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THE TIMING OF MEDIATION
COMMITMENT PROBLEMS IN CIVIL WARS

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ABSTRACT OF THE THESIS

The Timing of Mediation

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The peaceful settlement of civil wars represents a key challenge for the international community and its policymakers. Even though mediation has become the most common tool of conflict management to settle these conflicts, so far we know relatively little about how to best manage them. This thesis examines mediation in civil wars and by building on the bargaining model of war the author argues that mediators have to concentrate primarily on the resolution of commitments problems in order to establish robust peace agreements. This paper uses an edited version of the *Civil War Mediation* (CWM) dataset, which comprises 366 mediation events in the time period of 1946 to 2004. By employing logistic regression analyses, the author finds that the later the intermediary enters a conflict, the lower the development and democracy level of the respective state, and the more intense a conflict is, the higher is the probability of a successful mediation outcome. The results also suggest that international and regional organizations are better equipped than other mediators to resolve commitment problems.

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1 Introduction

Given the frequency and destructiveness of civil wars, facilitating robust peace settlements between the conflict parties represents a key challenge for the international community and its policymakers. Intrastate conflicts are not only more frequent and more deadly than their interstate counterparts, but also longer in duration (Fearon and Laitin 2003; Walter 2002). The difficulties to settle these conflicts and their widespread occurrence make the implementation of more effective mediation strategies an important and relevant concern for the international community.[1] In recent years, mediation has become the most common tool of conflict management in civil wars (Svensson 2007). However, so far we know relatively little about how to best manage them. Generally, the relative success of mediation is not particularly high, but depends crucially on a wide range of conditions (see e.g. Bercovitch and Gartner 2006; Gartner 2011; Kydd 2006; Regan and Aydin 2006; Svensson 2009).

Building on the bargaining theory of war, I provide a theoretical account of why and under what conditions mediation in civil wars can entail a more robust agreement. The bargaining model is one of the central theories that attempt to explain why wars occur, even though they lead to Pareto-inferior or inefficient outcomes. Proponents of this theory argue that primarily informational asymmetries and commitment problems lead to the onset of violent conflicts and its continuation (see e.g. Fearon 1995; Powell 2006). However, only credible commitment problems, which are the central cause of bargaining failures between domestic groups (Powell 2004; Walter 2002), can account for prolonged disputes (Leventoğlu and Slantchev 2007; Powell 2006; Reiter 2009). Hence, I argue that in order to resolve this commitment problem, mediators have to reduce the risk that one party violates the agreement by building trust between the belligerents and providing implementation assistance. The simple provision of information might in contrast lead to a failure of the mediation attempt.

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[1] In this paper the terms *conflict*, *war*, and *dispute* are used interchangeably.

This paper builds primarily on an edited version of the *Civil War Mediation* (CWM) dataset by DeRouen et al. (2011). In addition, variables from four other datasets have been added to the CWM-dataset in order to control for some other influential variables. The data focuses solely on civil war mediation and comprises 366 mediation events in the time period of 1946 to 2004. By employing logistic regression analyses, I find that the timing of the mediation, the severity of the conflict, the level of democracy as well as the level of development and the type of the mediator are strong predictors of the likelihood of a robust agreement. The later the intermediary enters a conflict, the lower the development and democracy level of the respective state, and the more intense a conflict is, the higher is the probability of a successful mediation outcome. Furthermore, the results suggest that international and regional organizations are better equipped than other mediators to resolve commitment problems.

This thesis proceeds as follows. The next section reviews the recent literature on mediation in civil wars. After situating this paper in the existing literature, the third section introduces the bargaining model of war as a theoretical framework for understanding which timing is most successful in order to reach a robust agreement. In addition, section three also presents the hypotheses. Following this, the research design is described in chapter four. The fifth section presents and discusses the results of the logistic regression analysis. The last section concludes with a brief summary of the central arguments and findings.

2 Literature Review

2.1 Mediation

Mediation belongs to the most commonly applied conflict management tools in the international arena and thus it has been examined frequently in theoretical and empirical studies (see Bercovitch and Houston 1996). Mediation is particularly popular when other techniques of conflict management have already failed to bring about a solution to the conflict and when the disputes are particularly protracted and complex. Mediation is a consensual, nonviolent, and nonbinding involvement of a third party in the conflict management and resolution process. These criteria help to distinguish mediation from other conflict management techniques, such as arbitration and adjudication.[2] Further characteristics of mediation are the voluntary participation of the belligerents and the often ad-hoc approach to conflict management (Bercovitch and Houston 1993).

Mediators can play various roles in order to prevent a breakdown in the negotiations and achieve an agreement, which is acceptable to both parties in the conflict. They may facilitate dialogue between and provide information to the belligerents, they may pre-formulate settlement terms or constructing agreements, and they may be able to pressure parties into a settlements by offering incentives and providing implementation assistance. Nevertheless, a crucial precondition for any successful mediation outcome is also the belief of both parties that by participating in a mediation process they will be better off than by a continuation of the conflict. The incentives for intermediaries to intervene in violent disputes and mediate between the parties are multifaceted. These incentives may include humanitarian concerns about loss of life, concerns about refugee flows, and security concerns about regional stability (Kydd

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[2]Arbitration and adjudication involve a legally binding third-party conflict resolution.

2010: 102). In contrast, mediators intervene hardly ever due to pure altruism. It is rather a rational consideration that weighs up material, reputational, and ideological benefits against the costs of a mediation attempt in terms of time, reputational and material losses (Maoz and Terris 2006).

There are several definitions of mediation. However, many of those definitions fail to appropriately capture the complexity of the mediation process.[3] A definition that is most often applied in research on mediation and attempts to capture this complexity is provided by Bercovitch et al. (1991). According to this definition, mediation is

> "[...] a process of conflict management where disputants seek the assistance of, or accept an offer of help from, an individual, group, state or organization to settle their conflict or resolve their differences without resorting to physical force or invoking the authority of the law" (Bercovitch et al. 1991: 8).

This paper equally relies on this definition. Furthermore, I consider mediation as a rational as well as political process, which is characterized by a strategic interaction between the intermediary and the conflict parties.

In order to explain the effectiveness of mediation attempts, a multi-causal approach has become commonplace in research on mediation (see e.g. Beardsley 2011; Bercovitch and Houston 1996; Svensson 2007). Disputes and their resolution and management efforts are neither uniform nor fixed and thus the context and the characteristics of any specific situation have to be taken into account. The contingency model of mediation proposed by Bercovitch and Houston (1996) is one attempt to integrate both. This model perceives mediation outcomes as the result of the interaction of context and process variables. Context variables take into account the nature of the mediator, of the parties and of the dispute, whereas process variables concern the

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[3]A good overview of various definitions of mediation is provided by Bercovitch (2007: 164-168).

actual mediation behavior. These variables have been examined in various case and large-N studies (see e.g. Beardsley 2011; Bercovitch and Gartner 2006). Given its ability to integrate many different explanatory variables, this thesis applies also the underlying rationale of the contingency approach.

Before I turn more specifically to mediation in civil wars, the so-called selection effect has to be considered at least theoretically. The selection of the cases in which mediators intervene is not random, but depends on the likelihood of success of the intervention, and on the willingness of both, the intermediary as well as the conflict parties. A mediator will hardly ever intervene if the probability of a failure is rather high and he may eventually jeopardize his international reputation. At the same time, mediation is particularly common in rather hard cases, where previous conflict management attempts have already failed to bring about a solution (Gartner and Bercovitch 2006; Greig 2005; Regan and Stam 2000). Hence, the selection effect can reduce the potential positive process effects of mediation.

