Journal of Peace Research

Anticipating mediated talks: Predicting the timing of mediation with disaggregated conflict dynamics

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Abstract

Research on mediation has shown that mediation can be an effective conflict management tool to contain intrastate conflicts, prevent escalation of low intensity conflicts, and foster de-escalation. But can ripe moments for conflict prevention effectively be anticipated? This article argues that the short-term conflict history provides a good predictor of the probability of mediation onset in low-intensity conflicts. It builds on an expected utility theory of mediation and states that conflict intensity is a primary indicator of whether a window of opportunity for mediation exists. Thereby, the article asserts that the direction of the effect is conditional on the respective probability of victory of each conflict party. The theory postulates that high conflict intensity only increases the probability of mediation onset when neither side is likely to prevail militarily. If one of the conflict parties has a high chance of a military success, then it will not regard conflict intensity as costly, since it can expect to impose these costs on its opponent. Under these circumstances the conflict parties will not be willing to engage in mediation. The article presents empirical support for this proposition. It uses temporally disaggregated data of low-intensity African conflicts from 1993 to 2004 and demonstrates that the theoretically motivated model predicts mediation onset with high accuracy. The results show that conflict dynamics are highly relevant covariates in predicting mediation. This selection process should be considered when the impact of mediation is evaluated.

Introduction

Research on mediation has shown that mediation can be an effective conflict management tool to contain intrastate conflicts, prevent escalation, and foster de-escalation of low intensity conflicts (cf. Melander, Möller & Öberg, 2009; DeRouen & Möller, 2013; Gurses, Rost & McLeod, 2008). In line with this scholarly assessment, early conflict mediation is a key tool in the United Nations' aim for preventive diplomacy (United Nations, 2011). Yet, in spite of this positive record, conflict parties agree to attempt mediation only in a limited number of conflicts. Mediation research explains this finding and prominently states that conflicts need to enter a mutually hurting stalemate in order to be ripe for mediation (cf. Zartman, 1995, 2001). Although this conclusion has found its way into practical guidelines of mediators

(e.g. Zartman & de Soto, 2010), it remains unclear if and how well we can predict the precise timing of mediation and anticipate windows of opportunity for this form of preventive diplomacy. This article addresses this question. It proposes a theoretically derived, statistical model which relies on disaggregated conflict event data and predicts mediation onset in low-intensity conflict.

Most existing, quantitative work on mediation has explained the propensity of mediation based on structural variables. Thereby, these works relied on highly aggregated, slowly changing measures as proxies of conflict characteristics, which hardly pick up conflict evolution. Only a single paper has examined how well

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mediation may be forecasted, but the approach taken by Clayton & Gleditsch (2014) is restricted to structural variables. A few recent publications have started to disaggregate the study of mediation incidence. Clayton (2013) demonstrates that stronger rebel groups have substantively higher chances to pressure governments into mediation. Similarly, Greig (forthcoming a) finds that rebel victories and distance to population centers are determinants of mediation. This article presents a generalized theory of conflict intensity, geography, and mediation and evaluates our ability to predict mediation. It shows that conflict intensity regardless of outcome and location is a strong predictor of whether a low-intensity conflict will be mediated. However, the direction and magnitude of the effect is strongly conditional on the overall location of the conflict.

The theoretical framework builds on an expected utility theory of mediation (Melin, 2011; Terris & Maoz, 2005). I argue that mediation will only be chosen if for both conflict parties the expected utility of mediation exceeds the expected utility of conflict. The expected utility of conflict is thereby determined by the probability of victory and the anticipated costs of conflict. I maintain that these costs are a function of both conflict intensity and the probability of victory of each party. Increasing conflict costs will only persuade a conflict party to consider mediation if the probability of a military success is sufficiently low. On the other hand, if a conflict party sees a high chance that it will prevail, then it will not assess increasing conflict intensity as costly, since it will be able to impose these costs on its opponent. At the same time, weak conflict parties will be unwilling to engage in talks if they perceive their bargaining position to be too frail in a particular situation and if they expect to improve their bargaining position through future successes on the battlefield. I therefore expect that the effect of conflict intensity varies in an inverted U-shaped form, conditional on the probability of victory.

I test the empirical predictive power of the theoretical argument using data from mediation in all low-intensity intrastate conflicts in Africa between 1993 and 2004. Drawing on previous findings that the location of conflicts correlates with the relative strength of actors and therefore acts as a proxy for an expected probability of success (Buhaug, Gates & Lujala, 2009; Buhaug, 2010), I estimate the effect of conflict intensity conditional on the location of the conflict. The results confirm the expected, inverted U-shaped, conditional association of conflict intensity and mediation onset. I demonstrate that this conditional effect of conflict intensity enables both in-sample and out-of-sample predictions of mediation onset with a quarter-year lead time.

Previous research on mediation

Mediation has received widespread attention in the scholarly literature and is generally considered to be a highly desirable form of conflict management. While mediation requires little logistical effort, it may have a strong appeasing effect, especially as a form of pre-emptive diplomacy. Empirical research finds that in civil wars, bargaining with the help of a mediator is significantly more likely to be successful and mediation is associated with shorter conflict and prolonged peace (Walter, 2002; Regan & Aydin, 2006; Gurses, Rost & McLeod, 2008). Analyses of the pre-emptive effect of mediation show that in mediated low-intensity intrastate conflicts escalation occurs less often and de-escalation is much more likely (Melander, Möller & Öberg, 2009; DeRouen & Möller, 2013).

Yet, despite these positive expected effects of mediation, this form of preventive diplomacy is only attempted in certain conflicts. To explain this puzzle, the literature has largely built on an expected utility theory, whereby mediation is predicted to occur if for both the conflict parties and the mediator the expected benefits of mediation surpass the costs of mediation (Terris & Maoz, 2005). Therefore, without the consent of all parties, mediation attempts will not occur. A well-known conclusion from mediation research emphasizes that conflicts need to be ripe for successful peace initiatives. Thereby, the concept of a mutually hurting stalemate mirrors an expected utility argument (Zartman, 2001: 8). Consequently, both theories predict that mediation should occur only in very specific situations of a conflict, that is, when all parties are willing to engage in talks.

A mutually hurting stalemate essentially depends on previous conflict. This theory therefore begs the question: under which conditions does preventive diplomacy in early and low-intensity conflicts start? A sizeable empirical literature discusses the question of when mediation occurs. However, only few publications address intrastate conflicts. The majority of studies focus on the determinants of mediation in militarized interstate disputes (cf. Melin, 2011; Terris & Maoz, 2005; Böhmelt, 2009; Beardsley, 2010). A few studies have examined third-party offers to mediate or the willingness of conflict parties to accept mediation in civil wars. The findings indicate that mediation is associated with several structural factors, such as the conflict type, historical ties or the overall number of potential mediators, and is more

likely to be accepted late during civil wars (Greig & Regan, 2008; Melin & Svensson, 2009; DeRouen, Bercovitch & Pospieszna, 2011). Furthermore, the relative strength of government and rebels predicts higher probabilities of mediation. The stronger the rebel group is vis-à-vis the government, the higher the probability of mediation (Clayton, 2013). The observation that mediation is more likely in later stages of the conflict or when rebel groups are strong reflects the prediction that a mediated conflict resolution is more likely when the conflict turns into a hurting stalemate (Zartman, 1995, 2001). However, this finding is of no help if the goal is to evaluate changes in the prospects for preventive diplomacy in earlier conflict phases. In these circumstances, duration is not applicable and the relative strength should be highly uncertain early in a conflict. Furthermore, while a hurting stalemate might not be conditional on a long conflict history (cf. Zartman, 2001: 13), it is difficult to identify ripeness or a hurting stalemate ex ante and it is unclear how to operationalize and measure the concept (cf. Schrodt, Yilmaz & Gerner, 2003). In fact, the hurting stalemate refers to the subjective perceptions of the conflict parties, which obviously are difficult to measure. This study addresses this difficulty. I argue that the information provided by conflict events and the short-term evolution of the conflict are a key empirical strategy to anticipate situations in which early conflict mediation is more likely to occur. The study proposes a theory whose operationalization resembles a stalemate and which predicts mediation onset accurately.

