

Credible Commitment in Post-conflict Recovery

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1. Introduction

As the contributions in this volume attest, civil war is common and deadly. By one count, civil conflicts have killed nearly 20 million people since 1945 (World Bank 2006). Perversely, the social, political and economic damage inflicted during civil conflicts often persists or even worsens once hostilities end, in turn planting the seeds of future civil conflicts. Paul Collier and his co-authors (2003) describe this cycle as a ‘poverty-conflict trap’ and urge international donors to assist post-conflict countries in their economic reconstruction or risk further war. That logic suggests two related questions for post-conflict countries. First, what factors favor the deepening of peace after civil conflicts? Second, what political steps are needed to speed economic reconstruction and provide opportunities to impoverished citizens? Research seeking to answer these questions not only furthers our understanding of civil conflicts, but also provides valuable guidance to politicians, aid agencies, and non-governmental organizations (NGOs) working in the shadow of violent conflicts.

Indeed, the challenge of promoting post-conflict economic recovery while avoiding conflict recidivism is daunting. Collier et al. (2003, p. 83) show that the risk of further conflict for countries emerging from civil war (*i.e.*, in the first year of post-conflict peace) is almost twice as high as it was on the eve of that conflict. Our own data support a pernicious version of the ‘poverty-conflict trap’ and dramatically emphasize the importance of short-term economic recovery; if a country does not recover economically in its first post-conflict year, a relapse into violent conflict becomes dramatically more likely (Flores and Nooruddin 2009a, p. 10).

In this essay, we contend that the central obstacle to post-conflict peace and recovery is the inability of former warring parties to commit credibly to peaceful contestation of political and economic power (see also Coyne and Boettke 2009). In the often-chaotic politics of post-

conflict communities, erstwhile enemies cannot rely on a hegemonic authority to enforce peace agreements; in the language of international relations, anarchy is the central political condition. Professed commitments to peace are unenforceable and hence non-credible. In turn, economic actors – be they foreign companies contemplating direct investments or small farmers attempting to return to lands abandoned during the conflict – understand this dilemma and therefore put little stock in post-conflict promises of peace. Their reluctance to commit resources in this unstable post-conflict environment obstructs economic reconstruction, facilitating the poverty-conflict trap.

Overcoming the credible commitment problem is therefore the lynchpin for post-conflict peace and recovery. Specifically, two related yet distinct sets of steps are necessary to reinforce the peace and galvanize recovery. Internally, former enemies must take steps to reassure each other that they will forego future violence. Externally, those groups must jointly signal both domestic and international audiences that they may invest their labor and capital without fear of violence and predation. If they do not accomplish each of these goals, they risk further political violence and socio-economic dislocation.

Yet how can groups that only recently sought each other's destruction pursue these goals? We argue that re-conceptualizing post-conflict reconstruction as a credible commitment problem not only furthers our theoretical understanding, but also allows a re-evaluation of post-conflict interventions designed to forestall the violence, thus serving as a guide to policymakers and practitioners in the field. In the broadest sense, former combatant groups must take three steps to signal their credibility: create mechanisms that raise the expected utility of cooperation relative to that of defection, send costly signals of their commitments, and empower third-parties to police agreements. More specifically, we re-interpret five post-conflict interventions in terms

of their ability to bolster the credibility of post-conflict actors and evaluate evidence regarding each of them. Two of these deal directly with the political structures governing the distribution of power in the post-conflict era. *Elections* have become an increasingly common means of allocating power and forming new governments in the immediate post-conflict period. Elections may reinforce the credibility of post-conflict commitments, since participating in elections may be seen as a credible signal of peaceful intentions. Furthermore, democracy's checks and balances bolster the credibility of executives' promises and constrain them from re-initiating violence. However, recent evidence suggests that elections' record is mixed. Sometimes this process is accompanied by explicit *power-sharing arrangements* between the former combatants as a way of assuaging the worst fears of the participants should the election results not favor them.

We then turn to three international interventions designed to galvanize economic reconstruction, focusing on how third-parties can use their interventions to overcome the credible commitment problem. *Peacekeeping operations* are designed to enforce the terms of peace agreements and thus build trust in former combatant groups that the peace will endure. Often, such operations include *Disarmament, Demobilization, and Reintegration (DDR)* programs, which offer a third-party-enforced credible signal that each party to the conflict is releasing its control over its soldiers. *Foreign aid*, whether provided bilaterally by regional and world powers or multilaterally through international financial institutions, also plays a critical role in helping rebuild state institutions devastated by war.

