MEDIATION IN CIVIL WARS: DETERMINANTS OF SUCCESS

BY ANDREAS TIEMANN

A thesis submitted to the
Graduate School—New Brunswick
Rutgers, The State University of New Jersey
in partial fulfillment of the requirements
for the degree of
Master of Arts
Graduate Program in Political Science

Written under the direction of
Prof. Jan Kubik
and approved by

__________________________
__________________________
__________________________

New Brunswick, New Jersey
May, 2010
In the recent past, mediation, a special kind of Alternative Dispute Resolution (ADR), has become a both more frequent and more successful tool to reach peaceful settlements in civil wars. Nevertheless, current research still does not understand what triggers the occurrence of mediation and which factors determine its failure or success. This research paper aims to answer these questions, deriving a comprehensive theoretical framework and corresponding research hypotheses from a literature review. Taking into account debates on the conceptualization and operationalization of the key variables in question, these hypotheses are subjected to an empirical test, analyzing a data-set including 68 civil wars in the time span 1945-1999. In doing so, for the first time, the ordinal nature of mediation outcomes is taken into account when modeling both the incidence of mediation and potential determinants of its outcome jointly. The results question a large number of hypotheses found in the literature, asking for a better theoretical underpinning of the subject matter. Particularly, while mediation occurrence can be explained rather well, a lack of knowledge remains concerning success factors of mediation. Moreover, adding to discussions on a mediator’s agency within structural constraints, none of the variables within the reach of a mediator’s direct influence were found to be significant predictors of mediation success.
Acknowledgements

For most helpful comments, their support, and advice, the author would like to thank Christopher Achen, Bear Braumoeller, Noah Eber-Schmid, Jan Kubik, Richard Lau, Roy Licklider, Patrick Regan, and Lisa Schmidt. Notwithstanding, the author alone assumes responsibility for the conclusions of this thesis and any remaining errors it may contain. The author gratefully acknowledges funding and support he received from e-fellows.net, the German Academic Exchange Service (DAAD), Konstanz University, Princeton University, Rutgers University, the Studienstiftung des Deutschen Volkes (German National Merit Foundation), and Swiss Academic Software. The views expressed in this paper are those of the author and not those of these institutions. Please contact the author before quoting or citing.
# Table of Contents

Abstract ......................................................... ii  
Acknowledgements ................................................ iii  
List of Tables .................................................... v  
List of Figures .................................................... vi  

1. Introduction ................................................... 1  

2. Theoretical Framework & Development of Research Hypotheses ........................................... 4  
   2.1. Mediation Occurrence ....................................... 4  
   2.2. Mediation Success ......................................... 8  

3. Research Design ................................................ 14  
   3.1. Conceptualization .......................................... 14  
      3.1.1. Mediation ............................................. 14  
      3.1.2. Success of Mediation .................................. 15  
      3.1.3. Civil War ............................................. 17  
   3.2. Operationalization & Measurement ......................... 18  
   3.3. Estimation Technique & Analysis .......................... 22  

4. Interpretation of Results ..................................... 25  

5. Conclusion ..................................................... 34  

Bibliography ...................................................... 37  

Appendix ............................................................. 43
List of Tables

1. Synopsis of Research Hypotheses ........................................... 13
2. Descriptive Statistics .............................................................. 21
3. Results: Selection Corrected Ordered Probit Estimation ............... 24
4. Marginal Changes in Estimated Probabilities ......................... 26
5. Marginal Probabilities for Dichotomous Predictors of Mediation Success 31
List of Figures

1. Frequency and Success Rate of Mediation over Time . . . . . . . . . . . . . . . 1
2. The Contingency Model . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 8
3. Predicted Probabilities of Mediation Occurrence by Conflict Duration . . . . . 28
4. Predicted Probabilities by Annual Number of Fatalities . . . . . . . . . . . . 32
5. Number of Conflicts per Year by Type . . . . . . . . . . . . . . . . . . . . . . . . 43
1

Introduction

In 1985, Johan Galtung, the principal founder of the discipline of Peace and Conflict Studies, looked back on 25 years of peace research. According to Galtung, one of the major challenges which could not have been solved thus far, was the development of “remedies” that would allow for the predictable creation of peace. To put it more clearly, discussing comparisons to medical science, Galtung (1985: 148) stated

“By that standard, we peace researchers are all failures. So far.”

So far. Almost another 25 years have passed and peace research has flourished ever since. Yet, have we been able to find, or to work on, such a remedy? When examining the most recent descriptive statistics on the occurrence of civil war interventions, one may tentatively conclude that we have been able to do so. In the last decades, mediation has been used more and more often – while steadily increasing its efficacy as well (see Figure 1).

Figure 1: Frequency and Success Rate of Mediation over Time

Source: Own depiction using data from Regan et al. (2009)
In the period before 1990, the number of mediations in civil wars was rather low, ranging between no observations (e.g. in the years from 1949 through 1957) and a maximum of ten mediations in the year 1964. With the end of the cold war, however, the number of mediations rose instantly from 1989’s five to 24 observations in 1990 and the maximum of 34 observations in 1994 when, among others, the second Sudanese civil war was accompanied by eight mediations. Even though these numbers dropped again after 1995, the frequency of mediations was higher in each year between the collapse of the Soviet Union and 1999 (the end of the time period covered) than in the years before. Considering the success rate of these mediations, a locally weighted scatterplot smoother (Lowess) moreover indicates that the proportion of successful mediations\(^1\) rose over time. Contrasting larger time spans, in the years after Galtung’s publication, the average success rate was 42\% and thus drastically higher than the 25\% of the period before. In addition, after 1945, civil wars have extended their role as the most predominant kind of armed conflict. For the time from 1946 to 2008, data from the UCDP/PRIO Armed Conflicts dataset (2009) comprising 240 conflicts show that after 1975, there were no more observations of extrasystemic wars. What is more, the post-Cold War period’s maximum number of interstate armed conflicts per year was “only” two. By contrast, the entire set for the year 2008 alone records 35 civil wars, of which five cases were internationalized (see Figure 3 in the appendix).\(^2\)

However, while civil wars have become the most frequent type of armed conflicts and mediation the kind of intervention used more and more frequently within these

\(^1\)For these first descriptive purposes, successful mediations are defined as a dichotomous variable coded one if a full or a partial settlement was reached and zero otherwise. A more nuanced approach is taken below. The average success rate was only computed if there were at least three mediations in a given year. A similar picture results when using different minimum thresholds to compute the average success rate, e.g. five mediations per year.

\(^2\)The UCDP/PRIO Armed Conflicts dataset (2009) defines an armed conflict as “a contested incompatibility that concerns government and/or territory where the use of armed force between two parties, of which at least one is the government of a state, results in at least 25 battle-related deaths”. Interstate conflicts are between two or more states. Extrasystemic conflicts are between a state and a non-state group outside its own territory and are concerned with territorial control. For the subset of civil wars, a distinction is made between internal and internationalized internal conflicts, which do not take place in one conflict country only (UCDP / PRIO 2007).
conflicts, what has caused that mediation is now used so often as a catalyst for peace? Diplomatic interventions and mediation are as old as civil conflicts themselves. Yet, have we now learned more about mediation’s potential and figured how to apply it in order to reach a successful outcome? What do we know about determinants of successful mediation in civil wars? Motivated by this question, this research paper is dedicated to the analysis of success factors for mediation in civil wars. As will be shown in the following, this question is inherently linked to the question of when mediation occurs, a topic which is therefore addressed explicitly.

In the following, first, a theoretical framework which takes into account previous literature on the topic is laid out. Thus, hypotheses on factors that may influence both the occurrence and the outcome of mediation are developed, leading to a comprehensive model. Second, the research design is presented, including the conceptualization of key variables and a section on how to operationalize the variables in question. After conducting a cross-sectional test, the results are presented, re-establishing a link to the initial research hypotheses. In a concluding paragraph, the main results are once more summarized and potential limitations as well as implications for further research are discussed.
2
Theoretical Framework & Development of Research Hypotheses

Experiments have become more and more common in Political Science, including the area of Peace and Conflict Studies where attempts have been made to analyze negotiations and third-party interventions (for an example, see chapter six in Wilkenfeld et al. 2005). Yet, when assessing “real world situations”, leaving the possibility of controlled treatments behind, mediation is characterized as an event whose occurrence is not determined by a random process among a given number of conflicts. Instead, the choice for mediation is strongly endogenous, thus confounding any results of analyses that restrict themselves to cases of mediation only. Should it hold true, for example, that mediators are systematically confronted with cases that are particularly hard to solve (Greig 2005), mediation’s potential would be underestimated. Therefore, such selection effects have been subject to intensive research (Terris and Maoz 2005; Greig and Regan 2008) and have hence been accounted for in a number of advanced publications assessing mediation outcomes (Gartner and Bercovitch 2006; Beardsley 2008; Savun 2008). In the following, a theoretical framework for both the occurrence and the outcome of mediation is laid out, resulting in testable research hypotheses for both phenomena. As common, all hypotheses are considered as rival hypotheses to H₀-hypotheses stating the opposite cases.