2.2   Mediation in Civil Wars

The following subsection presents recent finding on mediation and civil wars and is organized as follows. The first part highlights the supply and demand side of mediation and the second part focuses on its effectiveness.

An important question, that is closely related to the selection effect, is under what conditions do states and international organizations decide to intervene as mediators and when do warring parties accept such offers? In contrast to interstate conflicts, offers of mediation are more selective in civil wars in the sense that mediators tend to offer mediation where they are more likely to be accepted (Melin and Svensson 2009). Greig and Regan (2008) show that offers to mediate in civil wars are primarily driven by contemporary and historical links between potential mediators and the civil

war state. Therefore, mediation is most likely to be offered when the offering party has great interests at stake. Furthermore, mediation is more likely to occur if there have been previous mediation attempts. Even though a large proportion of mediation offers are accepted by warring parties, there is still some variance in the willingness to accept mediation (Greig and Regan 2008: 776). Thus, the acceptance of mediation can be considered as function of the conflict itself. For instance, offers of mediation are most likely to be rejected at the beginning and the end of an intrastate dispute (Greig and Regan 2008). Although strong historical linkages between the intermediary and the civil war state significantly increase the probability that an offer will be made, it simultaneously decreases the likelihood that it will be accepted (Greig and Regan 2008; Melin and Svensson 2009). Therefore, offers seem to be thoroughly considered before they are made. Equally, the belligerents do weight the costs of mediation against its benefits. Compared to international conflicts, political costs associated with the acceptance of mediation are considerably higher in civil wars, because the mediation process will transfer substantial legitimacy to the non-state actor (Melin and Svensson 2009). Hence, states accept mediation only in the most serious conflicts, or when the costs of legitimizing an opponent are lower than the benefits of a conflict resolution. These results are in line with DeRouen et al. (2011), who find that territorial, protracted and more intense conflicts are more likely to be mediated.

After having considered the demand and supply side of mediation, I will now focus on the effectiveness of mediation. Generally, mediation does not appear to have a great track record if only successful agreements are taken into account (Regan and Aydin 2006: 741). However, results differ across different types of mediation, diverse measures of success and different contexts (see Beardsley 2011; Gartner 2011; Gurses et al. 2008). Generally, scholars distinguish between international or regional, private and state mediators (Bercovitch and Schneider 2000). Each of them has a different impact on the effectiveness of mediation. For instance, by controlling for the selection effect and by focusing on mediation by regional organizations, Gartner

(2011) finds that regional mediators get especially hard-to-manage cases and that regional mediation contributes positively to the durability of civil war agreements. In another recent article, Gurses et al. (2008) find that international mediation has a positive effect on the duration of peace. However, they argue that different types of mediation attempts have a different impact on its success. Indeed, they show that mediated agreements and superpower mediation shorten the duration of peace after a civil war.[4] Furthermore, the authors find that ethnic wars and the intensity of the conflict have a negative influence on the duration, whereas democracy and the size of the army increase the duration of peace. Regan and Aydin (2006) do also confirm the positive effect of mediation and show that diplomatic interventions by third parties significantly reduce the expected duration of an intrastate conflict.

Scholars examining the effectiveness of mediation have argued that particularly two characteristics of the mediator may have an impact on the likelihood of a successful outcome. Unlike conventional wisdom, recent findings suggest that mediators do not need to be unbiased to be successful (Favretto 2009; Kydd 2003; Savun 2008; Svensson 2007, 2009). In contrast, biased mediators may be more likely to mitigate commitment problems and bring belligerents to a negotiated settlement. Svensson (2007) shows that government-biased mediators can mitigate the commitment problems of the non-state actor by reducing the fears of the government. On the contrary, rebel-biased mediators have no statistically significant effect on the likelihood of a negotiated settlement. The positive impact of bias is also confirmed by another study of Svensson (2009). There he argues that neutral in contrast to biased mediation processes are less likely to entail elaborated institutional arrangement, which are generally considered to contribute to more durable peace.

In addition to the impartiality dimension, some authors have raised the importance of leverage and power as significant predictors of successful mediation in international

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[4]Superpower mediation refers to mediation by the five permanent members of the United Nations Security Council.

disputes (Beardsley 2009; Favretto 2009; Kleiboer 2002; Zartman and Touval 1985). However, as the results of Gurses et al. (2008) and Gartner (2011) indicate, powerful mediators are not necessarily the most successful ones in a civil war context. Likewise, Beardsley (2011) argues that mediators using leverage to secure an agreement often risk maintaining the long-term sustainability of the peace, because the usually fail to keep the commitment needed to enforce such an agreement. In sum, mediation in intrastate conflicts is extremely complex and there are different predictors of a successful mediation outcome. Mediators face the difficult task to ensure both, the feasibility of mediated agreements in the short term and the sustainability over time.

3 Theory

3.1 Research Question

Over the past years mediation has emerged as one of the most often applied conflict management strategies. Therefore, it is not surprising that scholars have increasingly researched mediation processes by applying statistical large-N but also case studies and game theoretical approaches (see e.g. Beardsley 2011; Bercovitch et al. 1991; Favretto 2009; Greig 2005). The central research question usually centers on the criteria and conditions that make mediation attempts more likely to be successful. However, due to the complexity and the dependence on the context of the mediation process the empirical results are rarely robust and consistent for different types of conflicts. Furthermore, although intrastate conflict represent a disproportionate percentage of conflict management efforts (Bercovitch and Schneider 2000; Svensson 2007), research on mediation in civil wars lags somewhat behind similar work in the interstate war literature (DeRouen et al. 2011: 664; Gurses et al. 2008). Therefore, the central contribution of this paper is to close this gap by applying the assumptions of the bargaining model (see Fearon 1995; Powell 2006) to the study of mediation in intrastate conflicts. Even though this paper draws also on the commonly used definition of mediation by Bercovitch et al. (1991), it narrows the focus insofar as it concentrates solely on civil wars.

Mediators often fail to bring about a successful mediation outcome for a number of reasons. Sometimes they do not have the right "timing", do not employ the most appropriate strategy or the conflict parties are simply not interested in bringing the conflict to a halt (see Bercovitch and Houston 2000; Gartner and Bercovitch 2006). Nevertheless, mediation in intrastate conflicts can also be successful and bring violent disputes to a termination (see e.g. Gurses et al. 2008; Regan and Aydin 2006). This

paper focuses only on the conditions that make a robust mediated agreement more likely, which is in the case of this thesis defined as either a process agreement or a full settlement. Any other assessment of short- or long-term "success", for instance whether the conflict parties reached a cease-fire or for how long the peace lasts after the mediation, is explicitly not part of the coding of the dependent variable.[5]

Although other factors might likewise have an influence on the outcome of a mediation attempt, this paper concentrates on the examination of the validity of theoretical assumptions and the test of hypotheses concerning the time until the mediator enters a dispute, the level of democracy in the respective state as well as the severity of the conflict. This paper aims to analyze the influence of precisely these three explanatory variables on the likelihood of a robust agreement between both parties in the dispute.

3.2   Rational Choice and Bargaining Theory

In the following section I will develop the theoretical basis for my argument, which centers on the bargaining model of war and on what impact mediation can have on information asymmetries and commitment problems. The derived framework will then be used to form observable and testable hypotheses of the effect of mediation on the likelihood of a robust peace agreement.