Understanding the circumstances in which mediation occurs is also of vital importance for any evaluation of mediation effects. Impact assessments require an appropriate counterfactual scenario to identify the effect of mediation (Holland, 1986). Since mediation is by no means randomly assigned to conflicts, but rather self-selected by the conflict parties, knowing the determinants of mediation is of vital importance to study mediation effects. For this reason, several publications that focus on the effects of mediation in intrastate conflicts have incorporated analyses of mediation onset based on structural factors as part of selection equations which control for the self-selection into mediation (cf. Gartner, 2011; Lounsbery & Cook, 2011; Melander, Möller & Öberg, 2009). This study adds to this research and demonstrates that short-term conflict events are important predictors of mediation and should not be neglected.

Thus far, there are very few studies that focus on the relationship between short-term conflict events and mediation (exceptions are Schrodt & Gerner, 2004;

Greig, forthcoming a,b). Nevertheless, this research has provided important insights into how closely mediation is associated with conflict dynamics. Recent work has shown that military success by rebel groups appears to shorten the interval between conflict onset and a first mediation attempt. Furthermore, battles near the capital and the geographic location and dispersion of a conflict seem to correlate with mediation (Greig, forthcoming a,b). My study builds on this work and generalizes the theoretical framework of how geography interacts with conflict intensity. I argue that conflict dynamics change the perceived probability of victory, which in turn moderates the perception of increasing conflict intensity. I demonstrate that rising conflict intensity is a strong predictor of mediation, but does not necessarily increase the probability of mediation. Quite the contrary, depending on the conflict circumstances, increased conflict may have no or even a negative effect. In the terminology of the hurting stalemate analogy, even high conflict intensity may not hurt, if the probability of victory is perceived to be high.

Beyond the contribution to mediation research, the results extend the literature on forecasting conflict towards the prediction of interventions. Accurate out-of-sample predictions are 'generally considered the gold standard for model assessment', since statistical significance does not guarantee predictive accuracy (Beck, King & Zeng, 2000: 22). In line with this assessment, some of the most prominent studies in the civil war literature fail to predict, despite impressively significant results (Ward, Greenhill & Bakke, 2010). Hence, it is of vital importance to investigate the predictive accuracy of current theories of mediation, in order to determine the substantial relevance of these theories. This study takes this step and provides one of the first out-of-sample assessments of mediation theory. It evaluates the predictive power of the proposed expected utility theory of mediation and demonstrates that theoretically motivated models may predict well.

Theory

Any attempt of conflict management by external actors presents an involvement in the internal affairs of a foreign country. Hence, given that such third-party intervention might clash with the norm of sovereignty (Gartner, 2011: 382), the question arises under which condition a third party is willing to engage itself in a conflict and serve as a mediator. Since any intervention is associated with some costs, the decision process behind an intervention may be conceptualized by an expected

utility theory (Melin, 2011). However, compared to other forms of intervention, mediation is an attractive option since it does not collide as extensively with the norm of sovereignty and typically requires limited logistic efforts. These limited costs can be contrasted with the expected benefits of mediation for the mediator. Such benefits for the third party may stem from very different motives, such as moral, strategic or economic considerations (Greig & Regan, 2008: 762). If the expected benefits from mediation exceed its cost, a rational third party would be expected to initiate mediation.

To assess variation in the level of mediation propensity, many arguments have been centered on characteristics which are time invariant. For example, Greig & Regan (2008) argue that third parties are more likely to offer mediation if they have historic ties to the country at conflict or a particular strategic interest in the region (see also Melin & Svensson, 2009). Yet, although the explanation of these ties is highly relevant to explain mediation across cases, it does not address the issue of the timing of mediation since these ties are constant characteristics and do not vary over the course of the conflict.

In contrast to these time-persistent attributes, a moral determination to prevent bloodshed may change with the development of a conflict. As a conflict intensifies and the plight of the population increases, alarmed third parties should be more inclined to intervene. Similarly, the political or economic concerns of neighboring states or regional organizations can be heightened by more extensive hostilities (cf. Gartner, 2011). Whether neighbors are affected by instability on their own through cross-border links such as ethnic groups, whether they cope with large refugee flows or whether they experience the economic fall-out from regional instability – all of these factors should increase the likelihood that a regional actor gets involved when the conflict escalates. Similarly, a power with strategic interests in the region should be more inclined to react if the intensity of the conflict affects its own interests. Hence, the evolution of the conflict at a certain point in time should have a substantial effect on the utility of mediation and thus on the propensity of this form of intervention, and I expect that increased fighting increases the probability of mediation.

Thus far, only the decision of mediators has been considered. Nevertheless, the hypothesis that mediation is affected by conflict intensity is similarly applicable to the decision logic implied for the conflict parties. The literature review highlighted the benefits of mediation and indicated that conflict parties are likely to profit from a negotiated settlement fostered by mediation. Thus, with the help of a mediator, the parties could avoid the costs of conflict. This expected benefit stands in stark contrast to the limited number of conflicts that experience early conflict mediation. A predominant explanation for this phenomenon is that mediation is associated with particular costs on its own. Hence, the decision to accept mediation can again be expressed as an expected utility problem. Prior to mediation, any conflict party will face the decision to choose between continued conflict without mediation or accepting a third-party mediator. The literature on the bargaining model of war has conceptualized the expected utility of conflict as the difference between the probability of winning the conflict and the costs of conflict (Fearon, 1995; Kydd, 2010). The expected utility of mediation can be thought of in a similar way. Considering these two options, a conflict party should chose mediation if the expected utility of mediation exceeds the utility of conflict (cf. Melin, 2011). In light of this expected utility, it becomes clearer which time-varying factors might influence a conflict party's decision to accept mediation.

Recent research on mediation has placed an important emphasis on the costs of both mediation and conflict. First and foremost, despite the benefits of mediation, this form of conflict management is described as being especially costly in intrastate conflicts. Since intrastate conflicts usually consist of a struggle between incumbents and challengers, any official negotiations between these conflict parties require that the incumbent is willing to accept the challenger as a legitimate actor (Melin & Svensson, 2009). The reluctance to acknowledge the legitimacy of a challenger can be rooted in the specific nature of the conflict. As Walter (2009) describes, the conflict situation in intrastate conflicts is often plagued by severe information asymmetries, especially on the part of the government. For example, it is often unclear to what extent a rebel group is the true representative of a subpart of the population. In such case, legitimizing this organization would be highly problematic. Furthermore, a government may be uncertain whether negotiating with a challenger would create a precedent for other groups which might then use violence to coerce the government into formal talks (Walter, 2009: 250f.).

Aside from the question of legitimacy, another problem may be associated with mediation. Once negotiations commence, the conflict parties will have to make compromises to achieve a settlement. In many circumstances, this inherent requirement will provide leaders with a challenge to sell these compromises to the members of their group. Similarly, rebel groups can be quite heterogeneous, that is, they may consist of moderate

representatives and more extremist factions. If an extreme faction is unsatisfied with the prospective results of a mediation round, members of the faction might break with the original group and form their own movement. Empirical results underscore this argument and show that rebel groups splinter more frequently during mediations (Lounsbery & Cook, 2011). If a mediated agreement fails due to splinter groups, all moderate actors involved lose. The government has legitimized an actor, granted concessions, but failed to secure peace. On the other hand, rebel leaders are left without results and with a smaller and less powerful movement.