2.1 Mediation Occurrence

For mediation to occur, the voluntary approval of each of the conflicting parties and the mediator is required. This paper takes a rational choice approach, taking into account
each of the actors’ utility functions for the case of mediation and for continued fighting. In doing so, this research follows to some degree a theoretical framework developed by Wall et al. (2001: 374), which argues that mediation is sought “to the extent that each expects his or her own net outcome . . . from the mediation to be greater than those from the current interaction or from an alternative approach.” However, this paper considers an agreement to mediation as a veto-player game, in which mediation takes place as long as, for each party, the status quo’s cost (/gain) from fighting and expected future payoffs from an ongoing conflict are of a smaller (/larger) value than the expected cost (/gain) from engaging in mediation. There are several scenarios in which the value of alternatives is not as influential as described by Wall et al. (ibid.). Following the logic of a simple bargaining game, for example, even if some parties have alternatives of higher value to them, all parties will consent to an agenda-setter’s plea for mediation if their alternative’s pay-offs were discounted too strongly until they could expect their alternatives to be on the agenda (Ståhl 1972; Rubinstein 1982). In the context of civil wars, consider an “impatient” conflict country’s agreement to mediation because arbitration, her preferred outcome, would only have become an option at a significantly later point of time. Furthermore, Wall et al. (ibid.) do not take into account that other parties’ irrevocable commitments against alternatives may trigger the choice for mediation as a less-preferable, but still preferable outcome. While this paper acknowledges the role of alternative options, it considers expected payoffs from mediation and their comparison to those from an ongoing conflict as pivotal in influencing the likelihood of mediation occurrence.

---

3This paper fully respects current efforts which try to link legal factors, norms, and cultural characteristics to the occurrence of mediation. However, with this regard, theory development is still moving on “somewhat barren ground” (Wall et al. 2001: 374) and thus, these aspects needed to be excluded.

4One could think of another game-theoretic character of this decision and argue that, in the case of a Prisoner’s Dilemma, mediation may not take place even although all parties’ mediation payoff was higher than that of an ongoing civil war. Yet, in line with Axelrod’s theory on cooperation (1984), mediation will still become more likely once the payoffs’ difference further widens for the benefit of mediation.
With regard to the mediator, it is projected that her costs from the conflict is high and consent to (or an offer of) mediation is thus more probable if her location is close to the country where the conflict takes place. Such costs become most evident either when thinking of potential flows of refugees or the possibility for the conflict to spill over, becoming internationalized and causing destabilization in a geographic region. This hypothesis will be assessed as hypothesis H1 (see Table 1 for a synopsis of all research hypotheses). Secondly, in line with Greig and Regan (2008), a third-party’s interest in mediation should be increased if it shares a defense pact with the conflict country. Defense pacts reflect a common answer to a security concern which may be weakened through civil wars. From a third-party’s perspective, the most costly scenario would be the defeat of her alliance partners, thus motivating her to intervene in a conflict. This reasoning is examined as hypothesis H2. Hypothesis H3 ties in with previous research by Regan and Aydin (2006) proposing that the greater a third-party’s trade interest toward the country in which the conflict occurs, the more probable is the occurrence of mediation. Trade interest is regarded as an assessment of how heavily a country’s total trade depends on the trade ties with the conflict country. All other factors equal, given that an actor values her conflict-related loss of trade benefits higher than the costs occurring from mediation, one would expect her to be motivated to mediate. Hypothesis H4 states that a major power is more likely to be observed as a mediator than other states. This hypothesis perceives mediation as a public good and is grounded in Olson’s logic of collective action (1965), assuming that smaller states exploit the larger ones. Thus, smaller states are expected to shirk the cost of mediation, act as a “free-rider”, and leave the responsibility to major powers. Moreover, with actors’ mutual interest in peace being linked to shared interests in the presence, these ties may be linked to a common historic legacy. On the other hand, such historic ties may be considered by at least one of the belligerents as disqualifying a third-party as a mediator. Greig and Regan (2008: 374) find that a historic linkage in the form of a shared colonial history or historic ties to specific international organizations such as the Catholic Church fosters offers of mediation but also makes countries more prone to reject these offers. For the disputed direction of this factor, hypothesis H5 states rather generally that such
ties have an impact on the occurrence of mediation. Hypothesis H6 reflects the most
intuitive notion with regard to a conflict’s costs, being the intensity of the conflict. As
long as the hostility of a conflict is kept at a comparatively low level, a third-party
might not experience any costs in terms of pressure within the international commu-
nity, while the parties to the conflict may not see any need to ask for external help. In
addition, hypothesis H7 takes into account Zartman’s suggestion that interventions do
not occur until a “mutually hurting stalemate” and a “ripe moment” (2001: 8) have
been reached. Thus, H7 proposes that the elapsed time after a civil war started influ-
ences whether mediation takes place. With this regard, not only a linear but also a
curvilinear relationship is assessed for the likelihood of an intervention may eventually
decrease. Additionally, hypotheses H8, H9, and H10 follow Greig and Regan’s reason-
ing (2008), stating that prior interventions constitute sunk costs for the mediator and
hence make the recurrence of mediation more likely. H8 suggests such a relationship
asking whether the third-party in question mediated in the previous year, H9 refers
to previous economic, H10 to previous military interventions. Finally, hypothesis H11
reflects that although the end of the Cold War may not have caused a systemic change
affecting the occurrence of civil conflicts (Fearon and Laitin 2003), with the end of the
Cold War, third-parties could have lost interest in intervening in the internal affairs of
another state, thus making mediation less likely (Zartman and Touval 1996). Although
the initial intuition as presented in the introduction’s descriptive data contradicts this
notion, this paper stays close to the existing theoretical literature, subjecting it to an
empirical test.
2.2 Mediation Success

This research paper greatly benefits from an intensive theoretical analysis undertaken by Bercovitch, Anagnoson, and Wille (1991) as well as their development of the “Contingency Model”. The Contingency Model (see Figure 2) builds on less elaborate models by Wall (1981) and Raymond and Kegley (1985) and provides a structured approach for the development of research hypotheses, differentiating between contextual and process variables that influence each other, and eventually determine the outcome of mediation. According to Bercovitch et al. (1991), the context of the conflict depends on the nature of a dispute, the nature of parties involved and the nature of the mediator, whereas the mediation process is mainly characterized by a mediator’s strategies. Making minor adjustments for its primary focus on interstate conflicts, the independent variables to be integrated in the model presented here are derived from the Contingency Model.

---

5This paper’s choice to leverage from this model is not novel. Rather, the Contingency Model has become a state of the art theoretic framework for the analysis of mediation success, being used in a larger number of publications on the topic (for examples, see Bercovitch and Langley 1993; Bercovitch and Wells 1993; Gold 2008; Bercovitch and Jackson 2009).

6In Bercovitch’s publications, the Contingency Model is not consistent regarding the nature of the mediator. While Bercovitch et al. (1991) consider the nature of the mediator as a contextual variable, Bercovitch and Regan (2004) describe it as a process variable. For both process and context are inherently intertwined, this paper does not choose one approach over the other but simply recognizes the importance of integrating the nature of the mediator into its model.
As to the parties’ nature, the Contingency Model asks, inter alia, about the disputants’ relative power to each other. While such factors are not totally impossible to transfer to the context of belligerents of a civil war, this paper rather focuses on two other questions suggested by the model. Firstly, the success model asks whether the parties to the conflict can be identified either as religious or ethnic, in contrast to groups organized for ideological reasons. Bercovitch describes ethnic civil wars as “the greatest challenge to the theory and practice of conflict management” (2005: 100), furthermore stating that they are often considered “the most difficult and complex conflicts in international relations” (ibid.: 113). Hence, hypothesis H12 suggests that mediation will be less likely to succeed in civil wars with either ethnically or religiously motivated disputants. Secondly, hypothesis H13 suggests that the more democratic the country in which the conflict takes place is, the more effective is mediation. Following previous research (Beardsley 2008), this hypothesis is incorporated in order to capture a potential influence of domestic institutions on the outcome of mediation, e.g. a government’s greater commitment to civil war termination due to democratic accountability.

As to the nature of the dispute, hypothesis H14 focuses on the conflict’s main issue and distinguishes whether the conflict is territorial (comprising both irredentist and secessionist conflicts\(^9\)), or of a different type. Very early in 1972, after conducting two case studies, Ott concluded that conditions which facilitate successful mediation include particularly the absence of “questions of territorial control among the issues in dispute” (1972: 616). Hypothesis H14 assesses this suggestion. The nature of a conflict also comprises its intensity. H15 proposes that more violent conflicts are harder to solve as

\(^7\)Fearon and Laitin (2003) find that ethnic or religious diversity does not increase the probability of an incident of civil war. However, the authors state explicitly that their research is focused on civil war onset rather than termination (ibid.: 88).