The remainder of this essay is therefore divided into two sections. First, we describe more fully the logic of credible commitments in the post-conflict environment, focusing on how the credible commitment problem retards economic recovery. Second, we translate this more

conceptual discussion of the importance of credible commitment into an analysis of mechanisms for conflict resolution in post-conflict environments.

2. Civil war and credible commitments

The logic of the credible commitment problem permeates research on civil war's causes, duration, and resolution. Much of this research finds its foundations in the study of interstate war. In that field, neo-realist scholars' focus on anarchy – the absence of a dominant authority regulating states' behavior – informed the rationalist analysis of the causes of interstate war (Fearon 1995; Powell 2006). Without a sovereign that can observe and punish violations of interstate agreements, rational leaders of states cannot be confident that such agreements can be enforced. Anarchy thus creates a self-help system resembling a Prisoner's Dilemma. If the leader of Country A trusts the leader of Country B's public declaration of her commitment to a peaceful resolution of some dispute, the former leaves the latter the opportunity to defect from the agreement – with potential disastrous consequences for Country A. When leaders perceive significant first-strike advantages and/or shifts in relative power, particularly when those shifts depend on the resolution of the current disagreement, the benefits from defection increase, exacerbating the credible commitment problem (Fearon 1995). Rational leaders will thus choose war over the peaceful resolution of disputes, even when mutually acceptable bargains exist, due to the lack of enforcement (Fearon 1995: 401). Incomplete information about relative power or the motivations of other actors, though it can reinforce the credible commitment problem, is not necessary for war to occur.

In applying this logic to countries emerging from civil conflicts, we must first consider how domestic conditions, particularly the condition of anarchy, differ from the international

system described by Fearon (1995) and others. By the mid-1990s, the tragic breakup of the former Yugoslavia and genocide in Rwanda had convinced scholars that the concept of anarchy – and with it the fundamental premise of the credible commitment problem – applied within countries as well as between them. Posen (1993, p. 27-28) argues that, for countries emerging from Soviet rule, anarchy largely replaced hierarchy; weak post-Soviet states subjected ethnic groups to a self-help system in which they were largely responsible for their own security. Scholars of ‘failed states’ followed Huntington (1968) in describing the collapse of state authority (e.g., Fund for Peace 2009).

In line with such thinking, Fearon (1998) formalizes the credible commitment problem in his analysis of domestic ethnic conflict. In discussing Eastern Europe in the immediate post-Cold War period, Fearon seeks to explain why some ethnic conflicts turn violent, whereas others do not. He argues that the credible commitment framework helps us understand these questions, since majority groups cannot credibly commit to fair treatment of minority groups. In the formal model he presents, a majority group and minority group bargain over some set of benefits (B). In the first round of the model, the minority group can choose to fight or accede to a political process that divides B , which he assumes amounts to a division of B by the majority group. Fighting is a costly lottery, with costs for each sides and some probability that the majority wins. If the political process for dividing B leaves the minority group dissatisfied, it can again choose to fight in the second round, though with a lower probability of winning. The majority group, therefore, can offer a division of B that leaves the minority group indifferent between fighting and acquiescing. However, it cannot commit to implementing this offer, since once the minority group agrees, the majority group can defect and offer nothing; understanding this, the minority group will choose violence in the first round, when its chances of success are better.

Fearon (1998) contends five factors can weaken the intensity of the credible commitment problem. First, if the minority group is militarily weak or has relatively weak cultural preferences for secession, then the expected benefits from fighting will tend not to exceed even those from the worst compromise. Second, physical separation of the two groups weakens the credible commitment problem, since the minority can secede with little violence. Third, an external power could enforce the division of benefits. Fourth, the less stark the anticipated drop in power between first and second rounds, the less difficult the problem. Finally, when a large percentage of the members of the minority group has the option of “exiting” the game by emigrating, the minority group’s will to fight decreases. Using this logic, Fearon (1998) suggests that, since rural dwellers have comparably less of an exit option, they tend to bear a larger percentage of the costs of fighting in ‘sons of the soil’ wars.

