agreement and is coded 0 if the rebel group was a signatory to the agreement. This criterion is relaxed if a warring party has signed a previous peace agreement and then refrained from using

---

\(^\text{12}\) It should be noted that, while these actors at some point had enough military capabilities, they might have suffered setbacks during the course of the conflict and therefore may not retain enough capabilities at the time of the signing of the agreement. The scenario could also be reversed, since parties that do not meet the criterion of warring parties still may constitute a threat to the peace. For example, in the negotiation process leading up to the Arusha agreement, which was later to be signed by the government of Rwanda and the RPF, the CDR was declined a place at the negotiation table. According to Adelman et al, “The exclusion of the extremist CDR from the transitional government has become a major issue in subsequent evaluation of the strengths and weaknesses of the Arusha Accords.” (Adelman et al, 1996)

\(^\text{13}\) It is of course possible that there exist parties that were engaged in armed conflict but which did not meet these criteria. For instance, groups may have been active without it being recorded, either because the armed activities with the government fail to result in at least 25 battle-related deaths in a given year, or they are engaged in fighting with other groups, since the definition requires that at least one of the parties is a government.

\(^\text{14}\) In this paper I focus on the parties that were active prior to the signing of the agreement and therefore new parties that later emerge are not taken into account.
violence. Thus, a warring party that was a signatory to a previous peace agreement and which has since been inactive is coded 0.

The third variable is labeled Strong, since I am interested in whether the rebel group can be seen as strong or weak. This is measured through the relative military strength between the government and the rebel group.\footnote{What makes a party strong or weak is of course something which can be debated. I am interested in the military strength of the parties, and will leave other aspects for future research. Some groups can be strong concerning some other dimension. There are examples of groups that have only a small military wing but with large political support, for instance, the ANC in South Africa.} Jeffrey Dixon (2002) argues that troop strength can serve as an indicator of military strength, and he has gathered information on the strength of rebel groups in the civil wars in the COW data but for a different period than the one of interest here. Instead, the data for this variable comes primarily from the Uppsala Conflict Database, which is based on sources such as Military Balance. It can be difficult to assess the numbers of troops of a group with a high degree of precision, but it can at least be determined whether the group is militarily strong or weak in relation to the government. Dixon (2002) argues that in battles an attacker does not stand to gain much from an increase in relative military strength, “…until they have a large (perhaps 4:1) advantage over the defender…” I use a ratio of 4:1 to assess strength.\footnote{In the range of 0-4:1 there is a large cluster of observations, and changing the ratio from 4:1 to 6:1 does not alter the sub-sample by much. In fact, if a 4:1 ratio is used, 48 percent of the rebel groups are coded as strong, whereas a ratio of 6:1 means that 51 percent are seen as strong.} I consider a rebel group to be weak if the government has a relative military strength that exceeds 4:1, and otherwise the rebel group is considered to be strong. Thus, the variable Strong is coded 1 if the rebel group is strong, and it is coded 0 if the rebel group is weak.

I have also developed a measure to capture the relationship between the different rebel groups. Whether the rebel groups have had internal struggles is a factor that could influence whether a peace agreement is followed by post-settlement conflict. The fourth variable Splinter is coded 1 if the rebel group is in a splinter relationship to another group, and is otherwise coded 0. The interest lies in splinter relationships to other rebel groups. Therefore, this variable is coded 0 if there is no splinter relationship due to one of the groups ceasing to exist as a rebel group, either by dissolving or by becoming the government. This is a rather crude measure of rebel group relationships, and the results
should therefore be carefully analyzed, since several different interpretations are possible. This will be elaborated upon in the presentation of the findings.

**Control Variables**

I include a number of control variables, of which the first one concerns the number of peace agreements previously signed in the armed conflict, since this factor possibly could have an effect on peace duration. The first control variable *No. Peace Agreements* measures the number of peace agreements signed in the armed conflict between 1989 and the signing of the agreement in question.