All of these points indicate how mediation may be associated with high costs. Hence, the discussion underlines that despite their potential, mediations are by no means an easily acceptable alternative to continued internal conflict. One set of circumstances which may render mediation more attractive occurs when the conflict costs become extremely high. In most conflicts this should be the case when the conflict proves that the other side is capable of inflicting serious harm and the conflict costs start to mount (Greig, forthcoming a). Therefore, as in the description of mediator interests above, one would expect that mediation should become more likely when the conflict becomes especially intense.

However, this expectation presents an incomplete picture of the strategic nature of the problem. If one considers that the costs of mediation include the difficulty of selling potentially very costly compromises to members of the group, then high conflict intensity alone may not be enough to convince leaders that mediation is a viable alternative to conflict. This problem is particularly acute for the incumbent regime. In any compromise, the regime will have to convince members of its support base to give up on a substantial amount of power and privileges. In order for an incumbent and his supporters to accept the option of costly compromise, the situation might require an imminent threat of losing much more, if not all the power and privileges. Such a situation occurs if the probability of winning the conflict becomes small. If the perceived probability of winning is high, then even substantial conflict costs may not be enough to convince an actor to accept mediation. Quite to the contrary, if an actor is very certain that he will win, then the costs of conflict will most likely be paid by the adversary. In this case, observing intense fighting might even be an indicator that the winning side is able to severely harm and militarily defeat the enemy. Consequently, a high probability of military victory may outweigh the cost of conflict in some situations, that is, the expected utility of conflict increases despite an overall more deadly

conflict. As a result, under these circumstances increased fighting might even decrease the probability that an actor accepts mediation. Therefore, the theoretical prediction from the expected utility perspective on mediation would yield that mediation is only accepted if the conflict intensity is high and the probability of winning is so low that the expected utility of conflict is smaller than the expected utility of mediation.

Thus far this theoretical prediction relies solely on a consideration of the individual expected utilities of the actors. However, for mediation to occur, all parties need to be willing to negotiate. The bargaining model of war would posit that actors accept a bargained solution if actors agree about the probability of victory and fear the conflict costs (cf. Fearon, 1995). Yet, the respective probabilities of winning the conflict and the conflict costs are usually highly uncertain, especially in early phases of civil conflicts (Walter, 2009). Although this uncertainty might cause the fighting in the first place, the events on the battlefield are assumed to eventually reveal information on the probability of victory and the individual conflict costs (cf. Slantchev, 2003). While this may lead towards similar perceptions of the current probability of victory, the actors will only be willing to accept mediation if the costs of mediation are lower than the costs of conflict. If the actor with the higher probability of victory expects to impose the majority of these costs on his opponent, then this may create a situation in which he would not see the conflict intensity as costly. In lopsided situations, the stronger actor may therefore see high intensity as military progress, rather than an incentive for a diplomatic solution.

Furthermore, the probability of victory may be changing with the events on the battlefield, since losses and gains on the battlefield change the relative capabilities of the actors. If this temporal dimension is considered, constellations with lopsided capabilities may not see mediation even if the actors agree on the current probabilities of success. In a situation where actor A loses and believes that actor B perceives victory to be within reach, actor A will infer that B expects to impose his ideal point through a victory. As a consequence, actor A must assume that actor B will only agree to a mediated solution which grants him concessions similar to those which he would gain in a military victory. If actor A believes that his chances of success might improve in the future, then he may prefer to fight and hope for a situation which would improve his bargaining position in a future negotiation round. Hence, given the prospect of future improvements, an actor might decline a mediation offer if he sees his current probability of a military victory as

very slim. This strategic reasoning is perfectly reflected by a quote from the Syrian civil war. Shortly after the strategically relevant Syrian town of al-Qusayr fell to the Syrian regime, a leading commander of the rebel movement was quoted in the international press as saying: 'What can we ask for when we go very weak to Geneva? . . . The Russians and the Iranians and the representatives of the regime will say: "You don't have any power. We are controlling everything. What you are coming to ask for?"' (Gordon, 2013). With a similar logic, actor B could be unwilling to negotiate if he expects that continued fighting could further weaken actor A and the resulting gains would outweigh the cost of additional fighting. The lure of future gains is only mitigated when both sides have very similar chances of winning or losing the contest.

Hence, the theoretical discussion predicts that the probability of mediation is highest when conflict costs are high but neither side expects to be moving towards a military victory. The effect of conflict costs is therefore dependent on both sides' perceived probability of winning the conflict. This prediction mirrors the conclusion that genuine mediation attempts are more likely under the condition of a hurting stalemate (Zartman, 1995, 2001). However, a central problem regarding the applicability of the mutually hurting stalemate concept still stems from the fact that the circumstances under which both parties perceive a situation as a hurting stalemate are difficult to operationalize. The parameters 'conflict costs' and 'probability of victory' are similarly abstract, but may be operationalized in order to generate testable hypotheses.

The bargaining theory of war has argued that the process of fighting provides information on both the relative strength and conflict costs (see e.g. Slantchev, 2003). Based on this logic, the first parameter is not difficult to operationalize. Conflict costs can be approximated as a function of conflict intensity. However, as discussed above, conflict intensity might not be interpreted as costly if the probability of victory is sufficiently high. Hence, conflict costs should be a function of both parameters. A reasonable proxy for the probability of victory may be the geographic location of the conflict. The research on conflict location has shown that conflicts in close proximity are initiated by rebels that are strong relative to the national government. In contrast, relatively weak groups are more likely to fight in the country's periphery (Buhaug, 2010; Buhaug, Gates & Lujala, 2009). Therefore, the geographic location should enable researchers to classify situations according to the approximate probability of victory for both actors. A

particularly dangerous situation for the incumbent regime arises when a rebel group is able to launch attacks on the national capital. Furthermore, in secessionist conflicts a similar situation may develop if rebels are able to threaten the government stronghold in the contested region, such as a major administrative center. If the rebels are capable of attacking in such proximity to the center of power, then the probability of a rebel victory should be comparatively high. Under these circumstances, rebels may not perceive conflict intensity as costly, since they are imposing these costs on the government. In early conflict situations, such success may ultimately also affect the goals which rebels set themselves. The gains on the battlefield could foster optimism about their overall chances of victory and lead them to readjust their goals. In these situations, previously secessionist campaigns might start to aim for government control (Buhaug, 2006).

In the opposite case where most conflict events occur in peripheral areas, the government should have a good chance of containing the conflict. Under these circumstances, rebels should be relatively weak and the probability of a rebel victory should be comparatively low. If the government is able to fight on its opponent's turf and further weaken the rebels, then this should decrease its willingness to accept mediation. Therefore, the theoretical discussion suggests that the effect of conflict intensity should vary with the distance of the fighting from the capital or similar centers of power. This gives rise to the following prediction of an interaction effect between conflict intensity and the conflict location.

> *Hypothesis 1:* Given that fighting occurs in the capital or very far from the capital, the following pattern holds: the higher the conflict intensity, the lower the probability of mediation.
> *Hypothesis 2:* In intermediate distances to the capital, the following pattern holds: the higher the intensity of the conflict, the higher the probability of mediation.

Hence I expect the effect of fighting intensity to be conditional on the distance to the capital and to follow an inverted U-shaped functional form. While higher conflict intensity is related to a lower probability of mediation if fighting occurs at a great distance or in the capital, it is related to a higher probability of mediation if fighting occurs in intermediate distances to the capital.

Research design

To assess the ability to anticipate ripe moments for preventive, early conflict mediation, the analysis draws on a

dataset of all low-intensity, intrastate armed conflicts in Africa from 1993 to 2004. Low intensity is defined in accordance with the Uppsala Conflict Data Program definitions as more than 25, but less than 1,000 battle-related deaths per calendar year (Gleditsch et al., 2002). In order to study preventive mediation, the analysis thereby focuses on all low-intensity conflicts at the start of a conflict. Once a conflict crosses the threshold of 1,000 deaths, subsequent years are censored and do not reappear even if the conflict recedes to lower intensity again. If a conflict caused more than 1,000 casualties in its first year, then this first year is included. Thus, the dataset covers all cases which can be considered in an 'early stage' of conflict with low intensity.[1] The unit of analysis is a conflict dyad consisting of the government of a state and a rebel organization conducting an armed conflict. Due to the high temporal precision, it is possible to aggregate the data on a monthly level and capture changes in conflict intensity fairly accurately over time.