Fearon (2004) also applies the logic of the credible commitment problem to the question of conflict resolution by asking why some civil wars last longer than others. In particular, he is interested in why ‘sons of the soil wars,’ which he defines as “land or natural resource conflicts between a peripheral ethnic minority and state-supported migrants of a dominant ethnic group” (277) last longer than other types of wars. Fearon (2004) presents a formal model of civil conflict in which a central government bargains with regional elites over control of their region. If the regional elites initiate war in response to a negative shock to the central government’s power, then the war ends only if one side prevails militarily or one side quits. Critically, Fearon finds that under certain conditions, the central government cannot credibly offer a division of power over the region to the regional elites. Since wars tend to occur when the government is weak, it would prefer to settle wars with the rebels. However, the rebels cannot trust wartime offers of political autonomy from the central government, since they will suspect that when the

government regains its strength, it will renege on the offer and reassert control over the region (2004, p. 294). Therefore, war continues even when there exists a bargain that both sides would prefer to war (2004, p. 294). The equilibrium holds as long as the government's benefits from controlling some breakaway region exceed its costs of fighting and the rebels value the expected returns to autonomy more than their costs of war (2004, p. 293-294).

Walter (1997, 1999) also applies the logic of credible commitments to civil war settlement, beginning with a central puzzle – whereas 55% of international wars are settled through negotiations, only 20% of civil wars are, despite the fact that 42% of civil wars witness some kind of peace bargaining (1997, p. 335). She argues that in both international and civil wars, a credible commitment problem exists due to anarchy; in both, therefore, commitments to peace are inherently non-credible. Any party that disarms, therefore, risks punishment from its enemy. Nevertheless, the credible commitment problem is more pernicious in the domestic case. In international wars, adversaries may retreat to some agreed upon boundary and keep command of their respective armies, retaining a deterrent to defection by its enemy. In contrast, in domestic conflict each side must relinquish its military capability as part of the peace process (1997, p. 337). Given this dilemma, even when a bargain exists that would satisfy each side in a civil war, the parties cannot credibly expect to respect its parameters; as a result, they do not complete agreements and civil wars last longer than interstate wars. Walter (1997, p. 337) concludes, “the only way enemies in a civil war can prematurely end the bloodshed is to force themselves through a transition period during which they can neither encourage cooperation nor survive attack.”

Walter (1999) extends this work on security guarantees to include political terms of peace agreements. Even if former adversaries are able to implement the immediate terms of a ceasefire,

a second stage of the credible commitment presents itself – the challenge of re-establishing normal politics. Whether by democratic or non-democratic mechanisms, the selection of the first post-conflict government risks granting one party to the conflict unparalleled power, which it can subsequently use to cement its hold on power indefinitely, particularly if a former group leader now holds power while the other side must disband militarily (Walter 1999, p. 137-138). Even if adversaries choose to enter a period of extended vulnerability, the selection of new political leaders presents another credible commitment problem, as promises by a new government to respect the rights of former adversaries are not credible.

This research on civil conflicts suggests that anarchy before, during, and after civil conflicts creates a credible commitment problem that escalates disputes and complicates conflict resolution. We fuse this argument from peace studies with political economy to contend that the credible commitment problem is the primary obstacle to post-conflict economic recovery (Flores and Nooruddin 2009a). A substantial literature in political economy offers strong theoretical and empirical support for the proposition that individuals will under-invest in physical and human capital when they fear for the security of their investments (Clague et al. 1999; Keefer and Knack 1997; Olson, Sarna, and Swamy 2000). Because many investments are irreversible, firms might choose not to invest for fear of expropriation or future policy changes that imperil their investments (Aizenman 1997, 1998, 2003; Aizenman and Marion 1999; Dixit and Pindyck 1993; Grabel 2000; Stasavage 2002). During the post-conflict period, we argue that this calculus shifts. During civil war, the capital stock declines, creating privately lucrative and socially beneficial rebuilding opportunities, which should attract investors, laborers, and entrepreneurs to post-conflict countries.¹ However, we argue that rational, risk-averse economic actors will understand the non-credibility of former combatants' commitments to the peace and its implications for the

returns to their investments. In such a volatile environment, the risk of war and its concomitant risks of destruction and predation will foment underinvestment and slowed economic recovery. In turn, a lack of economic opportunities for both civilians and former combatants provides ideal circumstances for conflict recurrence.