Some previous findings suggest that the number of warring parties increases the risk of renewed conflict (e.g. Doyle and Sambanis, 2000; Downs and Stedman 2002). It is therefore appropriate to control for *No. Warring Parties*, which is measured as the number of warring parties in the incompatibility coded as active after 1989 but prior to the agreement.

Conflict duration has been argued to influence the likelihood of armed conflict after a peace agreement. The underlying theoretical arguments concern the costs of war and war weariness (e.g. Doyle and Sambanis, 2000: 787; Hartzell et al, 2001: 202; Dubey, 2002, and Fortna, 2002). For example, Hartzell et al (2001: 198) find that the duration of a conflict seems to increase the prospects of a durable peace. I have for this reason created the control variable *Conflict Duration*, which is measured as the number of years since the armed conflict first reached the threshold of 25 battle-related deaths. Since several of the conflicts started before 1989, I am here using data for the period 1946–2002.

Previous research makes a distinction between armed conflicts fought over government and those fought over territory, and since these conflicts are driven by different goals this may have implications for the dynamics of conflict resolution (e.g. Zartman, 1995; Wallensteen, 2002). The UCDP includes information on whether the armed conflicts concern government or territorial claims. If a settlement is followed by violence or not could be influenced by whether it is fought over government or territory. Hence, I created a control variable *Incompatibility* which is coded 1 if the incompatibility concerns government and 0 if it concerns territory.

According to Page Fortna (2003), peacekeeping has a significant effect on peace duration. Moreover, Zahar (2003: 117) argues that the UN peacekeepers may be more
‘neutral’ than what sometimes is the case for regional peacekeepers. Thus, I have included a control variable \textit{UN-Peacekeeping}, which is coded 1 if a peacekeeping operation under the United Nations was in place after the signing of the peace agreement, and 0 otherwise. I also constructed a variable that measures the presence of other peacekeeping forces than the UN. The variable \textit{Non-UN Peacekeeping}, is coded in the same fashion as the \textit{UN-Peacekeeping} variable.\footnote{A peacekeeping operation is defined as “a third-party state intervention that: (1) involves the deployment of military troops and/or military observers and/or civilian police; (2) is, according to the mandate (as specified in multilateral agreements, peace agreements, or resolutions of regional organizations), established for the purpose of peace enforcement, interposition and monitoring (among other things) between formerly warring parties, potentially warring parties, or even presently warring parties. Hence, all operations deal with security issues (cease-fire monitoring, verification of troop withdrawals, disengagement, policing, etc.), and may be deployed before, during, or after armed conflict; (3) is neutral and impartial to the conflict parties, but not necessarily indifferent to the conflict parties’ behavior.” (Heldt, 2002)} For these variables I relied on a data set compiled by Birger Heldt (2002).\footnote{I would like to extend my thanks to Birger Heldt and the Swedish National Defense College for generously sharing this data.}

\textbf{Statistical Technique}

I will use duration analysis to examine the proposition about inclusive peace agreements. Duration analysis is preferable when a research question concerns the duration of time up to the occurrence of an event. The events of interest in this paper concern post-settlement armed conflict but are slightly different for the two dependent variables. The event for \textit{Peace Duration} is post-settlement armed conflict in the incompatibility, whereas the event for \textit{Dyad Peace Duration} is post-settlement armed conflict in that dyad. Duration analysis can be used in order to better take into account time, and thus give a more precise measure of the dependent variable. In this study, the observations are at risk of experiencing an event from the signing of a peace agreement until the observation period ends on the 31\textsuperscript{st} of December 2003.\footnote{Duration analysis takes into account so-called censored observations, i.e. the ones that at the end of the observation period still have not experienced the event.} I employ a Cox proportional hazards model which in comparison to other duration models has the advantage of not assuming a specific parametric form for its distribution (Box-Steffensmeier and Jones, 1997: 1422).
FINDINGS

I will begin by outlining the results for hypothesis 1 concerning the main proposition that an exclusive peace agreement is more likely to be followed by armed conflict. These results can be found in table 1. Next I will focus on whether the characteristics of a rebel group influence the likelihood of post-settlement conflict involving that party, and these results are presented in table 2. In both tables the hazard ratios are reported, and whereas a ratio above one indicates an increased risk of armed conflict (i.e. reduces the peace duration), a value below one decreases the risk of armed conflict (i.e. increases the peace duration). Note that in table 2 it is the peace duration concerning the dyad that is reported but the interpretation of the hazard ratios follows the same logic. As a criterion for statistical significance, a p-value of 0.05 is used.