The dependent variable is based on the Uppsala Conflict Data Program (UCDP) Managing Intrastate Low-level Armed Conflict dataset (MILC), which records worldwide information on individual conflict management events with daily precision (Melander, Möller & Öberg, 2009). The outcome variable is a binary indicator of mediation that takes on the value of 1 if any mediation events took place in a given month. The coding is based on the mediation types identified in the UCDP MILC dataset, which distinguishes mediation from direct talks between the conflict parties, indirect talks where the mediator transmits information between the parties, and mediation where the mode of communication is unclear (Melander, Möller & Öberg, 2009: 73). If any of these categories occurred in a given dyad-month, the mediation variable is coded as 1. To exclusively focus on the onset process, all observations of continuing mediations are excluded from the analysis. Once the mediation ends, but the conflict continues, the conflict re-enters the dataset. This provides a more rigorous test of the model, since autocorrelation due to consecutive months with the same mediation initiative does not add to the predictive power.

The core independent variables are coded based on the UCDP Georeferenced Event Dataset (GED), which documents fatal events resulting from armed conflict on the African continent with high temporal and geographical precision (Sundberg & Melander, 2013). These variables consist of the number of monthly casualties, the number of fatal battles, and the average distance of these events from the national capital.

Casualty numbers are generally considered to be indicators of conflict intensity. Aggregated levels of battle-related deaths are used for this purpose in many studies, including studies of mediation in civil wars (Greig & Regan, 2008: 772f.). Nevertheless, in most cases, casualty estimates are highly volatile and do not give an indication of how frequently fighting occurs. Hence, I use two alternative operationalizations of conflict intensity: the count of total casualties caused by a conflict dyad per month and the number of fatal events from which the casualties occur. If multiple reports exist, I rely on the best estimate of casualty figures (Sundberg, Lindgren & Padskocimaite, 2010). Individual estimates are aggregated into monthly estimates based on the end date of an event. This is to ensure that all fighting occurred within a month or prior to it, given that the event is attributed to a period which stretches over more than one month. Since I expect the effect of one additional casualty to decrease with the overall level of casualties, I take the natural log of the casualty indicator. For the second operationalization of conflict intensity I count the number of fatal events per month that result from fighting between the two conflict parties in the dyad. Equivalent to the casualty case, events are attributed to months based on their end date.

The geographical distance of events from a point in a country can be calculated based on information of the approximate latitude and longitude of events as well as the geographical coordinates of the point of interest. In the analysis I use the geographical distance to the capital to get a proxy for the likelihood that an event presents an immediate threat to a particular incumbent. For this purpose, I calculate the great circle distance between two points ('as the crow flies') between each event's geographical site and the national capital using the Haversine formula. The information is than aggregated at the monthly level to document the average distance of fatal events from the capital during a particular month. If no conflict events occur in a month, then the distance from the previous month with conflict is imputed. This reflects the idea that in the absence of new information, actors should be unlikely to update their belief about the location of a conflict. In periods of few conflict events and when the conflict is relatively dispersed, the average distance might fluctuate. Nevertheless, a month with only a single event which deviates from the previous

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[1] The African conflicts used for this analysis together represent 49% of all low-level conflicts worldwide and 43% of all documented conflict management events worldwide between 1993 and 2004 (excluding the Israeli–Palestinian conflict) (Melander, Möller & Öberg, 2009).

geographic locations will most likely not lead an observer to update his belief of the geographic center of the fighting. Hence, similar to Greig (forthcoming b), I code the final distance measure as the weighted moving average of the previous six months, whereby the weight of the distance in previous months decays with the number of lags. As with the casualty indicator, I expect a one-kilometer change in distance to have a much stronger effect the closer the distance to the capital and therefore log the distance measure. To allow for a curvilinear effect of distance I further code polynomials of the distance measure.

This investigation of mediation enables a much finer temporal analysis compared with previous models. Hence, the question arises whether the expected effects occur instantly or with a particular temporal delay. To generate predictions with a significant advance, I include the core independent variables with a lag of three months, that is, one-quarter of a year. I am not aware of any work that has considered how fighting intensity precedes mediation temporally. As a consequence, there is no concrete theoretical argument which implies a particular lag. Nevertheless, the theoretical arguments presented thus far suggested that due to the political costs of mediation, it is highly unlikely that conflict parties will rush to the negotiation table in a particular situation. Rather, the decision to participate in mediation should come after careful consideration and bilateral talks with third parties. In particular, if a regime still has functioning institutions, these institutions might have to issue a mandate for mediated negotiations. Furthermore, any conflict party will have to convince its members that mediation is a good choice. Lastly, mediation, in particular direct talks between the conflict actors, requires some logistical preparations even after the political decision has been made. Based on these considerations I expect that some delay after particularly severe conflict situations is adequate. Yet, to make sure that relying on three-month lags does not affect the results, the robustness checks reported in the online appendix assess the sensitivity of the findings to using different lag structures; this provides qualitatively similar results.

To avoid omitted variable bias, I include several additional control variables which might affect both the theoretical variable of interest and the outcome. A potential confounder is the general capability of a rebel movement. The ability to recruit or rearm most likely affects battlefield dynamics as well as the likelihood of mediation. To ensure that the observed correlation between battlefield events and mediation is not spurious, I include indicators of overall rebel capabilities relative to the government as documented in the Non-State Actor Dataset (Cunningham, Gleditsch & Salehyan, 2009). Similarly, other forms of conflict management might affect both the conflict dynamics and the likelihood of subsequent mediation. I therefore include a number of binary control variables which capture the presence of other means of conflict management, such as bilateral talks with a third party, peacekeeping, observer missions or good offices (cf. DeRouen & Möller, 2013). All of these variables are coded from the MILC dataset and take on the value 1 if a particular conflict management was used at that time. Since these are dynamic variables which change over time, I also lag them by one-quarter of a year. I also include the distance to the closest major city as a control, since an offensive against a city other than the capital might change the distance to the capital as well as the probability of mediation.[2] The overall probability of mediation as well as conflict intensity may shift with country characteristics. A democratic regime might be more open towards diplomacy, whereas more powerful states could be less willing to accept a mediator (cf. Gurses, Rost & McLeod, 2008). To capture these variations, I include polity scores and GDP per capita in the model (Marshall & Jaggers, 2011; World Bank, 2013; both taken from Teorell et al., 2013). Similarly, characteristics of the international political landscape may shape the pool of potential mediators. As democracies are arguably more likely to offer mediation, I include the worldwide number of democracies as a predictor variable which I calculate as the number of states with a Polity2 score larger than five (cf. DeRouen, Bercovitch & Pospieszna, 2011). Descriptive statistics for all variables are documented in the online appendix.

This article analyzes the effect of conflict costs on mediation onset in a particular conflict and at a specific point in time. The onset of mediation in a given month is documented using a binary indicator. Since the effect of time-varying covariates on the timing of mediation is the quantity of interest and mediation may happen multiple times in a conflict, I use discrete event history models of repeated events to test my hypothesis. Discrete event history models are ideally suited to estimate the effects of time-varying covariates when the units are observed in intervals, in this case in months (Box-Steffensmeier & Jones, 2004). I specify

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[2] Major cities are defined as the five most populous cities of a country (analogous to Greig, forthcoming a). However, I exclude cities that are very close to the capital (< 30 km) since distances from twin cities such as Khartoum and Omdurman are substantively and statistically hard to distinguish.