\(^8\)Just as in the case of hypothesis H12, note that this hypothesis on civil war termination is different from research on democracy’s potential influence on civil war onset (e.g. Hegre et al. 2001).

\(^9\)“Irredentist conflicts” are conflicts in which an ethnic minority group forms a plurality in a certain region of a country and tries to “break the region away” from the country it currently lives in. In secessionist conflicts, a group seeks to eschew a central authority’s control (Regan 2000).

\(^10\)This thought is owed to the initial description of the Contingency Model as presented by Bercovitch et al. (1991).
the belligerents are more polarized, show stronger grievances, and possess a stronger wish for retaliation.\textsuperscript{11}

The last category of contextual factors as identified by the Contingency Model concerns variables describing the nature of the mediator. Hypothesis H16 suggests that there should be a difference between a unilateral and a multilateral intervention. For considering the possession of resources as a key determinant (Gartner and Bercovitch 2006) and assuming that multilateral teams of mediators are better informed and better “equipped”, H16 states that purely unilateral mediations should be less successful. Note, however, that this suggestion is not commonly agreed on within the literature on mediation, with Crocker et al. (2005: 511) concluding that “the final reckoning of costs and benefits of multiparty mediation produces a somewhat mixed balance sheet: whereas more [mediators] is not necessarily better, it is not necessarily worse”. Hypothesis H17 also addresses the question of the mediator’s resources, yet proposes that the potential advantages of a multilateral mediator may be equally reached if the mediator is a major power. Both a major power’s resources and status may increase mediation’s efficacy, offering the option to either impose additional costs to the disputants or to offer side payments (Smith and Stam 2003). Thus, H17 suggests that major powers rather reach a peaceful solution than other mediators. Moreover, as another kind of resource, Greig and Regan (2008) were first in assessing the role of trade leverage, the conflict country’s trade dependence upon the mediator. Greig and Regan hypothesize in their analysis (ibid.) that the more a conflict country’s trade depends on the mediator, the more probable is both the acceptance of mediation and the agreement to a peaceful outcome.\textsuperscript{12} Hypothesis H18 reflects this reasoning. As the last hypothesis portraying

\textsuperscript{11}An example for such strong pressures coming from inside a disputant group, leading to the rejection of a peaceful settlement, is KLA supreme commander Hashim Thaçi’s opposition to sign a draft peace accord at talks in Rambouillet, France on 23 February 1999 (International Crisis Group 1999).

\textsuperscript{12}Greig and Regan (2008) argue that trade leverage fosters the acceptance of mediation for increasing the expectancy of a successful outcome. However, empirically, the authors cannot find support for this hypothesis.
the nature of the mediator, H19 takes into account that, among other criteria, a mediator should be “knowledgeable and tactically skilled”. This quote taken from Ott (1972: 616) is only one example of research stating that mediation success largely depends on a mediator’s qualities, in particular on her skills and her experience. Thus, hypothesis H19 argues that if a third party has reached a great share of peaceful settlements in prior mediations and has thus gained good reputation, the chances for such settlements should also increase for the conflict in question.

The final area of determinants as defined by the Contingency Model refers to process variables, exploring different techniques chosen by a mediator. Hypothesis H20, H21, and H22 therefore examine the potential effects of particular mediation strategies and whether such strategies are accompanied by either economic or military interventions. To differentiate between mediation strategies, this paper uses a commonly accepted classification developed by Touval and Zartman (1985). This sorting (ibid.) distinguishes between facilitative strategies, formulating strategies, and manipulative strategies. These strategies can be better understood using Fearon’s “rational explanations of war” (1995) as well as Gilady and Russett’s (2002)13 “translation” of this bargaining approach to the context of mediation. In the first category, the mediator acts as a mere organizer, setting up meetings, providing the facilities, designing the agenda, etc. Thus, a mediator may help disputants to overcome the problem of uncertainty and to reduce bargaining failures caused by misinformation (Savun 2008). In formulating strategies, on the other hand, mediators go beyond a merely facilitative role, proposing and conceiving new solutions to the belligerents. In Gilady and Russett’s terms, in this way, a mediator may create divisibility by separating issues from values. Using a manipulative strategy, in which the mediator acts as a manipulator who may also either punish or introduce inducements, the issue of indivisibility may be alleviated as well. Using this strategy, a manipulative mediator may either “enlarge

13A very similar framework is also presented by Beardsley (2008). However, Beardsley (ibid.) does not mention the previous work by Gilady and Russett.
the pie” or fractionate the issue to create divisibility (Gilady and Russett 2002). H20 suggests that one of these three strategies (information provision, formulation, or manipulative mediation) is more successful than the other types. Hypothesis H21 and H22, explore whether in cases of mediation in which a third-party combines her mediation with military or economic interventions, the probability of success is increased. Although mediation itself does not foresee such a strategy, both military and economic interventions may represent further leverage upon the conflicting parties. In addition, these interventions may be used to bypass the fact that, for transferring no ultimate decisive or controlling power, a mediator’s task does hardly allow for the avoidance of commitment problems. Further, as in the selection model, hypothesis H23 takes into account that the international community and conflict resolution may have experienced a structural interruption through the end of the Cold War. Regarding mediation success, however, this paper expects mediation to have become more effectual in the post-Cold War era since third-parties, although not being as interested in mediations anymore, may show stronger commitment to peaceful settlements if such interventions do take place (Zartman and Touval 1996). A last comment shall be made regarding a conflict’s “ripeness”, the variable already included in the selection model. “Ripeness” was purposely excluded from the outcome model after taking into account Wilkenfeld et al.’s (2005: 141) discussion of the current literature debating whether ripeness is determined by the mediator (who may play the role of “ripener”), thus reversing the order of causality. Nevertheless, this proceeding is certainly debatable and future research may address the potential influence of conflict ripeness on mediation outcomes.

---

14 This rather intrusive strategy is sometimes also seen as a solution to conflicts of credible commitments (Gilady and Russett 2002). However, this paper argues that a mediator’s leverage is already covered by the resource-driven approach discussed above. Moreover, it shall be reminded that, per definitionem, mediators do not possess the possibility of neither imposing nor controlling a final solution.
Table 1: Synopsis of Research Hypotheses

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Mediation Occurrence (Selection Model)</th>
<th>Effect</th>
<th>Hypothesis</th>
<th>Mediation Success (Outcome Model)</th>
<th>Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1</td>
<td>Third-party’s proximity to conflict country</td>
<td>+</td>
<td>H12</td>
<td>Conflict is an ethnic conflict</td>
<td>–</td>
</tr>
<tr>
<td>H2</td>
<td>Third-party’s defense pact with conflict country</td>
<td>+</td>
<td>H13</td>
<td>Conflict country is a democracy</td>
<td>+</td>
</tr>
<tr>
<td>H3</td>
<td>Third-party’s trade interest in conflict country</td>
<td>+</td>
<td>H14</td>
<td>Conflict is a territorial conflict</td>
<td>–</td>
</tr>
<tr>
<td>H4</td>
<td>Third-party is a major power</td>
<td>+</td>
<td>H15</td>
<td>Intensity of the conflict</td>
<td>–</td>
</tr>
<tr>
<td>H5</td>
<td>Historic linkage between third-party and conflict country</td>
<td>+–</td>
<td>H16</td>
<td>Mediator is a unilateral actor</td>
<td>–</td>
</tr>
<tr>
<td>H6</td>
<td>Intensity of the conflict</td>
<td>+</td>
<td>H17</td>
<td>Mediator is a major power</td>
<td>+</td>
</tr>
<tr>
<td>H7</td>
<td>Time passed after start of civil war / “ripeness”</td>
<td>+*</td>
<td>H18</td>
<td>Mediator’s trade leverage upon conflict country</td>
<td>+</td>
</tr>
<tr>
<td>H8</td>
<td>Number of prior mediations by third-party</td>
<td>+</td>
<td>H19</td>
<td>Mediator has reputation as successful mediator</td>
<td>+</td>
</tr>
<tr>
<td>H9</td>
<td>Previous economic intervention by third-party</td>
<td>+</td>
<td>H20</td>
<td>Mediation strategy used by mediator</td>
<td>+–</td>
</tr>
<tr>
<td>H10</td>
<td>Previous military intervention by third-party</td>
<td>+</td>
<td>H21</td>
<td>Mediation is accompanied by economic intervention</td>
<td>+</td>
</tr>
<tr>
<td>H11</td>
<td>Year of conflict after the end of the Cold War</td>
<td>–</td>
<td>H22</td>
<td>Mediation is accompanied by military intervention</td>
<td>+</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>H23</td>
<td>Year of conflict after the end of the Cold War</td>
<td>+</td>
</tr>
</tbody>
</table>

Note:
“+” indicates the suggested relationship is positive
“+*” indicates that the suggested relationship is positive or positive curvilinear
“–” indicates that the suggested relationship is negative
“+–” indicates that the suggested relationship is either positive or negative
3

Research Design

3.1 Conceptualization

The beginning of any piece of empirical analysis is characterized by a closer conceptualization of the key concepts in question (Goertz 2005; Sartori 1970). Yet, one needs to be aware of the fact that viable conceptualizations are bought at the cost of imperfection, facing the necessity to avoid an infinite regress in which every *definiens* is simply constituting a new *definiendum* (Schnell et al. 2005: 128 et sqq.). In the light of this limitation, this paper’s understanding of “mediation”, “mediation success”, and “civil war” are discussed below. It is both inevitable and desirable, that this section is closely linked to the question of how to operationalize the concepts in question.