Exclusive Peace Agreements

Previous research suggests that a peace agreement not signed by all parties is more likely to be followed by armed conflict. As already mentioned there are in total 53 peace agreements signed in 25 civil wars during 1989–2002, and of these peace agreements 37 are followed by armed conflict, while 16 are not. Of the peace agreements that did indeed experience further violence, the peace endured on average about two years until violence broke out involving an included and/or excluded party. Moreover, it can be noted that 20 peace agreements are exclusive in character while 33 are inclusive. Of the exclusive peace agreements 17 out of 20 are followed by armed conflict, whereas fighting follows only in 20 of the 33 inclusive peace agreements.

Hypothesis 1 that concerns this argument about inclusive peace agreements is supported by the findings. A peace agreement where one or more parties are excluded has an increased risk of being followed by post-settlement armed violence. The variable Exclusive-PA, controlling for all other variables, has a hazard ratio above one and is statistically significant. More specifically, if one or more parties are excluded from a peace agreement, the risk of post-settlement armed conflict involving an included or excluded party increases by 88 percent.

In addition, if the incompatibility concerns government, or if non-UN peacekeeping forces are deployed, the risk of armed conflict is increased. The variable
Conflict Duration also increases the risk of armed conflict. These effects are all statistically significant. The fact that there is an increased risk if non-UN peacekeeping forces are present is not very surprising if one takes a closer look at the data. Liberia is a case in point: the regional peacekeeping force ECOMOG became involved in the fighting shortly after they arrived on the ground. In contrast to UN peacekeepers, regional peacekeeping forces are more likely to have own interests at stake and in some cases they may even be partial to one of the parties (Zahar, 2003:117). Moreover, the variable UN-peacekeepers seems to decrease the risk of armed conflict, but this effect is not statistically significant. In addition, no significant effects are found for the variables No. Peace Agreements and No. Warring Parties. To summarize, hypothesis 1, stating that an exclusive peace agreement is more likely to be followed by armed conflict, is supported by the findings.

Who Fights?
Whereas exclusion does seem to have an effect on post-settlement armed conflict, the previous hypothesis does not identify who is fighting, only that armed conflict will follow. Thus, we do not know whether it is an included and/or excluded party that is involved in the violence. In total there were 95 dyad-peace agreements which the rebel groups may, or may not, have signed. Of these, 61 included the rebel group in question, whereas 34 did not. Of the 61 rebel groups that were included 28 became, at some point, involved in armed conflict following the agreement. In contrast, as many as 23 of the 34 parties that were excluded became engaged in post-settlement violence. It is also interesting to note that the rebel groups that did become involved in post-settlement armed conflict, were on average fighting within a year after the agreement was signed. An example of this is Sierra Leone, where RUF, despite several agreements, continued to fight. In contrast, some rebel groups did not become involved in fighting until years later; for instance, FUNCINPEC in Cambodia did not go back to armed conflict until more than five years after the peace agreement was signed.

In order to examine this issue of who fights after a peace agreement, three additional hypotheses were proposed. Hypothesis 2 suggests that excluded parties are more likely to fight in the aftermath of a peace agreement. Model 1 in table 2 shows that the variable Excluded increases the risk of post-settlement armed conflict, and the effect is
statistically significant. If a party is excluded, the risk of post-settlement conflict involving that party increases by 82 percent.\textsuperscript{20} Thus, hypothesis 2 is supported. In this model, \emph{Strong} and \emph{Splinter} are introduced as control variables. Both indicate an increased risk of armed conflict, and the effects are statistically significant. The results for the other control variables are similar to the results found in the previous model. The variables \emph{Incompatibility} and \emph{Non-UN Peacekeeping} still show an increased risk of armed conflict, whereas \emph{Conflict Duration} is no longer statistically significant. To summarize, as predicted in hypothesis 2, excluded parties are more likely to fight in the aftermath of a peace agreement.