I assume that the parties in the conflict are rational actors choosing always the possibility, which maximizes their utility, given their transitive, complete and reflexive preferences.[6] The success of mediation depends mainly on the expectations of the conflict parties. If the utility of peace is bigger than the expected costs of an enduring conflict, both parties will decide to stop the violent fighting and negotiate a robust

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[5]Please see section 4.2.1 for details of the operationalization of the dependent variable.

[6]Certainly, there may be also other considerations of why the parties fight each other, such as psychological factors. However, I claim that these factors are negligible in comparison to the rational choice approach.

agreement. In addition, the utility function of an actor depends not only on its own utility, but also on the utility function of the other actors, including the intermediary. Hence, mediation can be regarded and modeled as a strategic game (see Favretto 2009; Kydd 2003) and "to fully understand third-party efforts to resolve conflict, we must consider (at least) three fully strategic actors responding to each other's past and potential future actions rationally" (Kydd 2010: 116).

By applying rational choice assumptions, bargaining theory is one of the central theories that attempt to explain why wars occur, even though they lead to Pareto-inferior or inefficient outcomes. In an important article, Fearon (1995) highlighted three rationalist approaches in order to explain this inefficiency puzzle. His first explanation is informational asymmetries, which arise if the bargaining parties have either private information about their military capabilities or incentives to misrepresent their private information. Secondly, Fearon (1995) argues that bargaining indivisibilities prevent the parties from reaching an agreement that satisfies all belligerents. These indivisibilities occur when the matter in the dispute can only be divided in a few ways and if none of these divisions simultaneously satisfy all of the parties. Finally, the crucial issue of commitment problems is mentioned by Fearon (1995). This problem arises when the belligerents are unable to commit themselves to abide by the agreement or have incentives to renege on it. If one of these three obstacles to a bargaining result occurs, the conflict parties may find themselves in a situation in which war is preferred to peace - at least for one of them.

Many other scholars have applied bargaining theory in order to explain why parties in an inter- or interstate context begin and continue to fight each other (see Lake 2003; Leventoğlu and Slantchev 2007; Mattes and Savun 2009; Walter 2009). Furthermore, the bargaining model has also been increasingly used to account for the success or failure of mediation attempts (see Beardsley 2011; Kydd 2003, 2006; Svensson 2009). Building likewise on this model, this paper provides a theoretical account of why and

under what conditions mediation in civil wars can entail a more robust agreement. The theoretical argument will primarily concentrate on the problem of informational asymmetries and commitment problems.[7]

Research has shown that it is considerably harder to reach bargains in civil than in interstate wars (see Walter 2009). Belligerents sign fewer negotiated settlements, and even if they are finally implemented, they are more likely to break down (Licklider 1995). Being more severe and pronounced in intrastate than in interstate conflicts, the credible commitment problem can be regarded as a central cause of bargaining failures between domestic groups (Powell 2004; Walter 2002). It prevents the belligerents from avoiding civil war in the first place and makes it difficult to implement a robust agreement after a conflict. Commitment problems may exist on the government as well as on the rebel side. The government cannot be sure whether the rebels demobilize completely and end their military campaign once they have been granted concessions. Likewise, the rebels cannot fully trust the government to abide by the peace agreement. Due to the consolidation of power in favor of the government and the rebel's abandonment of the military campaign, it can annihilate its former enemy. In general, after a peace agreement the government will gain a significant bargaining advantage and the rebels are rather vulnerable to defection by the government (Svensson 2009: 246; Walter 2009). But not only commitment problems are a particular problem in intrastate conflicts, also informational asymmetries are especially severe, because information about potential military capabilities of rebel groups is difficult to obtain and often vague. Furthermore, there are obviously strong incentives to withhold this information from the government.

In comparison to commitment-based explanations, informational explanations have one central limitation. Bargaining models that center on the latter often implicitly assume that there would be no fighting if there was complete information. However,

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[7] Bargaining indivisibilities can rather be seen as parts of the commitment problem (Powell 2006: 170).

even though they might explain early phases of a conflict, they account only poorly for prolonged disputes (Leventoğlu and Slantchev 2007; Powell 2006; Reiter 2009). This argument can be particularly witnessed in a civil wars context, where "after a few years of war, fighters on both sides of an insurgency typically develop accurate understandings of the other side's capabilities, tactics, and resolve" (Fearon 2004: 290). If war would only be the result of asymmetric information, fighting should be stopped after some time and the uncertainty resolved, because fighting serves to reveal information due to a learning process. By applying a game-theoretical approach and treating war as a costly process, Powell (2004) highlights the importance of a learning process that occurs if states are uncertain about the actual distribution of power. In these cases fighting serves to convey information and occasionally states have to fight long-lasting battles in order to completely "screen" the respective other party. Therefore, asymmetric information can only incompletely explain prolonged intrastate conflicts and how wars end. In contrast, the commitment fear explains not only why civil wars last so long, but also why it is so important that third parties help reduce this concern in order to achieve a negotiated settlement. This fear delays war termination, even though uncertainty has been reduced.

Commitment problems are particularly profound when there are large, rapid shifts in the distribution of power (Leventoğlu and Slantchev 2007; Powell 2006). Such shifts in power occur if after having agreed to a peace settlement one of the parties takes advantage of a pause in fighting by regrouping or rearming, and by launching surprise attacks. The basic idea behind this argument is that the faction in power will choose to fight rather than abide by a peaceful agreement, if fighting and subsequently winning increases the probability of remaining in power (Powell 2006: 189). This problem is especially relevant in civil wars, because the usual disarmament of the rebel group after a peace agreement can be considered as a massive power shift in favor of the government (Beardsley 2011: 154). The government might take the chance and attempt to defeat the rebel group once and for all.

Hence, due to the fact that fighting does not solve the commitment problem, it can only be resolved by a peace agreement that involves a credible deterrent to surprise attacks and mutual trust between the belligerents. To put it differently, "[...] the solution [...] involves strategies to minimize the power shift to the point where the incentives for surprise attack disappear" (Leventoğlu and Slantchev 2007: 766). In order to increase the likelihood of a successful agreement, mediators have to create an environment of mutual trust and may subsequently verify and monitor compliance with an agreement, and thereby reduce the incentives to cheat.

3.3   Hypotheses

3.3.1   Time until Mediation

According to asymmetric information models, civil wars should be more likely to end the longer they last due to the process of learning, the revelation of information and the screening out of weak belligerents (Filson and Werner 2002; Powell 2004; Slantchev 2003). However, one might argue that if a mediator enters the conflict, we should actually witness the opposite. The strategies that are most frequently employed in mediation processes are strategies that focus on information provision and the facilitation of communication (Gartner and Bercovitch 2006; Kydd 2003). Hence, the revelation of information over the actual bargaining power of each party should in fact be accelerated and the conflict should end earlier.

Nevertheless, this line of argument is problematic if we take into account that in a civil war context we usually observe an imbalance between the respective military capabilities of the conflict parties. Typically, the government is much more powerful than the rebel groups, which becomes even more pronounced after a peace agreement (Mattes and Savun 2009: 739; Melin and Svensson 2009: 254; Svensson 2009; Walter

2009: 246). This fact entails the following dilemma. Attempts to mediate the conflict through the provision of information about intentions and capabilities may lead to a continuation of the war and a failure of the mediation attempt, because the weaker side might have become aware that it faces an unappeasable opponent. "Then, rather than end the war because it knows precisely what it must leave to B in order to ensure peace, A continues the war by attacking and forcing a final, decisive battle that prevents power from shifting in B's favor" (Wolford et al. 2011: 568). Hence, if through the provision of information the weaker party becomes aware that an agreement leads to a significant shift in power in favor of the stronger party, it will continue to fight.