3.1.1 Mediation

While conceptualizations may be subject to lively discussions within the area of political science, there is comparatively great consensus on the question of how to define “mediation”. Mediation can be subsumed under the greater area of Alternative Dispute Resolution (ADR), which furthermore comprises techniques such as arbitration, adjudication, inquiry, and negotiation. Moreover, in an even broader context, mediation is one kind of third-party intervention to a conflict, among other approaches such as forceful interventions, sanctions, humanitarian interventions, peace-keeping, and peace-building.

---

15 Expressed in the terms of Goertz (2005), “infinite regress” means that any concept used on a secondary-level dimension constitutes a new basic-level concept, a process which may be continued infinitely.
This paper understands mediation according to three key characteristics. Firstly, mediation demands that both the mediator and the parties to the conflict voluntarily agree to participate (Bercovitch and Lee 2003). Hence, the occurrence of mediation rests entirely on the consent of each of the disputants and the third party. Second, and in contrast to arbitration, the conflict’s antagonists do not transfer any of their decisive power to the mediator, leaving her without the possibility of “putting a foot down” to come to a final outcome (ibid). In the same line, neither would mediation automatically include the monitoring or enforcement of potential agreements, underlining their non-binding nature (Bercovitch 2004). Nevertheless, such additional third-party involvements may be agreed on regarding the follow-up process to a case of mediation. Third, while a mediator may pursue more intrusive strategies, e.g. by offering inducements or “bribes”, mediation is distinguished by its non-violent character. Keeping with this, this paper joins Bercovitch and Houston’s widely-cited definition (1996: 13), understanding mediation as “a reactive process of conflict management whereby parties seek the assistance of, or accept an offer of help from an individual, group, or organization to change their behavior, settle their conflict, or resolve their problem without resorting to physical force or in invoking the authority of law.” The presented analysis greatly benefits from this broad conception of mediation which does not restrict itself with regard to a third-party’s identity, its resources, or the strategy chosen by the mediator. Yet, as will be shown below, such universality is not achieved at the expense of nuance, allowing for subtle distinctions within the greater understanding of mediation.

3.1.2 Success of Mediation

In contrast, mediation success has been discussed intensively in the literature without reaching a commonly accepted definition. In one of the attempts to do so, focus is placed on the questions of whether the conflicting parties’ expectations towards the

---

16See Wall et al. (2001) for a comprehensive overview.
mediator could be fulfilled, i.e. their satisfaction with the mediator, or to what extent their objectives could be reached (Bercovitch and Rubin 1992). Such proceedings, however, lead to the hardly resolvable task of operationalizing such phenomena as both expectations and goals may be vague, changing, and hard to measure (Savun 2008). This limitation also holds true for conceptualizations that assess mediation outcomes in terms of their potential to decrease future outbreaks of conflict (Touval 1985). More fertile approaches consider mediation’s effects on the actual recurrence of a conflict (Beardsley 2008), on the duration of a conflict, and its intensity (Regan and Aydin 2006; Gold 2008). The research presented here ties in with previous literature that concentrates on the immediate outcome of mediation, regarding whether disputants agree to cease fighting. However, also within this strand and even among publications of single authors, there is discontent on how to assess such an agreement. Whereas Bercovitch et al. (1991) consider mediation as successful once a cease-fire, a partial settlement, or a full settlement is reached, Bercovitch and DeRouen (2005) only include partial and full settlements. To the author’s knowledge, this paper is unique in overcoming such discussions, treating the success of mediations as a matter of degrees. Thus, mediation is considered most successful in the case of a full settlement and as failed in the case that fighting continues. In addition, a cease-fire following mediation is deemed a partial success, whereas a partial settlement is again regarded to be closer to the achievement of peace. A cease-fire is understood as a mediation outcome in which, although fighting stops, no further agreements are reached on the conflict’s underlying issues. In a partial settlement, on the other hand, some, but not the primary issues are resolved. Likewise, even if the primary issues are agreed on, partial settlements comprise cases in which the follow-up details have not yet been discussed. Yet, if this is the case, an outcome is regarded a full settlement. In this way, a more fine-grained analysis, going beyond the merely dichotomized distinction of success versus failure is presented.

17 This conceptualization heavily draws from the one used by Regan et al. (2009). The author is indebted to Patrick Regan for sharing the data-set’s conceptualization and coding of mediation outcomes in a private communication.
3.1.3 Civil War

With the debate about the nature of the Iraq conflict only being one prevalent example (Fearon 2007), discussions about whether a certain conflict should be considered a civil war recur in almost routine intervals. Distinctions are made in various ways, e.g. according to whether a state party needs to be included as a party to the conflict. In regard to this, it has become widely accepted that the involvement of a governmental party should be regarded as a criterion for civil wars (Sarkees and Schafer 2000; Hironaka 2005). In addition, some definitions may include a minimum duration, raising the question of how to differentiate between a coup d’état and a short-lived civil war (Gates and Strand 2004). Moreover, definitions differ with respect to casualty thresholds, whether such numbers of fatalities should be counted annually or with reference to conflicts, and whether deaths need to be combat-related or not. This discussion also goes hand in hand with the question of how to measure civil casualties since belligerents have an interest in either downplaying or exaggerating these numbers while data is often collected under most aggravated circumstances (ibid.). A widely regarded approach developed by Small and Singer within the Correlates of War project (1982) understands civil war as an internal conflict with a minimum of 1,000 combat-related victims per year. Additionally, to make a distinction from massacres, each party must experience at least 5% of the total number of fatalities (ibid.). Other data-sets, such as the Uppsala dataset on armed conflict (UCDP / PRIO Centre for the Study of Civil War 2009) as well as its extension presented by Gleditsch (2002), choose a lower threshold of 25 annual battle-deaths. Lastly, combining the issue of duration with the casualty threshold, it is open to discuss whether a civil war should only be regarded as such so long as the chosen threshold is passed or also within a greater time frame. This paper seeks a compromise. It follows Gates and Strand’s (2004: 2) definition of civil wars as “an armed conflict between representatives of the state and another domestic party over a contested incompatibility resulting in a number of casualties exceeding a certain threshold.” Furthermore, in line with a conception developed by Regan (2000), the casualty threshold is set to 200 victims. This number is not an annual requirement
but rather an aggregate, taking into account the entire duration of a conflict, starting once the threshold is surpassed for the first time, and ending once a full settlement is reached and six months without reciprocated violence have passed.

3.2 Operationalization & Measurement

Concerning its measurements, this research paper strongly depends on data-sets composed by Greig and Regan (2008), Regan and Aydin (2006), Regan et al. (2009), fundamental research undertaken within the framework of the Correlates of War project (Small and Singer 1982), as well as on the Expected Utility Generation and Data Management Program (EUGene) developed by Bennett and Stam (2009). In line with the conceptualization described above, the variable mediation is a dummy variable coded 1 if a third-party mediated in a civil war year and 0 otherwise. Moreover, the main dependent variable of interest is the variable success, coded zero if mediation failed, one in the case of a cease-fire, two given a partial settlement, and three given a full settlement. For both variables, data is taken from Regan et al. (2009) and Text 1 in the Appendix provides additional information on the corresponding coding procedure for the variable success. This source is also used to identify civil wars with diplomatic interventions between 1945 and 1999. Moreover, potential intervening third-parties comprise all existing countries in any civil war year as defined by the COW Project (Bennett and Stam 2009) as well as the Catholic Church, the United Nations, the African Union, and a collective group of other non-state parties\(^{18}\) (Regan et al. 2009). With regard to the selection and the outcome model, the remaining variables are operationally defined as follows and corresponding descriptive data is provided in Table 2.