Coyne and Boettke (2009) also place the credible commitment problem at the center of the post-conflict reconstruction challenge. The process of post-conflict reconstruction inevitably depends on the reformation of existing social, political, and economic institutions, if not their creation from whole cloth. Without citizens' support for such reforms, they will fail. However, politicians' hold on power grants them the power to renege on commitments made in the past. The credible commitment problem therefore relegates citizens to using imperfect information to differentiate between 'sincere' and 'insincere' politicians. If they support 'insincere' politicians, the latter will renege on their commitments, leaving citizens far worse off; however, if they fail to support 'sincere' politicians, they will prevent necessary post-conflict reforms (2009, p. 7). The policy challenge, they argue, is to create commitments to reform that are credible, binding on politicians, and culturally appropriate, in that the definition of 'credibility' will differ across contexts.

We may therefore describe two components of the post-conflict credible commitment problem, one internal and one external. Former combatants must first create mechanisms by which they enforce peace agreements, bolstering each group's confidence in the others' commitments. Externally, former enemies must jointly, publicly, and credibly signal these commitments to economic actors. Furthermore, we contend that such signals must also include more general commitments to improve the political economic environment for investment. In addition to the risk of conflict recurrence, economic actors must attend to the possibility that

even peaceful post-conflict politics will yield an economic environment that will depress their income. If the new post-conflict government cannot commit credibly to protecting private property rights, potential investors will reduce their presence (Flores and Nooruddin 2009a, Table 3). Similar tasks include reducing corruption and regularizing tax collection. For example, a power-sharing agreement could conceivably join former enemies in rent-seeking efforts. Keefer (2009, p. 7) argues that “the inability of political actors to make broadly credible promises to citizens is...a disincentive to pursue growth-promoting policies.” Successfully implementing a peace agreement in the short-term is therefore necessary for post-conflict recovery, though not sufficient. Parties to peace agreements must attend not only to their commitments to each other, but their joint commitments to private entrepreneurs.

Conceptualizing the credible commitment problem in this manner helps understand how it shifts based on how the conflict ends. Civil conflicts end either through the outright victory of one side, the conclusion of a peace and/or ceasefire agreement, or the slow ebbing of the violence. Peace scholars have focused on how the nature of the termination alters the credibility of the peace. Hoddie, Hartzell, and Rothchild (2001) argue that negotiated settlements are inherently precarious. Similarly, Licklider (1995) and Atlas and Licklider (1999) contend that outright military victory of one side or the other in civil conflict greatly reduces the risk of recidivism. In short, an outright military victory ameliorates the credible-commitment problem; while one side is eliminated, the other presumably forms a government and is confident in its security. However, outright military victories do not eliminate the credible commitment problem, as leaders must still convince citizens that they will forego political retribution, allowing minority groups that formerly supported the defeated parties to participate in politics and live without fear of state-sponsored discrimination. The nature of the credible commitment

problem therefore shifts away from forging credibility among former combatant groups (as in peace agreements) and towards making credible promises to citizens. Though the credible commitment problem may reduce in complexity, it does not disappear.

We may also define two temporal parts of the credible commitment problem. Former combatant groups must not only make credible commitments among themselves and towards citizens in the short-run, but also in the long-run. In the short-term, credible commitments are necessary to end the fighting and initiate economic reconstruction. In the longer-term, they are necessary for a peaceful transition to ‘normal’ politics and economics, as winners of post-conflict political power make credible commitments to losers that they will forego using the power of the state to exact political revenge or engage in economic predation. Steps to solve the short-term credible commitment problem must not do so at the expense of long-term economic and political concerns.

The above discussion conceptually defines the nature of the credible commitment problem and its effect on reconstruction. However, we do not suggest mechanisms by which such commitments might be made. In our next section, we turn to this question.

3. Implications for policy: mechanisms for strengthening credible commitments

A focus on the credible commitment problem in civil war reshapes policy priorities in post-conflict countries. If enforcement of agreements, and not their terms, is the central barrier to peace, then we should focus on how to overcome that hurdle. Broadly, doing so involves three steps. The first involves changing the parameters of the expected utility calculus of the parties involved, such that honoring the commitment becomes a dominant strategy. This is typically done by increasing the costs of defection or increasing the benefits of cooperation or, better still,

both. Second, the parties to an agreement may send costly signals (e.g., a tit-for-tat disarmament process) of their commitments to the peace, distinguishing them from insincere parties that will only engage in ‘cheap talk.’ Finally, third-parties can be empowered to enforce the agreement, essentially solving solve the problem of anarchy by ceding power to a third-party willing to observe and enforce the agreement (Walter 1999, p. 135). In the long-term, these interventions must be followed by political economic institutions that enshrine commitments to peace. In particular, both time frames must effectively transform formerly violent contestation of political power, economic benefits, and physical security into peaceful channels.