Taking into account the argument made by Svensson (2009), there are also rebel-sided commitment problems, especially in the pre-settlement phase. In some cases of negotiated settlements the government may actually lose some of its authority, namely to make decisions and to legally use force. Nevertheless, also in those cases my argument is still valid. If the provision of information by the mediator to the government entails the perception of the administration to be in fact on the weaker side after an agreement, it will likewise continue to fight. In both cases, as long as the mediator is not able to solve the credible commitment problem and convince both sides that the respective other side will not take advantage of a pause in fighting, the conflict will continue and the mediation will fail to reach a robust agreement. Simply "[...] providing information and facilitating the exchange of information can realistically do little to reduce uncertainty about what is likely to happen in the future [...]" (Beardsley 2011: 40). In contrast, it might make things even worse.

A mediator has to do both, he has to help the belligerents to stop their armed hostilities and likewise promote a new relationship between the conflict parties. However, achieving both simultaneously is extremely difficult (Beardsley 2011: 3). As long as the mediator is not able to solve the commitment problem the belligerents will not

accept a robust agreement. As I have argued, provision of information is not at all sufficient to achieve this goal. Fortunately, as the conflict moves forward the war's very nature as well as the ability of the mediator to build trust comes to the aid of the intermediary. As Leventoğlu and Slantchev (2007) show, the commitment problem can be solved by the war's very nature. As the violent conflict progresses, the pie becomes smaller and the continuation of the war becomes less attractive. Hence, the belligerents need weaker threats to deter each other from surprise attacks and can gradually credibly commit to peace (Leventoğlu and Slantchev 2007: 767). At the same time, in order to overcome commitment problems, mediators have the unique ability to establish trust between the belligerents (see Beardsley 2011: 29; Kydd 2006). Both factors only have their full impact on the outcome of the mediation when the conflict moves to its natural end.

Hypothesis 1: *The later the mediator enters the conflict, the more likely will be a robust agreement.*

3.3.2   Severity of the Conflict

In intrastate conflicts the pain of war directly affects the population of the civil war country, and it cannot be exported by fighting on some else's territory. Hence, all the negative effects of a violent conflict, such as the loss of infrastructure, human life and damage to economic growth, might even be worse for the population compared to interstate wars. Even though there are empirical results showing that the severity of the conflict may create incentives to accelerate the reaching of agreements (Mason and Fett 1996), this does not necessarily apply equally to robust agreements. In line with Fortna (2004), Quinn et al. (2007) and Walter (2004), I argue that more deadly conflicts increase hostility and entail subsequently feelings of hatred on both sides that persist even after the end of a war. This obviously increases the commitment problem

and reduces the possibility to create a feeling of mutual trust. Both belligerents may be afraid that the other party only awaits a new opening in the political opportunity structure to strike again. This might be particularly the case, if one or both feel that the underlying causes of the conflict are not addressed by an agreement (Gurses et al. 2008: 139). A greater number of people killed may therefore reduce the likelihood of a robust agreement.

Hypothesis 2: *The more severe the civil war is, the less likely is a robust agreement.*

3.3.3   Level of Democracy

Countries with weak political and legal institutions are particularly likely to encounter difficult commitment problems (Walter 2009). Essentially, commitment problems are problems of treaty enforcement in the present as well as in the future. If the belligerents can be sure that the terms of the agreement are implemented and enforced over time, they would have little fear from a negotiated agreement. Nevertheless, in countries where political and legal institutions are weak and not able to check executive power, rebel groups will be particularly hesitant to sign agreements. In these countries, governments are more likely to renege on their promises and exploit the peace. "As long as weaker groups have little ability to enforce the terms of an agreement, potential rebel groups may prefer the risk of war to the potential higher costs of easy exploitation by the government" (Walter 2009: 252). Furthermore, the civilian control of the military is an important factor for a successful implementation of a mediation outcome. The tighter the legislative oversight, which is a unique characteristic of democratic regimes, the higher will be the likelihood that the rebels trust the government.

The mediation by Martii Ahtisaari in Aceh in 2004 confirms this assumption. After the 2004 tsunami, talks were held in Helsinki between the Indonesian government and

the Free Aceh Movement (GAM), which produced a robust agreement in 2005. In contrast to previous agreements, it received widespread support and was successfully implemented. The timing of the peace process contributed significantly to its success. During the mediation attempt, the democracy in Indonesia became stronger and reforms brought more civilian control over the Indonesian military (Beardsley 2011: 172-175).

Hypothesis 3: *The more democratic the civil war country, the more likely is a robust agreement.*

3.3.4   Control Variables

3.3.4.1   Process

TYPE OF MEDIATOR

In order to solve the commitment problem and to reduce the risk that one party does violate the agreement, a mediator has to provide implementation assistance. Such a type of mediator is forward looking and offers monitoring and enforcement during agreement implementation (Beardsley 2011: 34). Only intermediaries with the respective capabilities are able to provide such services. According to Beardsley (2011), in the context of an intrastate war, mediators that do not pressure the belligerents into concessions and simultaneously are able to provide implementation assistance over a longer time period are the most successful ones. These characteristics apply predominantly to international and regional organizations, which are usually put in charge to monitor an agreement. In line with Gartner (2011), who finds that regional organization can indeed be very effective, and Beardsley (2011), I expect that regional and international organizations are more successful.

STRATEGY OF MEDIATOR

Research on mediation has found that the employed strategy of an intermediary has a significant impact on the outcome of the mediation attempt (see e.g. Bercovitch and Gartner 2006; Maoz and Terris 2006; Regan and Aydin 2006). Beardsley (2011: 32) argues that a heavy mediation style, which assumes a more active role of the mediator, will be more successful to expand the set of alternatives and provide implementation assistance.

3.3.4.2 Context

PREVIOUS MEDIATION ATTEMPTS

Bercovitch and Gartner (2006: 351) have shown that the number of previous mediation attempts has an influence on coming attempts. The quantity of interventions by intermediaries can be regarded as an indication that the conflict is to some extent deadlocked. Furthermore, it implies that the previous attempts not only failed to bring about a long-term solution to the conflict, but also have not resolved the commitment problem. Therefore, I argue that after many diplomatic interventions and subsequently failures of the mediation, the mistrust between the belligerents is probably so extensive that a robust agreement will be less likely.

TERRITORIAL WAR

It is more difficult to achieve symmetric and robust agreements, when the stakes are high. One could argue that conflicts over territory are more difficult to solve, because governments seldom accept a loss of sovereignty over their own territory. This is even more so, if the dispute is over symbolically and strategically important territory. The war between Israel and the Palestinians over the control of Jerusalem is an example of such a stalemate. However, if the fight is only over parts of the territory that are not strategically or symbolically important, governments may be more likely to make concessions.

LEVEL OF DEVELOPMENT

Low levels of economic development generally increase a country's risk of civil war and the likelihood of war to reoccur (Gurses et al. 2008; Walter 2004). It is also an indicator for poor government performance. This, in turn, decreases the legitimacy of the government and reduces the likelihood that rebels trust the government to abide by an agreement. Hence, one might expect that the lower the development is, the lower will be the likelihood of an agreement.