Indistance reflects the logged distance of a third-party and a civil war state. This data is gathered from Greig and Regan (2008) and was generated using COW inter-capital distances (Small and Singer 1982) using EUGene with land contiguity and War Trap distance modifications (Bennett and Stam 2009). This variable’s observations range from 0 to 9.43. The variable defense pact is coded 1 if the third-party shares a defense pact with the state in which the civil war takes place. Data is taken from Greig and Regan (2008) where the variable is coded using data from Leeds et al. (2002). trade interest, the variable integrated to assess hypothesis H3, represents the share of a third-party’s total exports and imports traded with the country in which the conflict occurs. This measure again relies on Greig and Regan (2008) and was computed using Gleditsch’s Expanded Trade and GDP data, version 4.1 (2002). Inversely, this procedure is also applied to obtain the variable trade leverage, which reflects the conflict country’s proportion of imports and exports traded with the mediator. The variable major power is a dummy variable. According to the COW definition (Small and Singer 1982), a coding with 1 indicates that the third-party is a major power. The corresponding data-set was generated using EUGene (Bennett and Stam 2009). historic is another dichotomous variable and is based on Greig and Regan (2008). The variable specifies whether there is a former colonial relationship between the conflict country and the third-party. The variable is also coded with 1 for dyads between the Catholic Church and conflict countries that are by majority Catholic. Further, the intensity of a conflict is operationalized as the log transformed number of annual battle deaths in the dyad year as computed by Greig and Regan (2008). This very source (ibid.) is also

19 Following Greig and Regan (2008), in order to avoid the loss of cases for which the computation of inter-state distances is not possible (e.g. for NGOs), the model furthermore includes a dummy variable Indistance dummy indicating missing values, which were thereafter set to the maximum distance. The results for this variable are not interpreted.

20 As with the variable Indistance dummy, in order to avoid the loss of cases for which the computation of the latter two variables is not possible (e.g. for NGOs), the model furthermore includes dummy variables indicating missing values. These were set to zero and the corresponding results for these dummies are not interpreted.

21 For the post-World War II period, the Correlates of War Project’s identification of major powers includes the United Nations Security Council’s Permanent Five (China was added in 1949 after the Communist victory). Germany and Japan were added in 1991.
used to attain a measure for the mediator’s international reputation (defined as a third-party’s proportion of previously successful mediations since 1945) as well as in order to compute military and economic, two dichotomous variables coded with 1 if mediation is accompanied with a military or economic intervention by the third-party. Accordingly, prev_military and prev_economic are obtained, showing whether any previous military or economic intervention occurred by any third-party of the international community. In addition, the dummy variable ethnic indicates that a civil war is ethnically-based as identified by Regan and Aydin (2006). territorial, on the other hand, is coded with 1 if the conflict is either irredentist or secessionist as identified by Regan (2002). Furthermore, a dummy variable cold_war is created and coded with 1 if the conflict year lies between 1945 and 1989. Additionally, the variable democracy is introduced, reflecting the level of democratic institutions in a given conflict country. The indicator ranges from minus ten to positive ten and is the standard Polity IV measure of democracy gathered in its most recent 2008 version from the Polity IV project’s corresponding website (Integrated Network for Societal Conflict Research 2009). Finally, data from Regan et al. (2009) is used to create the variables prev_med, timing, unilateral and three dummy-variables representing the mediation-strategy chosen by the third-party. While prev_med indicates how often a third-party has previously mediated in a given conflict, timing is recorded as the sum of months passed between the point of time the conflict first reached the casualty threshold and the point of time a diplomatic intervention took place. To control for the possibility of curvilinear effects, timing2, a squared version of timing, is included as well. unilateral, on the other hand, is coded 1 if the third-party intervenes unilaterally and 0 if the intervention is multilateral. Concerning the mediator’s strategy, strat_fac is a dichotomous variable coded 1 if the chosen strategy is facilitative only and 0 otherwise. strat_man, on the other hand, indicates a manipulative strategy. For being the strategy most prevalent in the sample, mediation as

---

22 Arguably, one may also set the beginning of the Cold War to 1947, when the Trueman doctrine was firstly promulgated. Changing the coding of cold_war accordingly does not lead to greater differences in the results.
Table 2: Descriptive Statistics

<table>
<thead>
<tr>
<th>Variable</th>
<th>Nobs</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>success</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ongoing</td>
<td>22</td>
<td>4.0</td>
</tr>
<tr>
<td>cease-fire</td>
<td>306</td>
<td>55.6</td>
</tr>
<tr>
<td>part. settlement</td>
<td>80</td>
<td>14.6</td>
</tr>
<tr>
<td>full settlement</td>
<td>142</td>
<td>25.8</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Std.Dev.</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>mediation</td>
<td>0.006</td>
<td>0.077</td>
<td>0.0</td>
<td>1.0</td>
</tr>
<tr>
<td>ln(distance)</td>
<td>8.151</td>
<td>1.390</td>
<td>0.0</td>
<td>9.4</td>
</tr>
<tr>
<td>defense_pact</td>
<td>0.048</td>
<td>0.214</td>
<td>0.0</td>
<td>1.0</td>
</tr>
<tr>
<td>trade_interest</td>
<td>0.006</td>
<td>0.029</td>
<td>0.0</td>
<td>0.9</td>
</tr>
<tr>
<td>ripeness</td>
<td>10.273</td>
<td>10.029</td>
<td>0.0</td>
<td>51.0</td>
</tr>
<tr>
<td>ripeness2</td>
<td>206.114</td>
<td>377.510</td>
<td>0.0</td>
<td>2601.0</td>
</tr>
<tr>
<td>historic</td>
<td>0.007</td>
<td>0.081</td>
<td>0.0</td>
<td>1.0</td>
</tr>
<tr>
<td>prev_med</td>
<td>0.003</td>
<td>0.054</td>
<td>0.0</td>
<td>1.0</td>
</tr>
<tr>
<td>prev_military</td>
<td>0.008</td>
<td>0.092</td>
<td>0.0</td>
<td>1.0</td>
</tr>
<tr>
<td>prev_economic</td>
<td>0.003</td>
<td>0.055</td>
<td>0.0</td>
<td>1.0</td>
</tr>
<tr>
<td>major_power</td>
<td>0.036</td>
<td>0.204</td>
<td>0.186</td>
<td>0.403</td>
</tr>
<tr>
<td>intensity</td>
<td>6.942</td>
<td>7.406</td>
<td>1.976</td>
<td>1.721</td>
</tr>
<tr>
<td>cold_war</td>
<td>0.576</td>
<td>0.342</td>
<td>0.494</td>
<td>0.475</td>
</tr>
<tr>
<td>ethnic</td>
<td>0.502</td>
<td>0.500</td>
<td>0.0</td>
<td>1.0</td>
</tr>
<tr>
<td>democracy</td>
<td>−0.975</td>
<td>5.362</td>
<td>−9.0</td>
<td>10.0</td>
</tr>
<tr>
<td>territorial</td>
<td>0.262</td>
<td>0.440</td>
<td>0.0</td>
<td>1.0</td>
</tr>
<tr>
<td>unilateral</td>
<td>0.662</td>
<td>0.474</td>
<td>0.0</td>
<td>1.0</td>
</tr>
<tr>
<td>trade_leverage</td>
<td>0.037</td>
<td>0.081</td>
<td>0.0</td>
<td>0.6</td>
</tr>
<tr>
<td>strat_fac</td>
<td>0.342</td>
<td>0.475</td>
<td>0.0</td>
<td>1.0</td>
</tr>
<tr>
<td>strat_man</td>
<td>0.022</td>
<td>0.146</td>
<td>0.0</td>
<td>1.0</td>
</tr>
<tr>
<td>military</td>
<td>0.105</td>
<td>0.307</td>
<td>0.0</td>
<td>1.0</td>
</tr>
<tr>
<td>economic</td>
<td>0.033</td>
<td>0.178</td>
<td>0.0</td>
<td>1.0</td>
</tr>
<tr>
<td>reputation</td>
<td>0.047</td>
<td>0.152</td>
<td>0.0</td>
<td>1.0</td>
</tr>
</tbody>
</table>

Note:
The total number of observations for the selection model is 106,953.
The total number of observations for the outcome model is 550.
For each metric, columns to the left relate to the selection model, whereas columns to the right relate to the outcome model.

formulation is used as referential category. Based on Regan’s (2009) identification of civil wars, furthermore using EUGene (2009) to identify all existing countries in these war years, a data-set of dyads between any conflict in any conflict year and all potential
mediators was created. After integrating all measurements described above and after pairwise deletion of missing cases, the data-set resulted in 106,953 observations in 68 civil wars over the time-span 1945-1999. In 550 (or 0.6%) of these cases mediation occurred, of which 142 interventions (or 25.8%) ended with a full settlement. Moreover, 80 interventions (or 14.6%) led to a partial settlement, in 306 observations (or 55.6%) a cease-fire was reached, and for 22 observations (or 4.0%) the conflict was ongoing.