Here, we focus on five post-conflict interventions designed to accomplish these two steps: shift the expected utility of cooperation and provide third-party support of post-conflict political actors. Two of these focus on domestic political interventions that seek to constrain post-conflict politicians from breaking their commitments (democracy) and/or distribute power among erstwhile enemies to raise the benefits of cooperation (power-sharing). The last three interventions focus on military (third-party interventions; Disarmament, Demobilization, and Reintegration) and economic (foreign aid) interventions that require the participation of external actors to enhance the credibility of post-conflict commitments to the peace.

3.1 Domestic Political Solutions

Internal war is a political problem, and requires a political solution. At their core, civil conflicts are fought because at least one group in society is unhappy about the status quo, and seeks violent redress of the situation. The resort to violence points to the weakness of existing political institutions, and, in particular, to the lack of faith the belligerents have in the political process as a means of resolving peacefully their grievances. In the period of peace that follows the

resolution of the conflict, a primary task to be attended to is the reinstatement of a peacetime political process, ideally with reforms in place to assuage the concerns of the belligerents that led them to conflict in the first place. Two such reforms are most commonly emphasized in the post-conflict reconstruction literature: holding elections as a first step in establishing democratic rule and the adoption of power-sharing arrangements. We consider each below.

3.1.1 Democratic Elections

Elections are not democracy, but they are arguably the latter's most visible indicator. And as democratic principles have gained ascendancy in the aftermath of the Cold War, so has the emphasis on holding elections as part of the post-conflict recovery process. Holding democratic elections, in addition to their normative attractiveness, is argued to yield benefits to post-conflict governments seeking to assert control domestically and signal the start of a new era to external audiences. Governments elected through democratic elections can claim legitimacy at home and signal a deeper commitment to their policy promises to external audiences upon whom they depend for investment and development.

Peace scholars have suggested that democratic political institutions – especially the power of public opinion and opposition parties – strengthen the credibility of leaders' promises due to the steeper audience costs (i.e., sanctions from the public for breaking their word) incurred if they renege on a public commitment (Fearon 1994). Schultz (1998) makes a similar point by emphasizing the role played by opposition parties, arguing that they constrain the executive from bluffing during crisis bargaining; the leader will accept only agreements that the opposition will approve or they will call her bluff. Therefore, Schultz reasons, when the opposition backs the executive's position, it lends credibility to her commitment. However, since autocrats do not

have a credible opposition to check them, they do not enjoy such a credibility boost. Political economists studying the dynamics of foreign investment and capital flows make similar arguments. Jensen (2003) argues that the larger number of veto actors in democracies facilitates commitments to protecting private property and foreign direct investment (FDI). Li (2006) extends this logic to explain that the greater credibility of democratic leaders' commitments to private property rights allows them to attract capital even though they offer fewer tax incentives to potential investors. And Nooruddin (2010) shows that domestic checks and balances enhance democracy's credible commitments to policy stability, encouraging investment and reducing capital flight and economic volatility.

The scholarship reviewed above implies that democratization should heighten post-conflict political leaders' ability to commit credibly to the peace by institutionalizing responsiveness to public opinion and creating a credible opposition that can at times veto violations of peace agreements. Indeed, at least one scholar has referred to a 'democratic reconstructionism' paradigm, in which early elections are central to short-term economic recovery and implementation of peace agreements (Ottaway 2003). However, scholars studying post-conflict countries increasingly doubt the effectiveness of rapid democratization as a key to securing peace and recovery (Coyne 2008; Paris 2004; Walter 1997, 1999; Ball 1996; Newman and Rich 2004; Reilly 2003, 2004; Flores and Nooruddin 2009a, 2009c). As Huntington (1968) argued forty years ago, the coherent, flexible, adaptable, and cohesive institutions that are taken for granted in well-institutionalized democracies are a rarity in those states making an initial transition to democracy. Instead, these institutions must be created from whole cloth. In the post-conflict environment — where the baseline probability of reverting to violent political competition is already high — democratization confronts still more perils, including embryonic

electoral institutions and political parties; weak civil society and media; and an unfamiliarity with ceding power peacefully (Paris 2004; Collier 2009). In line with these contentions, Flores and Nooruddin (2009a) find that rapid post-conflict democratization retards economic recovery and makes conflict recurrence more likely.