4 Research Design

By using logistic regression, the analysis aims to examine the empirical relationships stated above. In doing so, the effect of several predictor variables on one dependent variable will be investigated. In contrast to a regression analysis using *ordinary least squares* (OLS), the dependent variable in binominal logistic regression is not continuous, but categorical and usually coded 0 and 1. Rather than modeling the value of a dependent variable y, logistic regression aims to model a certain probability of an occurrence of an event (UCLA: Statistical Consulting Group 2013a). Furthermore, logistic regression makes no assumptions about how the independent variables are distributed. Hence, whereas OLS regression does a poor job of predicting probabilities of binary dependent variables, logistic regression is well suited to analyze the probability of a robust mediated agreement. In the following I will outline the research design that is used in this paper.

4.1 Datasets and Data Handling

This paper uses primarily the CWM-dataset by DeRouen et al. (2011). It is one of the first datasets that focuses solely on civil war mediation and comprises 460 mediation events in the time period of 1946 to 2004. In accordance with the UCDP definition of civil war, DeRouen et al. (2011) define an intrastate conflict as

> "a contested incompatibility that concerns government 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" (DeRouen et al. 2011: 664).

By adding crucial information on various mediation incidences to the conflict variables from the Uppsala Conflict Data Program (UCDP), the CWM-dataset contributes not only to research on mediation occurrence and the process of mediation, but also to the explicit analysis of the predictors of successful mediation attempts.[8] The usage of this database has two inherent advantages. First, the database is distinct in its coding of each mediation event with a specific set of mediation characteristics. Second, so far no comprehensive analysis of the determinants of successful mediation in civil wars has been conducted by using this dataset. Nevertheless, although the CWM-dataset is very extensive in its coverage of relevant variables, which might have an influence on the success of the mediation attempt, variables from four other databases have been added to the CWM-dataset.[9] I used data from the *Polity IV* dataset (Marshall and Jaggers 2011), *International Human Development Indicators* (UNDP 2012), the *UCDP Battle-Related Deaths Dataset* (see Gleditsch et al. 2002) and the *PRIO Battle Deaths Dataset* (Gleditsch and Lacina 2005). Furthermore, in some cases the beginning of the mediation process occurred before the actual onset of the conflict. To correct for observations lying outside of the concrete conflict period, these cases were dropped from the dataset. This procedure resulted in a reduction of the actual number of cases from originally 460 to 366 observations.

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[8]In order to code and identify mediation-related variables, DeRouen et al. (2011) used primarily open and public sources, such as *Keesing's Wold News Archive*, *LexisNexis*, *The Times*, and *Proquest Historical Papers.*

[9]For further information on which variables have been used from other datasets: see section 4.2.

4.2 Operationalization

In the following, all relevant variables that are used for the analysis are grouped according to the general scheme: dependent, independent and control variables.

4.2.1 Dependent Variable

MEDIATION OUTCOME

The variable "Mediation outcome" is coded as a binary variable in order to test the aforementioned hypotheses. It is denoted as 1 if both parties in the dispute could agree on either a process agreement or full settlement of the conflict. I argue that only in these two cases, one can reasonably assume that the parties were at least partially able to solve the commitment problem.[10] This argument is in line with Mattes and Savun (2009), who show that only fear-reducing and cost-increasing provisions help to address the commitment problem. Otherwise the variable is coded as 0.

4.2.2 Independent Variables

TIME UNTIL MEDIATION

The time until the mediation begins is defined as the time period between the onset of the conflict and the initiation of the mediation attempt, with

$$t_{untilmed} = (t_{startmed} - t_{startconf}) + 1 \ .$$

$t_{startmed}$ denotes the beginning of the mediation and $t_{startconf}$ the onset of the conflict. Occasionally $t_{startmed}$ and $t_{startconf}$ were not coded accurately in the CWM-dataset. In those cases the initial as well as the final value have been edited in order to ensure

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[10]For a more detailed elaboration of my argument, please see section 3.3 of this paper.

a proper calculation of the time period between the onset of the conflict and the beginning of the mediation process.[11] Even though this procedure might lead to a slight over- or underestimation of the actual time period, an omission of those cases cannot be regarded as an alternative, because due to the large number of those cases it would entail an even larger bias.

Due to the high variance of the newly generated variable, the time until the mediator enters has been recalculated as an ordinal variable with six categories. The variable "Time until mediation" is coded as follows: 0 = less than or equal to 500 days; 1 = 501 to 1.000 days; 2 = 1.001 to 5.000 days; 3 = 5.001 to 10.000 days; 4 = 10.001 to 15.000 days; 5 = 15.001 to 20.000 days.[12]

SEVERITY OF THE CONFLICT

In order to determine the severity of the conflict, information from other databases has been transferred to complement the CWM-dataset. For this procedure I used battle death estimates from the *UCDP Battle-Related Deaths Dataset* from August 2012 (see Gleditsch et al. 2002) and the *PRIO Battle Deaths Dataset* Version 3.0 (Gleditsch and Lacina 2005), which are both compatible with each other. Battle deaths provide a mean to measure the severity of the conflict. I calculated for each mediation event the mean of the accumulated battle-related death per calendar year between the onset of the conflict and the end of the mediation. Afterwards, four different levels have been created, which were grouped according to the 25th percentile, the median, and the 75th percentile of the respective mean. Therefore, the variable "Severity of the conflict" is coded as follows: 0 = very low conflict severity; 1 = low conflict severity; 2 = high conflict severity; and 4 = very high conflict severity.

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[11]Due to the application of this procedure the dates have been changed as follows: If the actual day was missing, the 15th of every month was imputed to the respective date. If the actual month and day were missing, the 15th of June was imputed to the respective date.

[12]Equally, a variable that denotes the log of the number of days until the mediator enters as well as a variable that divides the respective duration in two categories have been generated in order to control for the robustness of the findings. Please see section 5.1 for the results.

LEVEL OF DEMOCRACY

In order to add the level of democracy to the CWM-dataset I used the *Polity IV* database (Marshall and Jaggers 2011) and calculated the mean of the Polity IV value for each dispute based on the Polity IV value at the onset and the end of the conflict.[13] The variable "Level of democracy" is coded as 0 if the value is lower than 5, as 1 if it lies between 6 and 11, as 2 if it is between 12 and 16, and finally as 3 if the Polity IV value is higher than 16.

4.2.3   Control Variables

4.2.3.1   Process

TYPE OF MEDIATOR

The variable "Type of mediator" identifies the leading mediator. The CWM-dataset distinguishes eleven different classes of mediators. However, in accordance with the respective hypothesis, the variable is coded as 1 if the mediator was an international or regional organization, and as 0 if otherwise.

STRATEGY OF MEDIATOR

The CWM-dataset identifies different strategies used predominantly by the respective mediator. The variable "Strategy of mediator" is coded as an ordinal variable in order to reflect the different level of leverage that is inherent in each adopted strategy. Accordingly, the variable is coded as 0 if there was only an offer, as 1 if the mediator used primarily the facilitative strategy, as 2 if the procedural strategy was mainly used, and as 3 if the mediator adopted mostly a directive strategy.

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[13]The Polity IV dataset distinguishes 21 different levels of democracy ranging from -10 as its lowest level to +10.

4.2.3.2 Context

PREVIOUS MEDIATION ATTEMPTS

The variable "Previous mediation attempts" describes how often mediation has occurred previous to the actual mediation. It is coded as follows: 0 = no previous attempts; 1 = one or two attempts; 2 = three or four attempts; 3 = five or six attempts; 4 = seven or eight attempts; 5 = nine or ten attempts; and 6 = more than 10 previous attempts.