3.3 Estimation Technique & Analysis

As described in Section 2, the occurrence of mediation is not randomly chosen but may be subject to systematic selection effects. The importance of such effects has attracted much attention in the recent past, with more and more articles relying on correction procedures such as the ones developed by Heckman (1979). Nevertheless, possibly because of the availability of corresponding procedures in common data analysis computer programs, research on success factors of mediation has restricted itself to the Heckman probit model and, as discussed above, to the interpretation of mediation success as a simply binary outcome. This research paper, however, takes into account a wider range of multiple outcomes that are interpreted to lie on an ordinal scale, therefore requiring a more sophisticated estimation technique. The corresponding method that is chosen in this research paper, the maximum likelihood estimation of an ordered probit regression with selection correction (whose selection model is a probit model), was made available to the academic community only recently by Miranda and Rabe-Hesketh (2006) and, to the author’s knowledge, has not been used in any peer-reviewed article in political science. In addition, taking into account that observations are not fully independent

---

23 In the sample, in 63.4% of all mediations the mediator chose a strategy classified as mediation as formulation. In 31.4% a facilitative, in 5.2% a manipulative strategy was chosen.

24 These combinations between a potential mediator and a conflict in a given year are referred to as “civil war year dyads”.
from each other, robust standard errors are computed and are clustered around disputes.25 Table 3 and shows the results for the selection corrected ordered probit model. The full model converged after eleven iterations. Finally, given that, when clustering by conflicts, no $\chi^2$ test is provided and information is given on $\lambda$ only, the estimations were repeated without clustering in order to discuss these measures below. The results are available upon request.

25All estimations were calculated using the extension -ssm- to the computer program Stata as developed by Miranda and Rabe-Hesketh (2006). Further adjustments were made by the author to account for the calculations of robust standard errors clustered around conflicts. The full model was estimated subsequently using the GLLAMM extension developed by Rabe-Hesketh et al. (2008).
Table 3: Results: Selection Corrected Ordered Probit Estimation

<table>
<thead>
<tr>
<th></th>
<th>Probit Estimates of Mediation Occurrence (Selection Model)</th>
<th>Probit Estimates of Mediation Success (Outcome Model)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ln(distance)</td>
<td>-0.1627** (0.0197)</td>
<td></td>
</tr>
<tr>
<td>defense_pact</td>
<td>0.5312** (0.1950)</td>
<td></td>
</tr>
<tr>
<td>trade_interest</td>
<td>-2.6694 (2.2876)</td>
<td></td>
</tr>
<tr>
<td>timing</td>
<td>-0.0525* (0.0172)</td>
<td></td>
</tr>
<tr>
<td>timing2</td>
<td>0.0010** (0.0004)</td>
<td></td>
</tr>
<tr>
<td>historic</td>
<td>0.4920* (0.1960)</td>
<td></td>
</tr>
<tr>
<td>prev_med</td>
<td>2.9722** (0.2513)</td>
<td></td>
</tr>
<tr>
<td>prev_military</td>
<td>0.5261* (0.2873)</td>
<td></td>
</tr>
<tr>
<td>prev_economic</td>
<td>-0.6033^ (0.3493)</td>
<td></td>
</tr>
<tr>
<td>major_power</td>
<td>1.3074** (0.1732)</td>
<td>-0.3850** (0.1430)</td>
</tr>
<tr>
<td>intensity</td>
<td>0.0905** (0.0294)</td>
<td>0.0852* (0.0393)</td>
</tr>
<tr>
<td>cold_war</td>
<td>-0.4655** (0.1367)</td>
<td>-0.7048** (0.1652)</td>
</tr>
<tr>
<td>ethnic</td>
<td>-0.2488^ (0.1472)</td>
<td></td>
</tr>
<tr>
<td>democracy</td>
<td>0.0224 (0.0137)</td>
<td></td>
</tr>
<tr>
<td>territorial</td>
<td>-0.1778 (0.1391)</td>
<td></td>
</tr>
<tr>
<td>unilateral</td>
<td>-0.0401 (0.1372)</td>
<td></td>
</tr>
<tr>
<td>trade_leverage</td>
<td>1.6804^ (0.8876)</td>
<td></td>
</tr>
<tr>
<td>strat_fac</td>
<td>0.1641 (0.1586)</td>
<td></td>
</tr>
<tr>
<td>strat_man</td>
<td>0.1459 (0.3558)</td>
<td></td>
</tr>
<tr>
<td>military</td>
<td>0.0070 (0.1887)</td>
<td></td>
</tr>
<tr>
<td>economic</td>
<td>0.3536 (0.2961)</td>
<td></td>
</tr>
<tr>
<td>reputation</td>
<td>0.5058 (0.3657)</td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>-3.2310** (0.2812)</td>
<td></td>
</tr>
<tr>
<td>Cutpoint 1</td>
<td>-1.5079** (0.2935)</td>
<td></td>
</tr>
<tr>
<td>Cutpoint 2</td>
<td>0.8318* (0.2346)</td>
<td></td>
</tr>
<tr>
<td>Cutpoint 3</td>
<td>1.2190** (0.2378)</td>
<td></td>
</tr>
<tr>
<td>n</td>
<td>106,953</td>
<td>550</td>
</tr>
<tr>
<td>λ</td>
<td>0.1732 (0.0957)</td>
<td></td>
</tr>
<tr>
<td>log likelihood</td>
<td>-2079.5244</td>
<td></td>
</tr>
</tbody>
</table>

Note:
For the selection model, each observation is a dyad-year between a potential mediator and a given civil war. The dependent variable is the occurrence of mediation.
For the outcome model, each observation is a mediation in each of these dyad-years. The dependent variable is an ordinal measure of mediation success (see above).
Both models contain additional dummy variables to avoid dropping cases in which computing an independent variable is impossible (e.g. NGOs).
Robust standard errors are clustered around 68 disputes and are in parentheses.
^p < .10, *p < .05, **p < .01.
4

Interpretation of Results

The results from the non-clustered analysis empirically sustain that the chosen estimation technique is appropriate. With \( \rho \) proving significance at a 0.05-level, it should be assumed that the selection and the outcome model are related to each other and results of simple probit models could hence be subject to selection effects. Additionally, the results of the \( \chi^2 \) test show that the probability for all coefficients to be zero is miniscule.

With regard to significant predictors within the selection model, the results presented in Table 3 are interesting indeed. A first glance reveals that, aside from the variable \text{trade} \_\text{interest}, all of the predictor’s coefficients reach significance at least at a 0.1 level; the set of variables furthermore excluding \text{prev} \_\text{military} and \text{prev} \_\text{economic} relates to coefficients that are significant at a 0.05 level or even higher. Strikingly, however, only by assessing the coefficient’s signs, it is evident that three of the suggested hypothesis (H3, H7, and H11) must not only be rejected, but there is strong support for effects running in the opposite direction than the one suggested from the theoretical considerations. While some authors offer ad hoc explanations for such contradictory findings (e.g. Greig and Regan 2008, after finding that a third-party’s trade interest decreases the likelihood of mediation), this paper leaves these findings to more intensive theoretical analyses to follow. Rather than simply making statements on the significance and direction of individual predictors, however, it would be more interesting to relate the analysis’ results to the \textit{magnitude} of changes that can be attributed to single independent variables. This task is demanding in a probit setting for thinking in \( z \)-values is difficult and hence, the selection model was re-estimated, calculating predicted probabilities and marginal effects as well as corresponding confidence intervals by
Table 4: Marginal Changes in Estimated Probabilities

<table>
<thead>
<tr>
<th>Variable</th>
<th>From</th>
<th>To</th>
<th>change</th>
<th>change (%)</th>
<th>95% c.i. of change</th>
<th>95% c.i. change (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ln(distance)</td>
<td>0.0011</td>
<td>0.0006</td>
<td>−0.0005</td>
<td>−42.54</td>
<td>−0.0007</td>
<td>−28.64</td>
</tr>
<tr>
<td>defense_pact</td>
<td>0.0008</td>
<td>0.0028</td>
<td>0.0020</td>
<td>248.04</td>
<td>0.0004</td>
<td>46.49</td>
</tr>
<tr>
<td>historic</td>
<td>0.0008</td>
<td>0.0028</td>
<td>0.0020</td>
<td>235.78</td>
<td>0.0003</td>
<td>31.34</td>
</tr>
<tr>
<td>prev_med</td>
<td>0.0008</td>
<td>0.1501</td>
<td>0.1493</td>
<td>17989.78</td>
<td>0.0736</td>
<td>8870.22</td>
</tr>
<tr>
<td>prev_military</td>
<td>0.0008</td>
<td>0.0034</td>
<td>0.0025</td>
<td>304.11</td>
<td>−0.0001</td>
<td>−6.07</td>
</tr>
<tr>
<td>prev_economic</td>
<td>0.0008</td>
<td>0.0003</td>
<td>−0.0006</td>
<td>−68.35</td>
<td>0.0001</td>
<td>−130.39</td>
</tr>
<tr>
<td>major_power</td>
<td>0.0008</td>
<td>0.0129</td>
<td>0.0121</td>
<td>1608.12</td>
<td>0.0203</td>
<td>808.06</td>
</tr>
<tr>
<td>intensity</td>
<td>0.0007</td>
<td>0.0010</td>
<td>0.0004</td>
<td>53.77</td>
<td>0.0001</td>
<td>19.14</td>
</tr>
<tr>
<td>cold_war</td>
<td>0.0017</td>
<td>0.0005</td>
<td>−0.0012</td>
<td>−70.76</td>
<td>−0.0006</td>
<td>−33.70</td>
</tr>
</tbody>
</table>

Note:
Changes for continuous variables are based on a difference from half a standard deviation below the variable’s mean to half a standard deviation above. Changes for dichotomous variables represent differences from zero to one. All remaining variables are held at their mean.