Elections in any setting introduce uncertainty: participants are uncertain about who will win, by how much, and how the opposition will fare. In post-conflict situations such uncertainty is heightened since the normal patterns of domestic politics have been disrupted significantly. In countries where the post-conflict election is the first such experience in their history, this uncertainty is exacerbated. Newly formed political parties have no basis by which to ascertain their relative strength, and so unfavorable electoral returns are viewed with suspicion and fear. In particular, potential losers worry that the winners might use their newfound (and internationally legitimated) political power to exclude them permanently from the political process. And there is little potential winners can say that can assuage these concerns. Indeed, on-going research by Flores and Nooruddin (2009c) finds that post-conflict elections in new democracies are highly correlated with conflict recidivism and slow economic recovery, though the precise causal mechanisms underpinning this dismal result are little understood at this point (see also Collier 2009).

In the aggregate, this body of research suggests that rapidly built democratic institutions lack the robustness necessary to constrain the executive, strengthen the opposition, and withstand inflammatory rhetoric in the media. In short, democratic institutions do not lend credibility to the assurances of former armed groups that they will abide by peace agreements. Instead, post-conflict democratic institutions likely require a lengthy incubation period before they can provide

an effective bulwark against civil conflict. If so, then other steps must fill the gap during the dangerous post-conflict period.

3.1.2 Power-Sharing

The primary limitation of elections is the inability of winners to commit credibly to respecting the political rights of the losers. To tackle this problem, scholars increasingly advocate the adoption of explicit power-sharing provisions in peace agreements (e.g., Hartzell and Hoddie 2003, 2007; Hartzell, Hoddie, and Rothchild 2001; Sisk 1996). Such arrangements have the advantage of providing potential electoral losers – principally ethnic or religious minorities – with guaranteed access to political power and means of checking the power of the new government.

Not all power-sharing arrangements are created equal. Four principal types of such arrangements can be identified: political, territorial, military, and economic (Mattes and Savun 2009, p. 741). Political power-sharing arrangements allocate quotas of seats or cabinet positions to minority groups, or they might reserve a share of civil service positions for members of such groups. Territorial provisions provide minorities with autonomy over local politics in a given region, or institute decentralizing or federalizing reforms designed to dilute the power of the central government over the minority-dominated regions. Military arrangements allow members of the minority's armed forces to be integrated into the new military forces, ideally preserving their rank. Economic power-sharing could include commitments to redistributive policies or the allocation of economic-decision-making roles to members of the minority group.

Interestingly, in spite of their popularity, the evidence as to whether such power-sharing arrangements are successful in preserving a negotiated peace is at best mixed. Hartzell and

Hoddie (2003, 2007) use an aggregated index of power-sharing provisions since they argue there is little *a priori* reason to believe that any one type of arrangement is more effective than another. Their contention is that the major distinction in terms of peace agreements is not the *type* of power-sharing arrangement included, but the *number*. Their evidence appears to bear this aggregate notion out, though, as Mattes and Savun (2009, p. 741) note, Hartzell and Hoddie's own evidence suggests that territorial power-sharing arrangements are the most – indeed only – type of provision to have a statistically significant effect on post-conflict peace.

Mattes and Savun (2009) build on the work of Hartzell and Hoddie to offer a theoretical argument for why we should expect political power-sharing to be particularly useful. The Mattes-Savun framework distinguishes usefully between “fear-reducing” and “cost-increasing” provisions in peace agreements, and argues that political power-sharing is a prime example of a fear-reducing provision that should ameliorate the commitment problems that threaten to undermine a fragile peace. By providing both sides with control over policies, and by diluting the unilateral power of the majority, political power-sharing should reduce groups' insecurity and make upholding commitments easier. Their analysis, based on an original coding of a number of peace agreements, supports this hypothesis. We should note also that, contrary to Hartzell and Hoddie (2007), their results indicate that territorial power-sharing is not a significant predictor.

Our own research on post-conflict recovery offers mixed evidence about how external audiences (*i.e.*, non-belligerents) view power-sharing arrangements. We find that power-sharing arrangements have no effect on attracting foreign direct investment to a post-conflict situation, but that their presence is correlated highly with an increase in domestic savings rates (Flores and Nooruddin 2009a). Within the country at least this does suggest that economic actors value the

signals sent by power-sharing arrangements, though it remains to be understood why international investors are less sanguine.