TERRITORIAL WAR

The dummy variable "Territorial war" distinguishes secessionist and other reasons as explanations for the initiation as well as the continuation of the conflict. The variable is coded as 1 if the war centers on autonomy or secessionist claims. Otherwise the variable is coded as 0.

LEVEL OF DEVELOPMENT

In order to determine the respective level of development of the civil war state, the life expectancy at birth in years from the *International Human Development Indicators* (UNDP 2012) was added to the CWM-dataset. The number of years a newborn infant could expect to live is an appropriate proxy for the development level of a country, because it is lower in less developed states and higher in economically advanced countries. The variable "Level of development" has been generated by calculating for each mediation attempt the mean of the life expectancy at the beginning and end of the mediation event. After this procedure I created four different levels, which are grouped according to the 25th percentile, the median, and the 75th percentile of the respective mean. Therefore, the variable is coded as follows: 0 = very low level of development; 1 = low development; 2 = high development; 4 = very high development level.
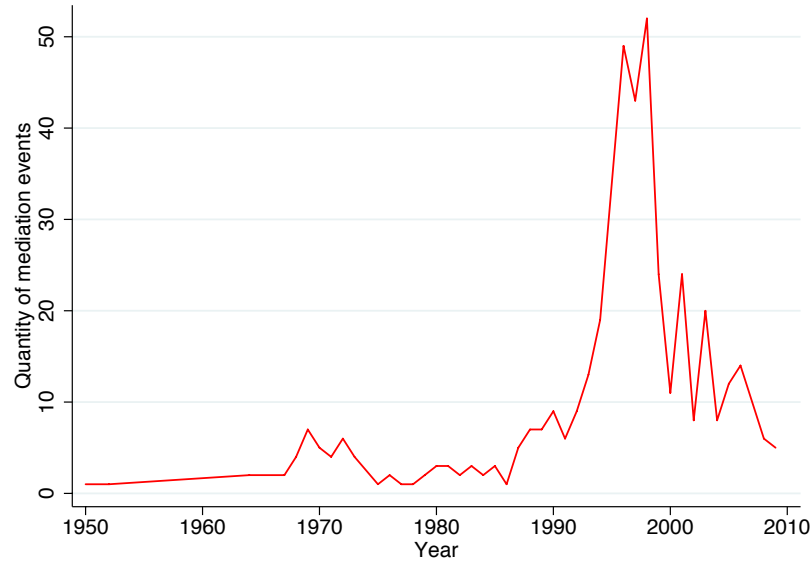
Figure 4.1: Quantity of mediation attempts in civil wars

4.3 Descriptive Statistics

Before examining the results of the multivariate analyses, I will shortly highlight the descriptive statistics. Figure 4.1 highlights the importance of mediation as a conflict management tool by the international community. It shows that from the 1950s until the end of the 80s mediation was not particular popular and was employed only occasionally. However, the end of the Cold War seems to be likewise the starting point for a massive increase of mediation attempts in intrastate conflicts. The decline after 1998 could be explained by the fact that the graphic only quantifies the beginning of a mediation event, but does not illustrate how long individual mediation attempts last. Therefore, there may be a plenty of ongoing mediations that account for the decrease in new attempts.

Table 4.1 summarizes the descriptive statistics of all used variables and is divided into the categories dependent, independent as well as control variables. Besides the strategy of the mediator all relevant variables have many observations. Due to the fact that mediators employ usually a mix of different strategies it is difficult to iden-

Table 4.1: Descriptive statistics

Variable	Mean.	Std. Dev.	Min.	Max.	N
Dependent variable					
Outcome of mediation	0.28	0.45	0	1	351
Independent variables					
Time until mediation	1.92	1.37	0	5	366
Severity of the conflict	1.48	1.14	0	3	286
Level of democracy	1.48	1.23	0	3	366
Control variables					
Type of mediator	0.42	0.49	0	1	366
Strategy of mediator	1.53	0.71	0	3	82
Previous med. attempts	2.16	2.34	0	6	363
Territorial conflict	0.84	0.37	0	1	317
Level of development	1.36	1.12	0	3	319

Table 4.2: Timing of mediation

	Early stages of conflict	Later stages of conflict
Percentage of successful mediation attempts	22.1	34.1

tify one strategy that dominates the others. However, in 82 cases it was possible to categorize the most decisive strategy. The descriptive statistics confirms the assumption that more directive strategies are used rarely (see Kydd 2003). In only five cases the mediators employed primarily directive strategies. In contrast facilitative strategies were used 33 times and procedural strategies 39 times. Figure 4.2 illustrates how many of the disputes were mediated successfully. The clear majority was unsuccessful, and in only 28 percent of the cases the mediator helped to bring about a full settlement or process agreement. The results displayed in table 4.2 allow a first guess of how the relationship between the outcome of the mediation and the duration until the mediator enters might look like. If the mediator enters early, approximately 22 percent of the mediation attempts end with a successful outcome. In contrast, if the mediator enters later, almost 34 percent of the mediation events conclude with a full settlement or process agreement.[14] Therefore, one could reasonably argue that

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[14]In order to distinguish an early or late entering of the mediator I calculated the median of the variable "Time until mediation".
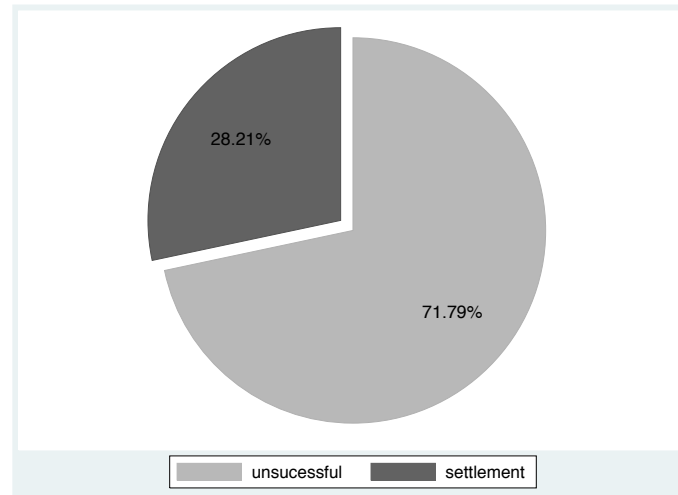
Figure 4.2: Effectiveness of mediation

the later the intermediary enters the more successful will be the mediation. Equally, figure 4.3 allows a first guess about the relationship between the severity of the conflict and the probability of a successful outcome. The mean of the mediation outcome becomes gradually higher, the more battle-related deaths have occurred in the conflict. This result suggests that the third hypothesis cannot be confirmed. In addition, the majority of the disputes were secessionist conflicts and experienced more than three previous mediation attempts. Likewise interestingly, table 4.1 shows that in almost half of the cases international or regional organization acted as intermediaries to bring the conflict to a halt. This result underlines the crucial importance of these organizations in dealing with intrastate conflicts.