Table I. Statistical models of mediation onset (all models are discrete-time duration models)

	(1)	(2)	(3)	(4)
Casualties (log)$_{t-3}$	0.142 (0.114)	0.074 (0.216)		
Average distance from capital (log of km)$_{t-3}$		0.556 (0.504)		0.313 (0.359)
Average distance from capital (log of km)^2 $_{t-3}$		–0.047 (0.074)		0.002 (0.064)
Casualties*Distance$_{t-3}$		0.525** (0.115)		
Casualties*Distance^2 $_{t-3}$		–0.106** (0.022)		
Number of fatal battles$_{t-3}$			0.094† (0.050)	–0.161 (0.225)
Fatal battles*Distance$_{t-3}$				0.727** (0.150)
Fatal battles*Distance^2 $_{t-3}$				–0.145** (0.026)
Cumulative casualties (log)$_{t-3}$	0.021 (0.111)	–0.093 (0.160)	0.018 (0.099)	0.004 (0.142)
Bilateral talks$_{t-3}$	1.018* (0.461)	1.178* (0.487)	0.987* (0.483)	1.291* (0.563)
Peacekeeping mission$_{t-3}$	0.393 (0.593)	0.390 (0.588)	0.367 (0.625)	0.511 (0.625)
Observer mission$_{t-3}$	0.696 (1.017)	0.493 (1.081)	0.838 (1.052)	0.145 (1.083)
Good office$_{t-3}$	–0.921† (0.517)	–1.040* (0.456)	–0.921† (0.499)	–1.068* (0.528)
Previous mediation$_{t-3}$	1.224* (0.603)	1.056† (0.556)	1.227* (0.623)	0.948 (0.636)
Combined Polity score	0.040 (0.097)	0.102 (0.099)	0.038 (0.099)	0.097 (0.098)
GDP p.c. (log)	–0.318 (0.399)	–0.050 (0.408)	–0.329 (0.401)	0.082 (0.442)
Number of democracies	0.020 (0.054)	–0.023 (0.060)	0.010 (0.055)	–0.016 (0.061)
Rebels much weaker	–1.992* (0.985)	–2.166* (1.035)	–2.064* (1.017)	–2.119* (1.027)
Rebels weaker	–0.853 (0.800)	–1.290† (0.784)	–0.784 (0.795)	–1.361 (0.833)
Average distance to closest city (log)$_{t-3}$		–0.180 (0.142)		–0.260 (0.180)
Constant	–2.541 (6.443)	1.256 (7.205)	–1.222 (6.725)	–0.308 (7.180)
Observations	1,233	1,233	1,233	1,233
Log-likelihood	–126.437	–118.458	–125.729	–110.976

Cluster robust standard errors in parentheses; $^†p < 0.1$, $^*p < 0.05$, $^{**}p < 0.01$; all models are logit models and include polynomials of time since last event (coefficients not reported).

the functional form as a logit function.[3] To model the baseline hazard of the model I rely on a cubic polynomial of time since the last event (Carter & Signorino, 2010). I address changes in this hazard rate for repeated events based on the theoretical arguments that mediation is initially unattractive for the incumbent, since it legitimizes the opponent. However, once an incumbent has accepted mediated talks with a particular challenger, he should be less reluctant to do so in the future, since he has already paid the cost of legitimizing this opponent. Hence, a previous mediation attempt should drastically reduce the costs of additional mediation. I therefore include an indicator of previous mediation to allow the hazard rate to increase once an initial mediation has occurred.

Analysis

Results and discussion

In the statistical analysis, I test the effect of the three main theoretical variables of interest: conflict intensity,

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[3] Alternative models are documented in the online appendix.

distance, and their interaction. The distance to the capital variable is included in the original as well as the squared form which models a quadratic association. This reflects the theoretical expectation that events in close proximity and with a large distance to the capital should display similar patterns that differ from the patterns observed for intermediate distance. The interaction similarly consists of an interaction between the polynomials and the intensity variable.

Table I gives the coefficient estimates for two different model specifications which use either casualty numbers or the number of fatal battles as a conflict intensity indicator. Both specifications yield similar results. In the models with only the conflict intensity variables and no interaction (Models 1 and 3), prior conflict intensity has virtually no association with mediation. The coefficients of the number of casualties and the number of fatal battles are close to zero and not or only marginally statistically significant. Once the interactions and the distance measure are included, these results change drastically. While neither distance nor distance squared is statistically significant, the interaction terms are strongly statistically significant. The positive coefficient of the interaction with the distance to capital and the negative
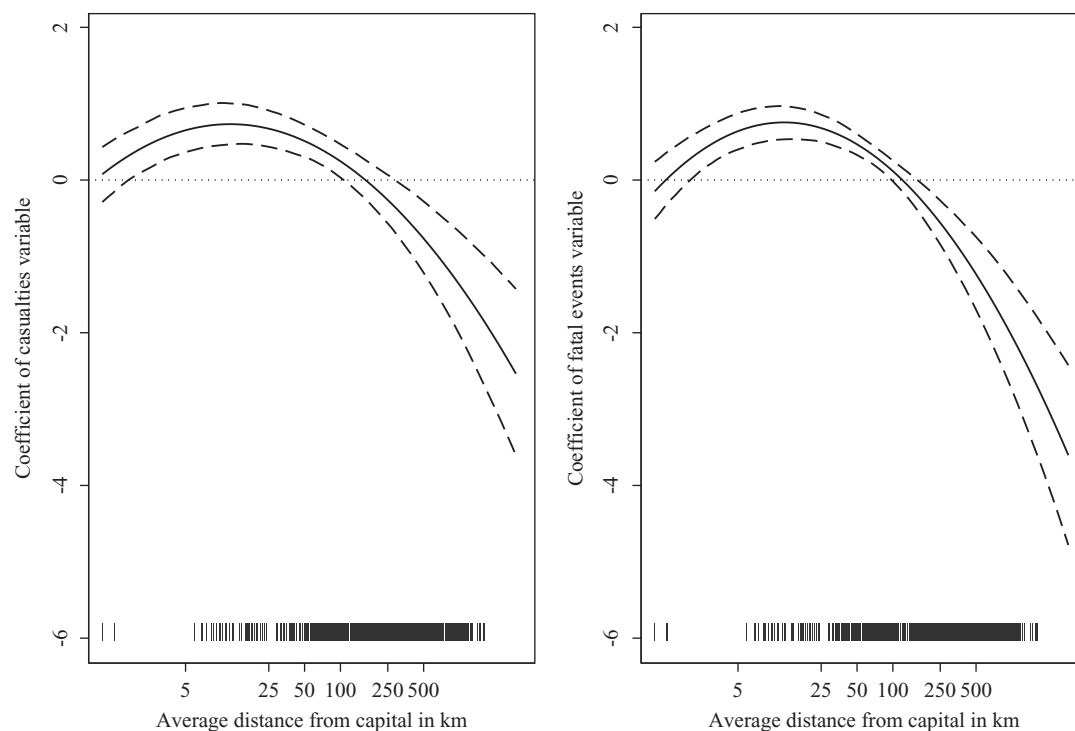
Figure 1. Interaction of conflict intensity variables and average distance from the capital

The graph displays the substantive coefficient (change in log odds) for both measures of conflict intensity across varying distance from capital (dashed lines depict the 90% confidence interval based on simulations with 1,000 draws), based on Models 2 (left) and 4 (right).

sign of the coefficient for the interaction with the squared distance give a first indication of an inverted U-shaped relationship. Nevertheless, the coefficients of interactions in themselves are hard to interpret, not to mention the additional complication introduced by the quadratic functional form.