As discussed previously in this paper, the effect of being strong or a splinter may depend on whether the rebel group is inside or outside the peace agreement. Hypothesis 3 and 4 concern this aspect. Of the 95 rebel groups in this data 46 rebel groups are strong, and 49 groups are weak. Moreover, 26 rebel groups are splinters, whereas 69 are not, and 13 rebel groups are both strong and splinters. Hypothesis 3 states that strong parties that are excluded are more likely to be involved in post-settlement armed conflict. To see if the effect of \emph{Strong} varies depending on the context, i.e. whether the party is excluded or not, the variable \textit{Excluded*Strong} was created, which makes it possible to assess the interaction effect. Hypothesis 4 suggests that a splinter party which is excluded is more likely to fight after a peace agreement. In order to examine if the effect found for the variable \textit{Splinter} varies depending on whether the party is excluded or included, I also created the variable \textit{Excluded*Splinter}. Hypotheses 3 and 4 are evaluated by looking at the effects of the variables \textit{Strong} and \textit{Splinter} in model 2 in table 2. In this model the hazard ratios for these variables represent the effect of \textit{Strong} and \textit{Splinter}, respectively, in the context of being included in a peace agreement, and the effects of these variables in the context of being excluded can be generated by some calculations.\textsuperscript{21} I will not go into this further, but instead try to give a picture of the main results found.

Model 2 in table 2 shows that the effect of \textit{Strong} is indeed dependent on being excluded. More precisely, \textit{Strong} increases the risk for armed conflicts by almost 11

\textsuperscript{20} Note that this result is obtained by clustering on dyads. The result is also roughly the same without clustering.

\textsuperscript{21} The hazard ratio of the variable \textit{Strong or Splinter} in the context of being excluded is generated by multiplying the hazard ratio of the variable in question with the corresponding hazard ratio of the interaction variable.
times, given that the party is included. In contrast, when the party is excluded, the variable *Strong* has no statistically significant effect at all.\(^22\) We can thus conclude that no support is found for hypothesis 3. The results are still noteworthy, since strength matters in the context of a party being included in a peace agreement, although in a direction opposite to the one predicted. Inclusion is apparently a key factor for whether party strength matters.

Turning to hypothesis 4, model 2 shows that the effect of *Splinter* is not dependent on context with regard to exclusion. The model shows that the effect of *Splinter* is not significantly different when the party is excluded *as compared to* being included, and the effect of *Splinter* is statistically insignificant when included. However, this does not mean that *Splinter* has no effect. Further calculations show the effect of *Splinter* is statistically significant when the party is excluded. More specifically, the variable *Splinter* increases the risk of armed conflict by 162 percent. Thus, hypothesis 4 is supported. In this model the effects for most control variables are similar to the previous models, but the control variable *Conflict Duration* is now statistically significant and the hazard ratio indicates an increased risk of armed conflict. Moreover, it can also be noted that the variable *Excluded* has a direct effect on armed conflict which is statistically significant.

The fact that hypothesis 3 did not receive any support whereas hypothesis 4 did, is indeed intriguing. One possible explanation for the results is that the groups standing on the outside are more resolved and will continue the fight regardless of whether they are strong or not. In contrast, an inside party may represent a more moderate group which after all has agreed to sign a peace agreement. What we could be observing is a selection effect where the excluded, more determined actors are standing on the outside. If a party is an excluded splinter group probably says something about how resolved or unwilling they are to compromise on the issue at stake. Such a party may have very strong incentives to fight, and therefore capabilities are less important. It should be noted that all groups have been active prior to the peace agreement and thus had at least some level of military capabilities. In contrast, for the groups on the inside of the agreement the incentives should be different. An included party has already agreed to a settlement and for such an actor capabilities may be more important. Strong actors on the inside could in the aftermath of an agreement find themselves not getting as good a deal as initially