4.4   Method

The hypotheses mentioned above are statistically analyzed by employing logistic regression, which is the appropriate design for the research question of this paper. The unit of analysis is the respective mediation event, which implies that I focus on the 366 mediation attempts. The logistic regression procedure allows the examination of binary dependent variables, which is in my case the outcome of the mediation
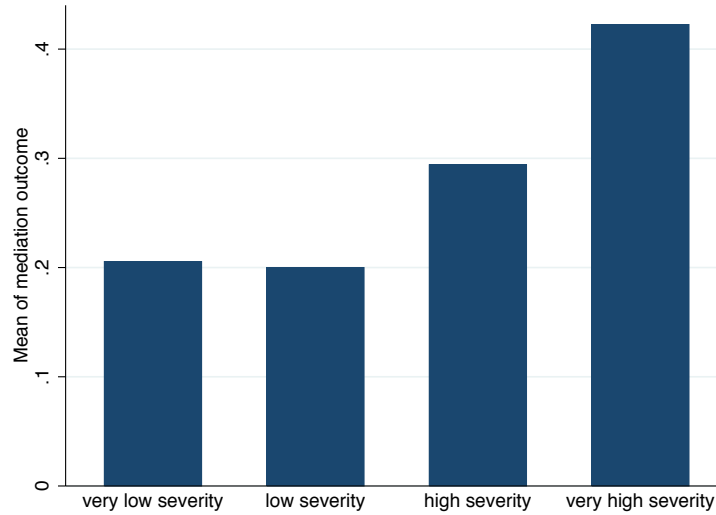
Figure 4.3: Effect of the severity of the conflict on the mediation outcome

attempt, coded as 0 or 1. The goal of logistic regression is to predict the likelihood that the dependent variable equals 1 given certain values of the explanatory variables. Logistic regression has certain assumptions that have to be true in order to make robust statistical inferences. Most importantly, the true conditional probabilities have to be a logistic function of the explanatory variables. Moreover, the observations must be independent, and the explanatory variables have to be linear combinations of each other (see UCLA: Statistical Consulting Group 2013b). Formally, the logistic regression can be represented by

$$log \frac{p(x)}{1-p(x)} = \beta_0 + \beta_x x_j$$

In the functional form, $p(x)$ reflects the probability that $Y=1$, which is in my case that the mediation results in a full settlement or process agreement. $1-p(x)$ denotes the probability that $Y=0$. Both terms are divided by each other and the natural logarithm is taken afterwards. β_0 denotes the constant of the regression line and β_x represents the regression coefficient, which is estimated by the maximum likelihood method. Finally, x_j denotes the value of the respective independent variable.

5 Findings

This section presents the results of the logistic regression analysis of the extended CWM-dataset, which has been described in the previous section. The calculation of the models has been conducted with the statistics program Stata 11.2.[15]

5.1 Discussion of Results

The discussion of the findings proceeds as follows. First, I present the basic model that includes only the main independent variables. Afterwards, the results of the full model including the various control variables are introduced. Thirdly, I test the validity of the basic model by the inclusion of the strategy of the mediator as a control variable. Finally, the results will be discussed and integrated in the existing empirical literature.

The results of the logistic regression are reported in Table 5.1 and are presented as logistic regression coefficients, which describe the change in the log odds of the outcome variable for a one unit increase in the predictor variable.[16] Positively signed coefficients indicate that the respective variable increases the likelihood of a robust agreement, whereas negative coefficients imply a reduction of the likelihood. The results of the first model suggest that all three main predictor variables have a statistically significant effect on the likelihood of a successful mediation attempt. However, only the theoretical assumptions of the first hypothesis are confirmed by the empirical results. The later the mediator enters, the more likely is a robust agreement. The positive effect of the time until the mediator enters can also be observed in figure 5.1, where the predicted probabilities (blue) are graphed against the observed values

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[15]All results can be replicated by using the respective *do-files*, which are attached to this paper.

[16]The log odds are the natural logarithm of the odds. The odds of an event is basically the probability that an event occurs divided by the probability that the event does not occur.

Table 5.1: Logit analysis of the likelihood of a robust agreement

Variable	Model 1	Model 2	Model 3
	(S.E.)	(S.E.)	(S.E.)
Time until mediation	$0.24^\dagger$	0.49^*	0.25
	(0.13)	(0.20)	(0.21)
Severity of the conflict	0.34^{**}	0.18	
	(0.13)	(0.18)	
Level of democracy	-0.25^*	-0.18	-0.26
	(0.13)	(0.16)	(0.24)
Type of mediator		$0.66^\dagger$	
		(0.40)	
Strategy of mediator			0.71
			(0.45)
Previous med. attempts		$-0.20^\dagger$	
		(0.11)	
Territorial conflict		0.30	
		(0.65)	
Level of development		-0.64^{**}	
		(0.21)	
N	277	214	82
Log-likelihood	-157.03	-109.04	-37.88
$\chi^2_{(10)}$	15.26	35.85	5.18

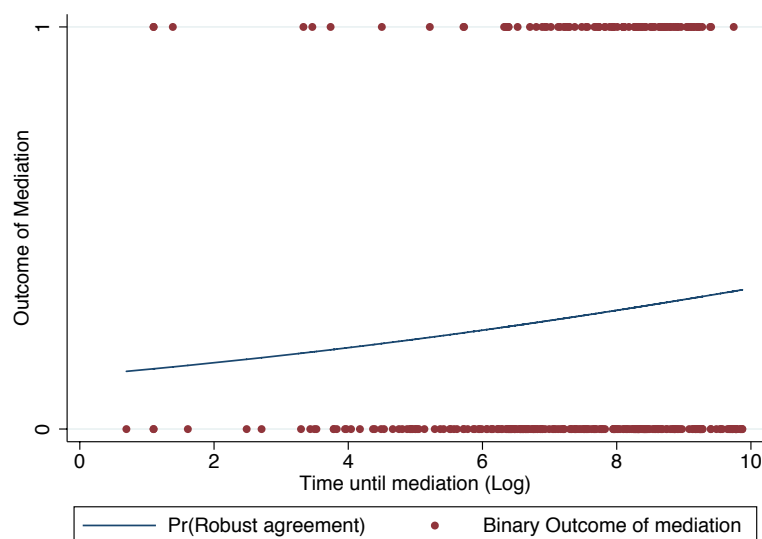Level of significance : $\dagger : 10\%$ $* : 5\%$ $** : 1\%$

Figure 5.1: Timing of mediation

(red). The results predict for a time of less than 501 days until the mediator enters a probability of a successful outcome of only 0.18. In clear contrast, if the mediator enters after the conflict has already lasted more than 40 years the predicted probability is approximately 0.40.

The positive and statistically significant coefficient of the effect of the severity of the conflict indicates that, in contrast to my theory, the more battle-deaths occurred in an intrastate conflict, the more likely is a successful outcome. Surprisingly, also the third predictor variable has the opposite effect than expected. The level of democracy has a negative and statistically significant impact on the probability of a robust agreement. Countries that are more autocratic seem to be more able to resolve commitment problems than their democratic counterparts. Generally, the first model is statistically significant, which is indicated by the chi-squared value.

In the second model, I have included variables that control for the characteristics of the mediation process and the conflict itself. The effect of all main independent variables holds to the pattern in the more basic first model. The effect of the time until mediation and the severity of the conflict are still positive. However, whereas

the variable measuring the intensity of the conflict lost its significance, the timing of the mediation becomes more significant. Therefore, the results regarding my first hypothesis are quite robust, despite the inclusion of the control variables. Still, the later the mediator enters the conflict, the higher is the probability of a successful outcome. Hence, the effect has become even stronger. When the mediator enters now the conflict in less than 501 days, the predicted probability adds up to only 0.09. In contrast, if the intermediary begins his mediation attempt after 40 years of the conflict the predicted probability amounts to almost 0.50. The level of democracy has still a negative influence on the likelihood of a robust agreement, but is not significant anymore.