To allow for a better interpretation of the effect of conflict intensity, Figure 1 displays the substantive regression coefficient for both conflict intensity measures, conditional on the distance to the capital (based on Models 2 and 4). The plot nicely displays the theoretically predicted pattern. Both measures of conflict intensity are only positively associated with mediation onset when the average distance from the capital lies in a close to intermediate range. If the fighting occurs on average in the capital, increases in the number of fatalities or fatal battles have no significant effect. If the conflict occurs virtually exclusively at a large distance from the national capital, then increases in the conflict intensity are correlated with a decrease in the number of mediation onsets. The plots depict the changes in the coefficients of the conflict intensity variables conditional on distance. Substantively, the plots display the change in the log odds of mediation, for example in

Model 4 one additional battle conditional on the average distance from the capital. For a given distance, the plotted coefficient estimate can be exponentiated, which will yield the change in odds for one additional event.

To assess the magnitude of the joint effect of both conflict intensity and distance, Figure 2 displays how a change in conflict intensity changes the predicted probability of mediation, given different distances to the capital. The plot thereby depicts an increase in intensity from the 25th to the 75th percentile, all other variables held at their mean. Given that conflict occurs on average 25 km from the capital, an increase from no battle-related deaths to 22 casualties increases the predicted probability of mediation by roughly 20%. For the same scenario, an increase from no battles to three fatal battles in a month predicts a similar increase in the predicted probability of mediation. This pattern stands in contrast to the scenario in which the conflict occurs at more than 100 km from the capital. The same increases in casualties or fatal battles reduce the predicted probability of mediation by 10% to 20%.

Overall, these findings correspond to the theoretically expected pattern. When the conflict occurs at a great distance to the capital, higher conflict intensity is associated
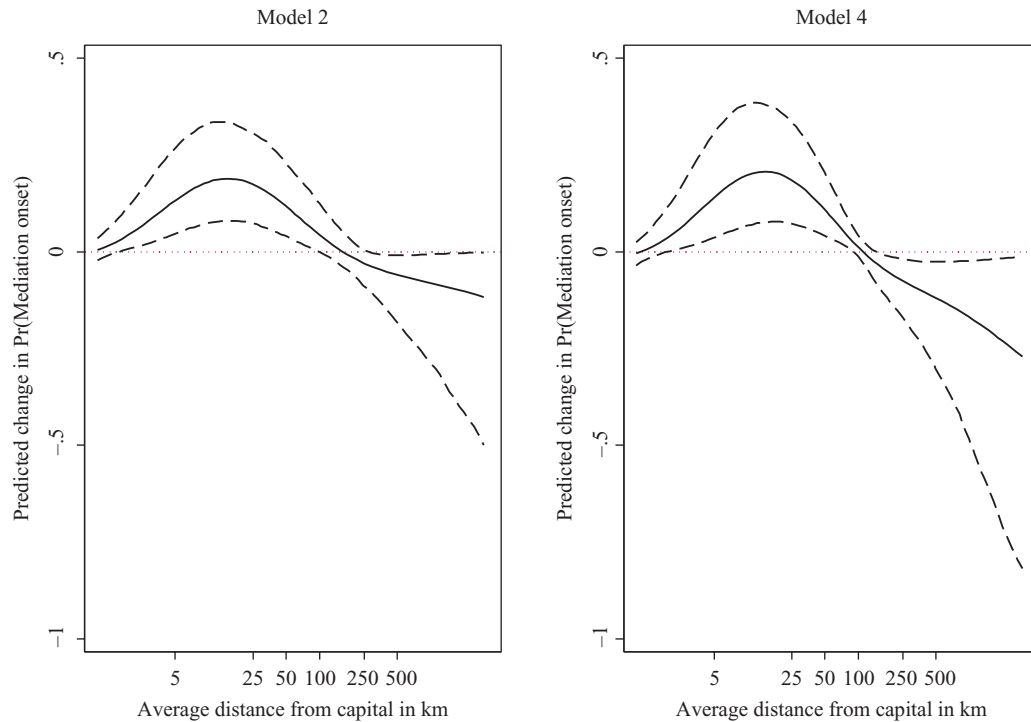
Figure 2. Joint effect of conflict intensity variables and average distance on the predicted probability of mediation onset
The graph displays the change in predicted probability when conflict intensity variables are changed from the 25th to the 75th percentile; all other variables are held at their means (dashed lines depict the 90% confidence interval based on simulations with 1,000 draws).

with reductions in the probability of mediation onset. On the other hand, in conflict contexts where the fighting occurs on average at intermediate distances to the national capital, increases in the conflict intensity correlate with a higher propensity of mediation onset. In cases where the center of the conflict lies in the capital city, increased conflict has no association with mediation onset. When the rebels are strong enough to escalate and take the fight close to the seat of government, but unable to concentrate the fighting directly in the capital, early conflict mediation is most likely. On the contrary, when the government is able to limit the fighting to the country's periphery and the intensity increases, mediation occurs very rarely in early conflict situations. These results allow classification of early conflict situations according to their propensity of mediation onset. To further assess the accuracy of this theoretically driven classification, the subsequent section analyzes the predictive power of the model in greater detail.

To ensure the robustness of the results, I conduct several sensitivity checks. All results are documented in the online appendix. To ensure that the inverted U-shaped interaction is not a result of the quadratic model specification, I assessed the effect of higher order polynomials of distance as well as local polynomial regression. Higher order polynomials do not improve the model fit, but estimate similar inverted U-shape interactions, that is, a positive association between conflict intensity and mediation at close to intermediate distances to the capital and a negative association for conflicts in the periphery. Furthermore, I employ dyad-based jackknife resampling to show that excluding particular conflicts does not change the results. Another set of robustness checks addresses the fact that the models might omit relevant constant or slowly changing structural variables which could explain cross-conflict variation. To assess whether unobserved cross-conflict variation is relevant, I included random effects in the respective models. Interestingly, likelihood ratio tests support the pooled models over the random effects models. Furthermore, the coefficient estimates remain virtually unchanged. In line with this finding, dyad as well as dyad-year fixed effects logit analyses of mediation incidence also confirm the results and estimate very similar coefficients of the core variables, albeit with wider confidence intervals due to the less efficient estimator.
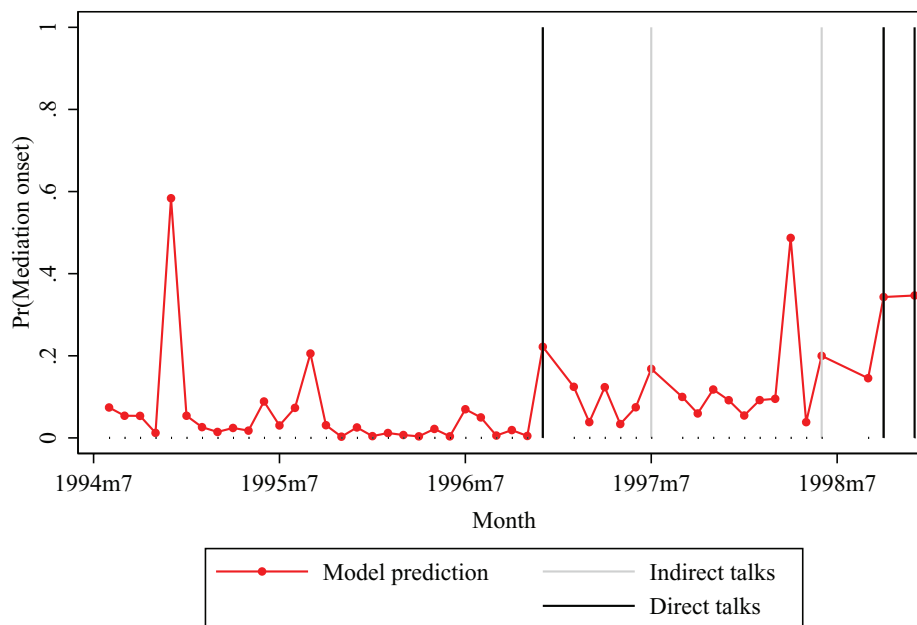
Figure 3. Time series of predicted probability of third-party mediated talks between the Government of Burundi and the CNDD (in-sample, based on Model 4)

Dyad ID: 10012; Observed from 1994 to 1998; Incompatibility concerning government

Predictive power

Although the model seems to confirm the theoretical expectation, it is unclear how well it enables anticipation of mediation onset. While this article is substantially interested in prediction, assessing the predictive power of statistical models is an important step to ensure that the correlations implied by the model explain substantial proportions of the outcome. Even impressive, statistically highly significant results in prominent conflict studies have been found to explain very little variation (Ward, Greenhill & Bakke, 2010). Hence, I explicitly evaluate the predictive power of the theoretically derived model.