---

\(^{22}\) The result concerning model 2 is obtained by clustering on dyads, and the result is virtually the same as compared to when not clustering.
anticipated, and in such a scenario the capabilities could be of importance. Another possibility is that excluded parties trigger the included parties to resort to violence. However, the included parties are likely to anticipate the excluded parties’ will to continue the fight, so the behavior of the excluded parties is unlikely to explain why the included strong parties fight after a peace agreement. Moreover, this does not explain why only the included parties that are strong would resort to violence. While several different explanations are plausible, this raises many questions that deserve some further elaboration in this project.

CONCLUSIONS

This study set out to explore if and how exclusion of parties may influence the likelihood of post-settlement armed conflict. This paper supports the notion that exclusion does matter, since the common assertion that an exclusive peace agreement is more likely to be followed by armed conflict is supported by the findings. I also tried to assess how exclusion may influence armed conflict, by examining who fights after peace agreements. The findings indicate that excluded parties are more likely to be involved in post-settlement armed conflict, which is consistent with the underlying theoretical argument that excluded parties have higher incentives to fight. Moreover, it was predicted that a strong excluded party increases the risk of armed conflict, but in contrast to this, such an effect was instead found concerning a strong included party. Another finding is that excluded splinters are more likely to fight after a peace agreement, which is in line with the theoretical expectations. Although the findings are intriguing, it should be noted that the results are to be seen as tentative until more data has been collected.

Whereas this study has provided some information concerning if and how exclusion may influence armed conflict, there are many aspects left to explore. For instance, it may be of importance to focus on why the excluded parties are standing on the outside of the peace agreements. While it may be difficult to find out if the parties were excluded from the negotiations or if they excluded themselves, it should at least be possible to see if they have been part of the negotiations. It could be of interest to study whether the excluded parties failed to reach an agreement with the other parties, or if they were never part of the negotiations in the first place. Therefore, in future work I will
examine if the rebel groups prior to the peace agreement have been involved in negotiations.

Another issue that will be explored in more detail is the relations between the rebel groups, more specifically by studying inter-group fighting or rebel group alliances. This could provide information on patterns of animosity and cooperation between rebel groups. In addition, it could also be of value to explore other measures of strength. A group with a small number of troops could compensate for this weakness by employing other means in their struggle, for example, by using less conventional means such as suicide bombers. It would therefore be preferable to have some kind of measure that captures whether the parties use extreme tactics.

Moreover, whereas the focus here has been on how the characteristics of a rebel group may influence the likelihood of post-settlement violence involving that group, a rebel group’s behavior may also depend on the characteristics of other rebel groups. And while it is primarily the rebel groups that have been studied, the government is also an important actor and its characteristics and behavior should be taken into account. Clearly, there is a need to further examine how exclusion of parties in peace agreements may influence armed conflict, and although the results need to be explored in more detail, the findings still suggest that the question of who signs a peace agreement matters.
<table>
<thead>
<tr>
<th>Variable/Model</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exclusive-PA</td>
<td>1.88*</td>
</tr>
<tr>
<td></td>
<td>(0.52)</td>
</tr>
<tr>
<td>No. Peace Agreements</td>
<td>1.06</td>
</tr>
<tr>
<td></td>
<td>(0.14)</td>
</tr>
<tr>
<td>No. Warring Parties</td>
<td>1.20</td>
</tr>
<tr>
<td></td>
<td>(0.16)</td>
</tr>
<tr>
<td>Conflict Duration</td>
<td>1.03*</td>
</tr>
<tr>
<td></td>
<td>(0.02)</td>
</tr>
<tr>
<td>Incompatibility</td>
<td>2.94**</td>
</tr>
<tr>
<td></td>
<td>(1.34)</td>
</tr>
<tr>
<td>UN Peacekeeping</td>
<td>0.51</td>
</tr>
<tr>
<td></td>
<td>(0.23)</td>
</tr>
<tr>
<td>Non-UN Peacekeeping</td>
<td>3.68**</td>
</tr>
<tr>
<td></td>
<td>(1.86)</td>
</tr>
<tr>
<td>Number of observations</td>
<td>53</td>
</tr>
<tr>
<td>Number of failures</td>
<td>37</td>
</tr>
<tr>
<td>Log likelihood</td>
<td>-93.59</td>
</tr>
</tbody>
</table>