By using the likelihood-ratio test, I compared the basic with the full model and got a chi-squared value of 21.55, which is statistically significant.[17] Therefore, the inclusion of the control variables significantly improves the model. Three of the four control variables are statistically significant. Whether the conflict is a secessionist war or not has no effect on the mediation outcome. In contrast, the less previous mediation attempts the more successful will be the intermediary. At the same time, a lower development level increases the chances of a robust agreement. The type of the mediator has likewise an impact on the mediation outcome. International and regional organization seem to be more successful than other mediators. In general, the second model is also statistically significant.

In order to test for the effect of the strategy of the mediator, a third model has been created. This procedure was necessary, because including this variable in the second model would result in a dramatic loss of observations, which are needed to guarantee the explanatory power of the model. The effect of the two main independent variables holds to the pattern in the previous two models, even though they loose its significance. The effect of the mediation timing is still positive and the level of democracy is

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[17]Please see the *do-file* "02_mt_mediation_analysis" to replicate the likelihood-ratio test.

still negative. The variable "Strategy of mediator" is almost significant and positive, which implies that mediators employing a more heavy and active mediation style are more successful.

Having presented the empirical results of the logistic regression, I will now discuss the results in greater detail and integrate them in the existing empirical literature. After testing the hypotheses of this paper, only the first hypothesis can be clearly confirmed. The timing of the mediator has a significant impact on the likelihood of a robust agreement. If intermediaries begin their mediation attempts later in the conflict, they will be more successful. Hence, one of the most important tasks of a mediator is not the simple provision of information, but the creation of an environment of mutual trust and the verification and monitoring of compliance with an agreement. Only thereby incentives to cheat can be reduced and the commitment problems resolved. Fighting alone does not solve credible commitment problems. It can only be resolved by a peace agreement that involves a credible deterrent to surprise attacks and mutual trust between the belligerents. This finding runs counter to the results of Regan and Aydin (2006) as well as Svensson (2009). They suggest that mediation is more effective in early and middle stages of the conflict. In contrast to Regan and Stam (2000), who assume that mediation in interstate disputes is more successful in early and late stages, I do likewise not find a curvilinear relationship.[18]

Contrary to my theoretical expectations, the second and third hypothesis could not be confirmed. The severity of the conflict has a positive effect on the likelihood of a robust agreement. Hence, the massive loss of human life creates incentives to accelerate the reaching of agreements. This result confirms the findings by Mason and Fett (1996). Belligerents being confronted with a high number of battle-related deaths may realize that the benefits of a robust agreement outweigh the costs of a continuation of war. Contrary to my theoretical argument, the hostility level and

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[18]Please see the *do-files* for the statistical test. The inclusion of the squared time is not significant.

the potential feelings of hatred on both sides seem not to hamper an agreement. In contrast to the findings of Gurses et al. (2008) and to some extent surprising, the results concerning the level of democracy run counter to my expectations. The less democratic a country is, the more likely are robust agreements. Given the fact that democracies and autocracies are almost equally distributed in the dataset, this result cannot be driven by an unequal distribution of this variable. Therefore, even though the weakness of political and legal institutions increases the problems of credible commitments, it seems not to hinder both parties to find a peaceful solution to the conflict.

The level of development is a strong negative predictor of the likelihood of a robust agreement. Even though low levels of economic development generally increase a country's risk of civil war and the likelihood of war to reoccur (Gurses et al. 2008; Walter 2004), it seems to foster the willingness of the belligerents to find a peaceful solution to the conflict. In addition, the results of the logistic regression support the findings of Gartner (2011) and Beardsley (2011), who argue that international and regional intermediaries are particularly well equipped to solve commitment problems. They are better able to reduce the risk that one party violates the agreement by providing implementation assistance, and at the same time do not pressure the belligerents into concessions. Furthermore, even though the coefficient of the strategy of the mediator is not significant, the finding suggests that a heavy mediation style is more successful to expand the set of alternatives and provide implementation assistance. This result supports the argument of Beardsley (2011: 32). In sum, the timing of the mediation, the severity of the conflict, the level of democracy as well as the level of development and the type of the mediator are strong predictors of the likelihood of a robust agreement. However, whereas the first hypothesis could be confirmed, the logistic regression analysis failed to lend support to the second and third hypothesis.

5.2 Model Fit

In order to determine the fit of the three tested models, various regression diagnostics have been conducted. First, I tested all models for potential specification errors, because it could be the case that the logit function as the link function is not the appropriate choice. Moreover, it could happen that the relationship between the logit of the dependent and the predictor variables is not linear. In both cases, a specification error would be the result (UCLA: Statistical Consulting Group 2013b). After conducting a test for such an error, I found that all three models are properly specified.[19] Secondly, I conducted the Hosmer and Lemeshow goodness-of-fit test controlling for the overall model fit (see UCLA: Statistical Consulting Group 2013b). In all three cases the respective test indicates that my models fit the data well. Finally, I conducted a multivariate OLS regression of the basic model (Model 1) in order to test whether the results hold with a different method. The findings suggest the same directions as in the logistic regression, and are equally statistically significant. In sum, after having checked the models for misspecifications, overall fit and robustness, I can reasonably argue that the models are well specified and allow for strong inferences.

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[19]I used the Stata command *linktest* to detect a potential specification error. Please see the *do-file* "02_mt_mediation_analysis" for the complete test. This *do-file* contains also all other regression diagnostics.

6   Conclusion

Recent civil wars in Syria and the Central African Republic have illustrated the challenges with which the international community is confronted when trying to mediate between conflict parties, that are unable or unwilling to credibly commitment to peace agreements. In contrast to interstate conflicts, civil wars are not only more frequent and more deadly, but also longer in duration (Fearon and Laitin 2003; Walter 2002). Even though mediation has become the most common tool of conflict management in civil wars, we know relatively little about how to best manage these conflicts. By examining mediation events in civil wars, this paper attempted to provide a first step to close this research gap.

Building on the bargaining theory of war, I have provided a theoretical account of why and under what conditions mediation in civil wars can entail more robust agreements. The application of the bargaining model is a useful way to theoretically approach the causal mechanisms behind any violent dispute. Proponents of this theory argue that primarily informational asymmetries and commitment problems lead to the onset of violent conflicts and its continuation (see e.g. Fearon 1995; Powell 2006). However, only credible commitment problems can account for prolonged disputes (Leventoğlu and Slantchev 2007; Powell 2006; Reiter 2009). Hence, I have argued that in order to resolve these problems, mediators have to reduce the risk that one party violates the agreement by building trust between the belligerents and providing implementation assistance. The simple provision of information is not enough to settle conflicts in the long run. Quite in contrary, by making the weaker side aware that it faces an unappeasable opponent, they might lead to a failure of the mediation attempt.

By employing logistic regression analyses, my results suggested that the timing of the mediation, the severity of the conflict, the level of democracy as well as the level of development and the type of the mediator are strong predictors of the likelihood

of a robust agreement. Therefore, only the first out of three hypotheses could be confirmed. The later the intermediary enters a conflict, the higher is the probability of a successful mediation outcome. In contrast to my expectations, I also found that the lower the development and democracy level of the respective state, and the more intense a conflict is, the higher is the likelihood of a robust agreement. Furthermore, the results suggested that international and regional organizations are better equipped than other mediators to resolve commitment problems.

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