Research on the contributions of power-sharing arrangements to bolstering credible commitments in post-conflict situations represents a fecund and productive area for future work. Two concerns remain to be addressed satisfactorily at both the theoretical and empirical levels however. The first, which scholars do address more frequently today than in the past, is the issue of endogeneity. The concern here is that power-sharing arrangements only emerge where peace was already more probable so that any correlation between the existence of such provisions and longer peace durations is spurious. Conventional practice in this literature is to see if the same factors that predict the existence of such provisions also predict conflict recurrence (see Mattes and Savun 2009 p. 746; also, Walter 2002; Fortna 2003, 2004a, Hartzell and Hoddie 2007), and, to the extent that they do not, to conclude that power-sharing arrangements are not “epiphenomenal”. This is at best a partial solution as it cannot address the problem of selection on unobservables. Given how well-established statistical techniques for dealing with unobservability and selection bias have become in economics and political science, future work would do well to address the endogeneity problem head on.ⁱⁱ

The second concern is that the literature on power-sharing arrangements does not address adequately the mechanisms by which actors’ commitments to such provisions are made credible. That is, what is to stop the majority group in the post-conflict period from either ignoring these provisions or demanding their renegotiation on terms less favorable to the minority? In essence, to claim that power-sharing is a solution to the credible commitment problem created by political reforms such as the holding of elections is to replace one such problem with another. This insight is at the core of Walter’s (2002) argument that third-party guarantees are the only means by

which negotiated settlements can be made credible and therefore successful. We consider this argument, and the broader literature on third-party and external interventions, next.

3.2 External Interventions

The two political interventions discussed above both focus on the actions of domestic actors. Yet, as many have recognized, these actors have a difficult time making credible commitments to each other on account of their history of antagonism and recent violent conflict. Consequently scholars have considered how third-parties to the conflict might intervene to help these actors achieve peace. In this section, we first consider the key findings of third-party interventions in bolstering security arrangements, and then turn to how external actors can help rebuilding war-torn economies.

3.2.1 Third-party Security Interventions

Third-party interventions in civil conflicts are of two main types. The first, which falls beyond the scope of our survey here, is interventions to end a conflict (Regan 2000; Gent 2007, 2008). Peace scholars, often centered at Uppsala University's International Peace Research Institute (PRIO), have focused on the role of conflict mediation by third-parties and their role in overcoming the credible commitment problem to secure a peace agreement, particularly when considering their bias towards one or another side (Svensson 2007, 2009). The second is interventions to help preserve the peace once it is struck, of which three are of particular interest: security guarantees, peace-keeping operations, and Disarmament, Demobilization, and Reintegration (DDR) programs.ⁱⁱⁱ

Barbara Walter uses the same commitment perspective employed fruitfully in much of the post-settlement literature surveyed here. She argues that commitment concerns make it impossible for erstwhile combatants to negotiate satisfactory peace agreements. A climate of poor information and high distrust threatens to undermine peace. Therefore, Walter argues, third-parties must participate in the peace process to guarantee that the terms of the negotiated settlements are upheld (1997, 2002). Such guarantees are essentially promises of military interventions should one side be found to be violating the terms of the peace agreement.

Increasingly such security guarantees are provided multilaterally in the form of peacekeeping operations organized and sponsored by international or regional organizations. United Nations peace-keeping operations in particular have been the focus of two path-breaking scholarly treatments by Michael Doyle and Nicholas Sambanis (2006) on the one hand, and Page Fortna on the other (2008). How might such peace-keeping operations help preserve peace? And, do they?

Peace-keeping operations are fundamentally a third-party security guarantee. Peacekeepers are charged with monitoring and verifying that all participants in the peace treaty are honoring their obligations as specified by that treaty, particularly commitments to disarm and demobilize armed forces. One of the main concerns after internal conflict is that one side will preserve its military might and use this advantage to attack the other side; since neither side wishes to be caught unprepared, both sides have an incentive to renege on such provisions and to perpetuate conditions for war. Further, since neither side's proclamations of adherence to its obligations are thought credible by the other, the only way to build confidence is to have both sides' actions be subject to monitoring and verification by a legitimate third-party. In addition, because peacekeepers possess military expertise, they are well-suited to conduct the tasks

involved in disarmament and demobilization, and certainly more so than their diplomatic and political counterparts who helped negotiate the peace they are charged with keeping. In addition, the use of force by peacekeepers to quell violence is less likely to be marred by allegations of bias than if the states' own armed forces, which are too often dominated by one group, did so. Peacekeepers can therefore preserve the peace by providing the internal security crucial to allowing actors to adjust their expectations about the durability of the peace and to begin a return to normalcy in their everyday lives.