Note: Hazard ratios rather than coefficients are reported, with robust standard errors in parentheses clustered on incompatibility. A ratio above one indicates an increased risk of armed conflict (i.e. reduces the peace duration), while a value below one decreases the risk of armed conflict (i.e. increases the peace duration). One-tailed tests are used.

* Statistically significant at the .05 level. ** Statistically significant at the .01 level.
## TABLE 2
Effects on Dyad Peace Duration, Cox Model

<table>
<thead>
<tr>
<th>Variable/Model</th>
<th>1</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Excluded</td>
<td>1.82*</td>
<td>6.52**</td>
</tr>
<tr>
<td></td>
<td>(0.65)</td>
<td>(4.32)</td>
</tr>
<tr>
<td>Strong</td>
<td>2.42*</td>
<td>10.81**</td>
</tr>
<tr>
<td></td>
<td>(0.98)</td>
<td>(7.00)</td>
</tr>
<tr>
<td>Splinter</td>
<td>1.66*</td>
<td>1.44</td>
</tr>
<tr>
<td></td>
<td>(0.46)</td>
<td>(0.49)</td>
</tr>
<tr>
<td>Excluded*Strong</td>
<td></td>
<td>0.10**</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.07)</td>
</tr>
<tr>
<td>Excluded*Splinter</td>
<td></td>
<td>1.82</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.94)</td>
</tr>
<tr>
<td>No. Peace Agreements</td>
<td>1.11</td>
<td>1.05</td>
</tr>
<tr>
<td></td>
<td>(0.08)</td>
<td>(0.08)</td>
</tr>
<tr>
<td>No. Warring Parties</td>
<td>1.03</td>
<td>1.14</td>
</tr>
<tr>
<td></td>
<td>(0.16)</td>
<td>(0.15)</td>
</tr>
<tr>
<td>Conflict Duration</td>
<td>1.05</td>
<td>1.07**</td>
</tr>
<tr>
<td></td>
<td>(0.03)</td>
<td>(0.03)</td>
</tr>
<tr>
<td>Incompatibility</td>
<td>4.66*</td>
<td>4.96*</td>
</tr>
<tr>
<td></td>
<td>(3.29)</td>
<td>(4.05)</td>
</tr>
<tr>
<td>UN Peacekeeping</td>
<td>0.57</td>
<td>0.64</td>
</tr>
<tr>
<td></td>
<td>(0.20)</td>
<td>(0.21)</td>
</tr>
<tr>
<td>Non-UN Peacekeeping</td>
<td>3.02**</td>
<td>4.16**</td>
</tr>
<tr>
<td></td>
<td>(1.41)</td>
<td>(2.41)</td>
</tr>
<tr>
<td>Number of observations</td>
<td>95</td>
<td>95</td>
</tr>
<tr>
<td>Number of failures</td>
<td>51</td>
<td>51</td>
</tr>
<tr>
<td>Log likelihood</td>
<td>-172.15</td>
<td>-165.86</td>
</tr>
</tbody>
</table>

Note: Hazard ratios rather than coefficients are reported, with robust standard errors in parentheses clustered on dyad. A ratio above one indicates an increased risk of armed conflict (i.e. reduces the dyad peace duration), while a value below one decreases the risk of armed conflict (i.e. increases the dyad peace duration). One-tailed tests are used.

* Statistically significant at the .05 level. ** Statistically significant at the .01 level.
REFERENCES


Sollenberg, Margareta (2002) The Uppsala Conflict Data Project: A Background Note for the Internet Database, Unpublished manuscript, Department of Peace and Conflict Research, Uppsala University.