The last two columns refer to proportional changes based on the lower / upper value of the 95% confidence interval of a variable’s impact.

All estimations were conducted using the Clarify utility for Stata (King et al. 2000).

The results are presented in Table 4 providing probability estimates of the occurrence of mediation that are more convenient to interpret.

This analysis supports findings of previous research (e.g. Greig and Regan 2008), suggesting that geographically closer states are more prone to mediate. This relationship, portrayed by hypothesis H1, becomes particularly evident considering the analysis of marginal effects. Comparing the probability of mediation in the standard deviation range of two countries’ distance around the distance’s mean, holding all other factors at their means, the probability that mediation occurs decreases by approximately 43%. In

---

26 As common practice in many publications interpreting probit results, marginal effects are calculated by holding the remainder of the independent variables at their mean. However, caution is advised because, in this way, the estimated effects are likely to be overestimated by artificially assessing a variable’s change at one of the curve’s steepest positions. The author is indebted to Christopher Achen for pointing at this limitation and for referring him to an unpublished manuscript by Hamner and Kalkan (2008).

27 These results slightly differ from the selection model presented in Table 3, whose coefficients could be used to manually calculate corresponding z-values as well. Note, however, that these differences are minuscule.
order to provide an even clearer picture, this difference in probabilities relates to a pair of countries with a distance of 1,712 miles, in contrast to a third-party whose location is 7,001 miles away from a conflict. Note, however, that this and the remaining reported marginal effects should be interpreted carefully, also taking into account the range determined by the corresponding standard errors and the resulting confidence interval. Nevertheless, there is support for this paper’s theoretical grounding, suggesting that closer states are more likely to intervene in order to mitigate their costs of a conflict. In addition, in accordance with hypotheses H2 and H5, it is found that a country is more likely to mediate if it shares a defense pact with the conflict country and if there is a historic linkage between the conflict country and a third-party. Moreover, as proposed in hypothesis H4 and its foundation in Olson’s logic of collective action (1965), this research paper finds major powers to be more likely to mediate. What is more, the hypothesized relation between a conflict’s intensity (hypothesis H6) is sustained in the analyzed set of civil wars. This research suggests that if the third-party of a civil war year dyad is a major power, the probability of mediation occurrence increases by 1,608%, compared to the opposite case. In comparison with the remaining variables\textsuperscript{28}, this effect is substantive, predicting that, given all other independent variables are held at their mean, a major power is about 16 times more likely to mediate than other parties. \textit{prev_mediations}, introduced in order to assess hypothesis H8, is the variable found to be the strongest predictor of mediation occurrence. Given that any third-party has previously mediated in a conflict before increases the chance of mediation approximately 188 times. Furthermore, the results also lend support to hypothesis H10, which makes a case for a positive relationship between previous military interventions by the international community and observations of mediation. This effect, whose theoretical basis is determined by the consideration of sunk costs, is significant at a 0.1-level, suggesting that in civil wars with prior military interventions, mediation is approximately 304% more likely than in other conflicts. Contrasting this result, however, this analysis

\textsuperscript{28}To be precise, all of the independent variables are nominal in their difference, i.e. a given marginal change in one predictor is strictly speaking not comparable with the reported effect of another. Therefore, it is up to the reader to develop her own yardstick for a qualitative judgment on how easily such changes are triggered.
finds that previous economic interventions make mediation less likely, thus challenging hypothesis H9. In addition, hypothesis H11 is falsified: third parties were found to be more eager to mediate after the end of the Cold War than before.

Finally, it is even more problematic to find an appropriate interpretation for the significant curvilinear relationship that is found to exist between a conflict’s ripeness and the occurrence of mediations. To solve this problem, Figure 3 presents the estimated probability for each year after the conflict started and corresponding confidence bands, holding all other predictors at their mean. While hypothesis H7 needs to be clearly rejected, Figure 3 provides an important insight regarding the probability of mediation depending on a conflict’s duration: Within the first 5 to 10 years, the chance for mediation to occur appears to drop strongly, whereupon the probability converges to an even level. Interestingly, the probability’s confidence interval is furthermore greatly enlarged during the first period, making predictions by far more difficult than in the following years.

Moving to the central question of mediation success and the corresponding coefficients as shown in Table 3, only to a limited extent do the findings of this analysis
confirm the postulated research hypotheses. Generally, while the results show consistency with the presented rational choice model for mediation occurrence, the Contingency Model for mediation success performs rather poorly. Not only are its coefficients mostly insignificant, those being significant do not cluster in a pattern which could have explained that only one area of the presented model (e.g. only process variables) should be regarded as a sound predictor. More precisely, none of the variables democracy, territorial, reputation, and none of the process variables reaches significance. Upon first glance, these findings appear drastic. Nevertheless, this analysis may also shed more light on the current state of research and put the insignificance of many research hypotheses, some of them known for decades, in a better perspective. Certainly, caution is advised for insignificant coefficients may always be due to the set of remaining predictors, “eating into” the potential effect of a predictor. Nevertheless, with none of the process variables showing significance, these results lend tentative support for arguments on structure vs. agency, suggesting that mediators’ efforts are more strongly affected by a given context rather than by the mediator’s skills, her strategy, or accompanying measures such as military or economic interventions. In addition, hypothesis H13 on the conflict country’s level of democracy, hypothesis H14’s concern about territorial conflicts, and hypothesis H16 (on the potential difference between unilateral and multilateral mediations) need to be rejected, finding no evidence that their coefficients are different from zero, even although all of the corresponding signs are in the expected direction. Interestingly, both variables ethnic and trade_leverage reach significance at the 0.1 level and are in line with the theoretical propositions stated in hypotheses H12 and H18. Given that there is no debates about the direction of these variables’ hypothesized effects, it is open to the reader to interpret these hypotheses as directional, in which case one-tailed tests apply and the p-values are halved.

Even though such thresholds are nothing more than arbitrary conventions that are commonly accepted among scholars, there should be little controversy around the findings concerning hypotheses H15, H17, and H23. Note, however, that the sign of the coefficient corresponding to the conflict’s yearly number of fatalities is positive and
therefore contradicts the suggested relation between a conflict’s level of intensity and the probability of successful mediations. This result is rather in line with arguments on the role of “hurting stalemates” and future research may focus on this finding to assess whether there exists a tipping point after which this effect becomes reversed. Equally surprising is the effect for observations in which the mediator is a major power, which are found to be less likely to end successfully. Lastly, and as indicated in the introduction, mediation in the post-Cold War era appears to be more successful. This result is in line with the initial intuitions, yet even holds when controlling for factors that make the occurrence of mediation more likely and when holding the model’s remaining predictor variables of mediation success constant. Finally, the estimated cutpoints correspond with the intuition that a move from a mere cease-fire to a partial settlement is more difficult to achieve than a corresponding move from a partial settlement to a full settlement.29

In the case of estimates in the outcome model (as was the case in the selection model), coefficients’ signs are difficult to interpret beyond indicating the direction of an effect. Therefore, this section presents predicted probabilities for a change from zero to one in each of the significant dichotomous variables (see Table 5). Thus, each value corresponds to the estimated probability that, in the case of a mediation, an outcome is reached that is above each of the ordinal categories (thereby including outcomes beyond the next categories up to the category “full settlement”).