If the model correctly picks up the theoretically expected association with conflict events, then the predicted probabilities should vary not only across cases, but also over time within single conflicts. The model performs well in capturing such short-term variation in the probability of mediation. Its predictive power does not rely on cross-country variation but rather accurately classifies particular months within individual conflicts according to their propensity to experience mediation. As a graphical case study, Figure 3 plots the in-sample model prediction over time and indicates the start months of talks between the government of Burundi and the rebel movement Conseil National Pour la Défense de la Démocratie (CNDD). The model pools direct and indirect talks in one mediation onset indicator and therefore does not distinguish between the modes of talks. Nevertheless, the figure indicates how the model quite precisely captures both indirect and direct talks. Overall, the model correctly classifies most initial months of the conflict as having a low probability of mediation and accurately anticipates an increased probability for the month with the first round of talks. Following the first talks, the model correctly predicts increased probabilities of talks when talks occurred. Further predicted probability time-series graphs for each dyad in the study are documented in the online appendix.

The Burundian case exemplifies how the model captures the within-conflict variation. Nevertheless, the figure relies on data which were used to estimate the model and the fit could therefore be the result of overfitting the model. To safeguard against this problem, I employ a split-sample approach. Specifically, I divide the data into the period from 1993 to 2001 and use this part of the dataset to estimate the model again. Thereafter I generated predicted probabilities for the observations in this sample (in-sample prediction). Finally I use the model estimates to predict the probability of mediation for the excluded data spanning the time from 2002 to 2004 (out-of-sample prediction).

I assess the accuracy of the in- and out-of-sample model predictions using Receiver Operator Characteristic (ROC)
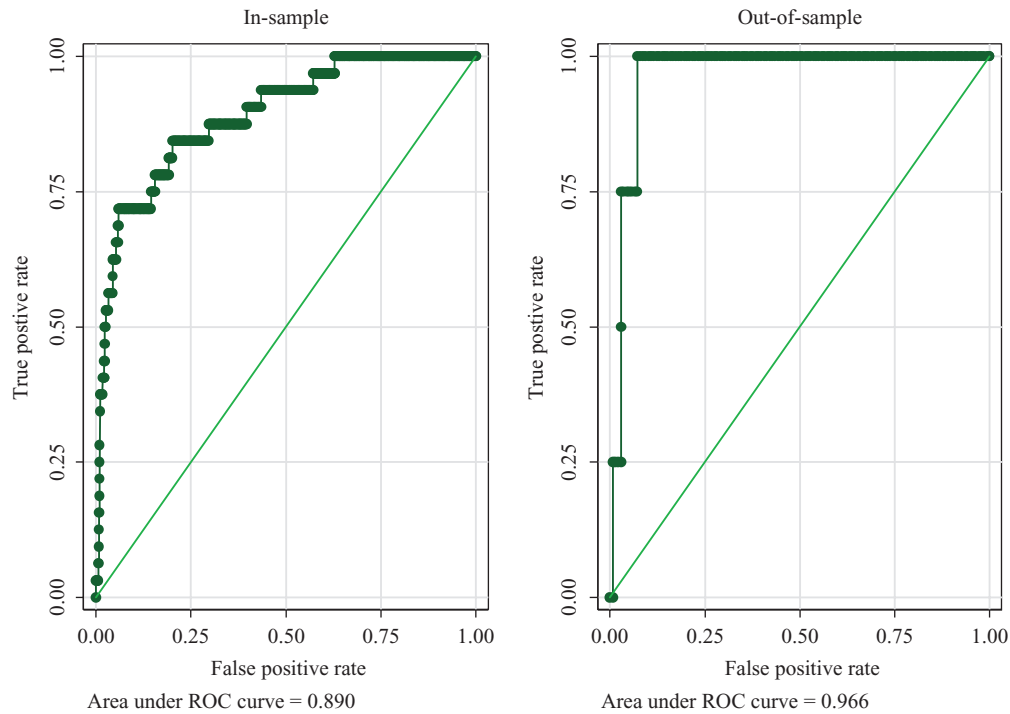
Figure 4. ROC curves for in-sample (1993–2001) and out-of-sample (2002–04) predictions, based on Model 4

curves. ROC curves take into account that the model predicts a continuous probability for a binary outcome. There is no defined rule to say what level of predicted probability should be used as a threshold above which mediation is predicted. Lower thresholds will generate a high number of true positive predictions at the expense of a high number of false positives. On the other hand, higher thresholds will lead to fewer false positives but increase the number of false negatives. ROC curves plot the true positive rate against the false positives rate for all perceivable thresholds. The higher the curves reach into the upper left corner, the better the classification based on the model prediction, that is, the better the ratio of true positives versus false positives. The overall fit may also be summarized as the area under the ROC curve (AUC). If the area is 1 then the model predicts perfectly. An AUC of 0.5 indicates that the model performs no better than chance.[4]

Figure 4 displays the ROC curves for both the in-sample and the out-of-sample predictions. The plots indicate that the model predicts very well both in-sample and out-of-sample. The AUC is given as 0.89 for the in-sample predictions and remains high for the out-of-sample period (0.96). The curves were calculated using Model 4. This model includes an extensive list of control variable which might contribute to the good predictions. However, if all control variables are dropped from the model, the restricted model with only conflict intensity, distance, and interaction terms still corresponds to an AUC of roughly 0.87 in-sample (0.80 out-of-sample). While all of these predictions were based on Model 4, the specification using casualty numbers (Model 2) generates similarly accurate predictions (0.87 in-sample, 0.96 out-of-sample; restricted model: 0.86 in-sample, 0.79 out-of-sample). Overall, the predictive performance underscores that conflict intensity is a good indicator of mediation onset.[5]

Conclusion

This article analyzes whether conflict dynamics predict the timing of mediation onset in low-intensity conflicts. It demonstrates that it is possible to anticipate suitable moments for preventive diplomacy with considerable accuracy. Based on an expected utility theory of mediation, I argue that mediation onset should occur most

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[4] A model that always predicts a zero probability of mediation also generates an AUC of 0.5.

[5] Further documentation of the predictive accuracy is provided in the online appendix.

often when conflict intensity increases, but neither conflict party sees a particularly high probability of victory. The theory predicts that conflict intensity has an inverted U-shaped effect conditional on the perceived probability of victory.

I find empirical support for this pattern in a sample of all low-intensity conflicts in Africa between 1993 and 2004. The model captures within-conflict variation in individual cases and is able to classify months with higher and lower probabilities of mediation. Using a split-sample approach, I show the accuracy of the model's in- and out-of-sample predictions. The results demonstrate that an expected utility theory of mediation may be operationalized and generate quite accurate out-of-sample predictions. Furthermore, the findings underscore that the short-term conflict dynamics may be important determinants of mediation. As a consequence, future work aiming to assess the impact of mediation should ensure that the immediate conflict context and individual battle events are considered when appropriate comparison groups are constructed.

This article has restricted its analysis to low-intensity conflicts and therefore shed light on our ability to predict preventive mediation. Nevertheless, the theoretical framework is not necessarily restricted to this context. As data become available on mediation in later stages of full-blown civil wars, future research should assess to what extent conflict dynamics also enable researchers to predict mediation at later stages in long-lasting and more intense intrastate conflicts. The availability of real-time data collection may further enable researchers to evaluate the usefulness of the theoretical model in real-time forecasting.