These marginal effects can be interpreted both between each other and from category to category. Across all categories, the cold war variable results to be the dichotomous predictor with the greatest impact on the outcome of mediations, followed by the variable indicating whether the intervening third-party was a major power. In addition, while there is an evident disadvantage for mediations in ethnic conflict, the variable’s

29Note that the ordered probit model assumes an independent variable’s effect to be constant across ordinal categories (“the parallel regressions assumption”). Naturally, this does not assume that these categories are equally distant from each other on an underlying continuous distribution (which would make the ordering equal to one on an interval scale).
Table 5: Marginal Probabilities for Dichotomous Predictors of Mediation Success

<table>
<thead>
<tr>
<th></th>
<th>Cease-fire</th>
<th>Partial Settlement</th>
<th>Full Settlement</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>Probability</td>
<td>∆</td>
</tr>
<tr>
<td>Mediator a Major Power</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>112</td>
<td>0.924</td>
<td>0.191</td>
</tr>
<tr>
<td>No</td>
<td>438</td>
<td>0.965</td>
<td>0.041</td>
</tr>
<tr>
<td>During the Cold War</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>188</td>
<td>0.897</td>
<td>0.149</td>
</tr>
<tr>
<td>No</td>
<td>362</td>
<td>0.976</td>
<td>0.079</td>
</tr>
<tr>
<td>Ethnic Conflict</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>276</td>
<td>0.958</td>
<td>0.283</td>
</tr>
<tr>
<td>No</td>
<td>274</td>
<td>0.968</td>
<td>0.010</td>
</tr>
</tbody>
</table>

Note:
Values reflect the estimated probability that any of these three categories is reached or exceeded.

Impact is comparatively small and ranges between 1.0% for the probability to reach an outcome beyond a cease-fire and 4.3% for the change in the probability to reach an outcome which exceeds a cease-fire. As could be expected from assessing the cutpoints in Table 3, this pattern of a weaker drop in probabilities once a partial settlement is reached is uniform across these predictors. In contrast, note the significant drop once the goal is not only to achieve at least a cease-fire but rather a partial or full settlement. In addition, for each of the three predictors, their effect becomes more pronounced once this latter conceptualization of successful mediation is used. The corresponding probabilities diverge drastically, converging only slightly when full settlements are considered instead. Although the described patterns are uniform among the three determinants of mediation success, it does appear noteworthy to once more point out the strong individual influences of both the variables major_power and cold_war. Their magnitude is certainly impressive: Given that the mediating third-party is not a major power, the probability to reach either a partial or a full settlement increases by 11.9%. The same probability differs by a telling 21.9% depending on whether the intervention took place.
during the Cold War, in opposition to the post-Cold War era.

Figure 4: Predicted Probabilities by Annual Number of Fatalities

Note:
Values reflect the estimated probability that any of these three categories is reached or exceeded.
The remaining predictors are held at their mean.

Likewise, Figure 4 presents predicted probabilities that any of these three categories is reached or exceeded, moving along the number of annual fatalities and holding the remaining predictor variables at their means. Again, it becomes evident that there is a drastic difference in the probability that mediation leads to at least a cease-fire and the probability for outcomes beyond a partial settlement. Note, however, that future research may focus on the question of whether this effect is exogenous indeed. Here, the causal chain may be reversed, given the possibility that cease-fires may be a prerequisite of mediation in particularly intense conflicts. Figure 4 furthermore depicts the estimated impact of conflict intensity within each of the three categories, providing a more approachable interpretation of the coefficient than Table 3.
To summarize once more, a mediation would be expected to be more successful if the mediator is not a major power, if the intensity of the conflict is high, the conflict is not an ethnic conflict, and when the country in which the civil war takes place is economically dependent on the mediating third-party.
Concerned with detecting explanatory factors influencing the outcome of mediation in civil wars, this paper presented a broad theoretical framework, drawing intensively from hitherto existing literature on the subject. Thereafter, carefully taking into account debates on the conceptualization and operationalization of the key variables in question, an original dataset on mediation in civil war was composed and an econometric analysis was presented.

In doing so, this research paper sustained both theoretically and empirically that determinants of mediation success may only be found by taking into account factors influencing the incidence of mediation. Overall, while the presented rational choice model was only partly successful in identifying determinants of mediation, there is nevertheless strong empirical evidence for a number of predictors of mediation occurrence. Firstly, both major powers and geographically close actors are found to be more prone to mediate than other third-parties. Moreover, chances for mediation to occur appear to increase if a civil war experienced prior military interventions and if there have been prior mediations in the conflict. What is more, third-parties sharing a defense pact and common historical ties with the conflict country rather mediate than other actors. Additionally, a higher level of conflict intensity appeared to make mediation more likely. Unexpectedly, though, this paper’s results support that mediation was less prone to happen during the Cold War era. Further, previous economic interventions seem to decrease the likelihood of mediation occurrence, although both of the latter variables reach statistical significance at a 0.1 level only. Lastly, this paper presents support for a curvilinear relationship between the duration of a conflict and mediation, rejecting
existing theories on a conflict’s “ripeness” for mediation.

Yet, only three variables show to have a statistically strong significant impact on the outcome of mediation, with a further two variables reaching the 0.1 level. On weaker grounds, ethnic civil wars seem to be particularly hard to solve by the means of mediation, whereas mediation was detected as more successful if the intervening third-party possesses higher levels of trade leverage over the conflict country. Once more contradictory to the corresponding research hypothesis, a less satisfactory outcome is expected if the mediator is a major power. Equally surprising is the role of a conflict’s annual levels of fatalities as higher levels are associated with more peaceful endings. Here, more research is needed to assess whether this is due to misspecification or curvilinear effects, or rather high levels of intensity that coincide with greater costs for the conflicting parties. Finally, as indicated in the introduction’s cursory inspection of descriptive data, mediation appears to have become more satisfactory in the post-Cold War era. Most striking, however, is the large number of potential explanatory variables which do not seem to have any major influence on the outcome variable. Certainly, while insignificance of an independent variable needs to be interpreted carefully, the fact that a smaller role is attributed to process variables provides interesting empirical evidence for discussions on the role of a mediator’s agency within structural constraints.

Although these results are undoubtedly impressive, limitations of the research presented here need to be taken into account. First, while the chosen data-set of civil wars represents the most recent milestone for quantitative analyses of third-party interventions, the identification of civil wars is restricted to conflicts in which any kind of intervention occurred. In this vein, this study’s results should be handled with care as minor conflicts could have been neglected at the selection stage. Second, as has been shown in the section on the conceptualization of civil war, several of the concepts in question are highly disputed, leading to a variety of measurement approaches. Although such diversity is perhaps unavoidable, the comparability of studies is hard to be
assured and future research may focus both on the robustness of this paper’s findings and on determinants of potential differences. Third, as the Contingency Model’s name indicates, further methodological advances may soon be available to analyze process variables’ potential role as mediating or moderating factors within a selection corrected structural equation model. Finally, legal factors, norms, and cultural characteristics are potential predictors of both mediation occurrence and success which had to be excluded from this research. Once a better theoretical understanding of these factors and corresponding data-sets are available, these factors should be included in subsequent analyses. In addition, small-n studies may be well suited to assess the causal role of such factors.

25 years after Galtung’s call for “remedies” to prevent and to solve conflicts, his words are more relevant than ever. Nevertheless, just as medical science did not emerge within 50 years either, this paper shows that peace research is slowly moving ahead. At present, we have found strong support for a number of predictors for mediation occurrence in civil wars and are able to model these factors jointly with potential determinants of success – without reducing mediation outcomes to a mere dichotomy. Yet, as could be seen by the small explanatory power of the hitherto well established Contingency Model, further research may need to take one step back and develop sounder theoretical frameworks.
Bibliography


Appendix

Figure 5: Number of Conflicts per Year by Type

Source: Own depiction using data from the UCDP / PRIO Centre for the Study of Civil War (2009)

Text 1: Coding Manual for Ordinal Measures of Mediation Outcomes

The outcome is defined according to the extent to which the parties were able to settle the dispute issues. There are four categories of outcomes. Code the category that best describes the mediation outcome.
(1) **Full Settlement**: Code this category only when the parties have reached a formal agreement settling the primary issues that prompted the dispute. You can identify the primary issues through the demands put forward by the parties at the outset of the dispute. If the parties agree to an overall formula for the settlement of the main issues, but postpone the “details” to later talks, code the outcome as a partial settlement, not a full settlement.

(2) **Partial Settlement**: The parties reach a settlement on some issues, but not the primary issues that led to the dispute. For example, if the parties agree to some terms but do not address the underlying issues, this could reflect a partial settlement. Acceptance of an offer of arbitration is considered to be a partial settlement.

(3) **Moderation of the Dispute, but no Agreement on Issues**: The parties agree to a cease-fire, a withdrawal of troops from border areas, or similar activities to moderate the level of hostility, but there is no agreement on substantive issues. If, after achieving a cease-fire, the parties agree to a disengagement of forces, including the areas to which the forces would withdraw, for example, then the outcome would be coded as a partial settlement, because there was some agreement on political issues.

(4) **Failed Negotiation**: The parties break-off negotiations with no agreement of any kind.

Note: Note that, in this paper's analysis, the outcome variable was coded in a way that zero indicates a failed mediation and four relates to a full settlement.

Source: Coding manual for Regan et al. (2009) as received in a personal communication with Patrick Regan. Emphasis in the original.