Replication data

The data and do-files for the empirical analysis in this article, along with the online appendix, can be found at http://www.prio.no/jpr/datasets.

Acknowledgements

References

Beardsley, Kyle C (2010) Pain, pressure and political cover: Explaining mediation incidence. *Journal of Peace Research* 47(4): 395–406.

Beck, Nathaniel; Gary King & Langche Zeng (2000) Improving quantitative studies of international conflict: A conjecture. *American Political Science Review* 94(1): 21–35.

Böhmelt, Tobias (2009) International mediation and social networks: The importance of indirect ties. *International Interactions* 35(3): 298–319.

Box-Steffensmeier, Janet M & Bradford S Jones (2004) *Event History Modeling: A Guide for Social Scientists*. New York: Cambridge University Press.

Buhaug, Halvard (2006) Relative capability and rebel objective in civil war. *Journal of Peace Research* 43(6): 691–708.

Buhaug, Halvard (2010) Dude, where's my conflict? LSG, relative strength, and the location of civil war. *Conflict Management and Peace Science* 27(2): 107–128.

Buhaug, Halvard; Scott Gates & Päivi Lujala (2009) Geography, rebel capability, and the duration of civil conflict. *Journal of Conflict Resolution* 53(4): 544–569.

Carter, David B & Curtis S Signorino (2010) Back to the future: Modeling time dependence in binary data. *Political Analysis* 18(3): 271–292.

Clayton, Govinda (2013) Relative rebel strength and the onset and outcome of civil war mediation. *Journal of Peace Research* 50(5): 609–622.

Clayton, Govinda & Kristian Skrede Gleditsch (2014) Will we see helping hands? Predicting civil war mediation and likely success. *Conflict Management and Peace Science* 31(3): 265–284.

Cunningham, David E; Kristian Skrede Gleditsch & Idean Salehyan (2009) It takes two: A dyadic analysis of civil war duration and outcome. *Journal of Conflict Resolution* 53(4): 570–597.

DeRouen, Karl & Frida Möller (2013) The short-term effects of mediation on low-intensity civil wars. *Negotiation Journal* 24(4): 377–495.

DeRouen, Karl; Jacob Bercovitch & Paulina Pospieszna (2011) Introducing the Civil Wars Mediation (CWM) dataset. *Journal of Peace Research* 48(5): 663–672.

Fearon, James D (1995) Rationalist explanations for war. *International Organization* 49(3): 379–414.

Gartner, Scott Sigmund (2011) Signs of trouble: Regional organization mediation and civil war agreement durability. *Journal of Politics* 73(2): 380–390.

Gleditsch, Nils Petter; Peter Wallensteen, Mikael Eriksson, Margareta Sollenberg & Håvard Strand (2002) Armed conflict 1946–2001: A new dataset. *Journal of Peace Research* 39(5): 615–637.

Gordon, Michael R (2013) Syrian opposition to sit out any talks unless arms are sent, general says. *New York Times* 9 June: A10.

Greig, J Michael (forthcoming a) Nipping them in the bud: The onset of mediation in low-intensity civil conflicts. *Journal of Conflict Resolution*. DOI: 10.1177/0022002713503807.

Greig, J Michael (forthcoming b) Rebels at the gates: Civil war battle locations, movement, and openings for mediation. *International Studies Quarterly*. DOI: 10.1111/isqu.12130.

Greig, J Michael & Patrick M Regan (2008) When do they say yes? An analysis of the willingness to offer and accept

mediation in civil wars. *International Studies Quarterly* 52(4): 759–781.

Gurses, Mehmet; Nicolas Rost & Patrick McLeod (2008) Mediating civil war settlements and the duration of peace. *International Interactions* 34(2): 129–155.

Holland, Paul W (1986) Statistics and causal inference. *Journal of the American Statistical Association* 81(396): 945–960.

Kydd, Andrew H (2010) Rationalist approaches to conflict prevention and resolution. *Annual Review of Political Science* 13(1): 101–121.

Lounsbery, Marie Olson & Alethia H Cook (2011) Rebellion, mediation, and group change: An empirical investigation of competing hypotheses. *Journal of Peace Research* 48(1): 73–84.

Marshall, Monty G & Keith Jaggers (2011) Polity IV Project: Political regime characteristics and transitions, 1800–2011 (http://www.systemicpeace.org/polity/polity4.htm).

Melander, Erik; Frida Möller & Magnus Öberg (2009) Managing intrastate low-intensity armed conflict 1993–2004: A new dataset. *International Interactions* 35(1): 58–85.

Melin, Molly M (2011) The impact of state relationships on if, when, and how conflict management occurs. *International Studies Quarterly* 55(3): 691–715.

Melin, Molly M & Isak Svensson (2009) Incentives for talking: Accepting mediation in international and civil wars. *International Interactions* 35(3): 249–271.

Regan, Patrick M & Aysegul Aydin (2006) Diplomacy and other forms of intervention in civil wars. *Journal of Conflict Resolution* 50(5): 736–756.

Schrodt, Philip A & Deborah J Gerner (2004) An event data analysis of third-party mediation in the Middle East and Balkans. *Journal of Conflict Resolution* 48(3): 310–330.

Schrodt, Philip A; Ömür Yilmaz & Deborah J Gerner (2003) Evaluating 'ripeness' and 'hurting stalemate' in mediated international conflicts: An event data study of the Middle East, Balkans, and West Africa. Paper prepared for the Annual Meeting of the International Studies Association, Portland, OR, February (eventdata.parusanalytics.com/papers.dir/Schrodt.etal.ISA03.pdf).

Slantchev, Branislav L (2003) The principle of convergence in wartime negotiations. *American Political Science Review* 97(4): 621–632.

Sundberg, Ralph & Erik Melander (2013) Introducing the UCDP Georeferenced Event Dataset. *Journal of Peace Research* 50(4): 523–532.

Sundberg, Ralph; Mathilda Lindgren & Ausra Padskocimaite (2010) *UCDP GED Codebook version 1.0-2011.* Department of Peace and Conflict Research, Uppsala University.

Teorell, Jan; Nicholas Charron, Stefan Dahlberg, Sören Holmberg, Bo Rothstein, Petrus Sundin & Richard Svensson (2013) The Quality of Government Basic Dataset made from the Quality of Government Dataset, version 15May13. University of Gothenburg: Quality of Government Institute (http://www.qog.pol.gu.se).

Terris, Lesley G & Zeev Maoz (2005) Rational mediation: A theory and a test. *Journal of Peace Research* 42(5): 563–583.

United Nations (2011) Preventive diplomacy: Delivering results. Report of the Secretary General, S/2011/552. New York: United Nations (http://www.un.org/wcm/content/site/undpa/main/issues/preventive_diplomacy/main_preventive).

Walter, Barbara F (2002) *Committing to Peace: The Successful Settlement of Civil Wars.* Princeton, NJ: Princeton University Press.

Walter, Barbara F (2009) Bargaining failures and civil war. *Annual Review of Political Science* 12(1): 243–261.

Ward, Michael D; Brian D Greenhill & Kristin M Bakke (2010) The perils of policy by p-value: Predicting civil conflicts. *Journal of Peace Research* 47(4): 363–375.

World Bank (2013) World Development Indicators. Washington, DC: World Bank Group (http://data.worldbank.org/products/wdi).

Zartman, I William (1995) *Elusive Peace: Negotiating an End to Civil Wars.* Washington, DC: Brookings Institution.

Zartman, I William (2001) The timing of peace initiatives: Hurting stalemates and ripe moments. *Global Review of Ethnopolitics* 1(1): 8–18.

Zartman, I William & Alvaro de Soto (2010) *Timing Mediation Initiatives.* Washington, DC: United States Institute of Peace.

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