Complementing the hands-on role they play in maintaining law and order, peacekeepers serve two additional functions. First, they open channels of communication between the principals to the recently concluded conflict (Fortna 2008, p. 95). Peacekeepers can serve as a neutral arbiter, to whom each side can take its concerns and complaints about the other, allowing for increased communication between the sides and a reduced risk of a pre-emptive return to arms. In short, they moderate anarchy by providing some neutral authority. Second, the mere presence of peacekeepers can serve as a credible signal of the intention of both sides to maintain the peace. Peacekeeping operations are an example of what Mattes and Savun (2009) term “cost-increasing provisions” because they increase the costs associated with conflict recidivism. The willingness of the combatants to invite peacekeepers thus serves as a credible signal of their intentions, and, conversely, helps identify potential spoilers whose intentions are murkier.

Research on peacekeeping has reached mixed conclusions about its efficacy, though Fortna's recent book is far more optimistic in its conclusions than prior analyses. Surveying UN peacekeeping operations between 1989 and 2000 that were conducted after civil wars, Fortna (2008, p. 17) concludes that, “peace lasts significantly longer, all else equal, when international personnel deploy to maintain peace than when they do not” even though “peacekeepers tend to

go to the most difficult cases”. In their comprehensive survey of UN peacekeeping, Doyle and Sambanis study all peace processes after civil wars that ended between 1945 and 1999 – 151 in total – and conclude that “while the UN is very poor at ‘war,’ imposing a settlement by force, it can be very good at “peace,” mediating and implementing a comprehensively negotiated peace” (2006, p. 5). Specifically, Doyle and Sambanis identify two factors common to successful peacekeeping operations: they are well designed to fit conditions on the ground and they prioritize economic recovery. While the first factor, as Fortna correctly points out, is difficult to translate into a policy recommendation since we only ever know if an operation was designed well *post hoc*, the emphasis on the economic dimension of peacekeeping is useful and worthy of further consideration.

Disarmament, Demobilization, and Reintegration (DDR) programs have generated increasing attention as part of the United Nations’ package of post-conflict peacekeeping operations. DDR programs are designed to rehabilitate former combatants and reinsert them into society with a real chance to pursue non-violent means of economic and social support, as well as political expression. Third-party interveners thus take steps to disarm combatants, remove them from military structures, and train them for productive jobs. In theory, DDR programs play a different role than the peacekeeping operations that nominally govern them. In the terminology of the credible commitment problem, DDR programs grant heads of combatant groups the opportunity to send a credible signal of their commitment to the peace. By submitting to a program administered by an unbiased third-party designed to demobilize and reintegrate their fighters, combatant groups will aid reconstruction by assuring their former enemies of the credibility of their commitments.

DDR programs are increasingly included in peace agreements and are an essential portion of UN peacekeeping operations, including ongoing operations in Sierra Leone and Liberia. We do not know of cross-national studies of DDR programs' efficacy in preventing conflict recurrence or speeding economic reconstruction. However, survey studies of ex-combatants have begun to investigate whether such programs indeed aid them in their reintegration. Humphreys and Weinstein (2004, 2007) report on surveys of ex-combatants in Sierra Leone, finding little evidence that non-participants in DDR programs suffered in comparison to participants.^{iv} In contrast, parallel survey research conducted in Liberia reports that DDR programs have improved ex-combatants' lives, particularly their ability to reintegrate into society (Pugel 2007). Future research, in particular through micro-level surveys and randomized trials, should continue to tackle these questions.

3.2.2 Economic Interventions

While most students of civil wars focus understandably on violence, there has been an increasing recognition in recent years of the critical need to rebuild the domestic economy if the country is to sustain its hard-won peace. As mentioned above, Doyle and Sambanis find conclusive evidence that peacekeeping operations accompanied by extensive economic programs are most successful; likewise, Spear (2002) points out that demobilization efforts are more successful when former soldiers can find economically-viable occupations in peace time. However, fostering broad-based economic recovery in post-conflict situations is difficult, even if individual groups or actors in society found war profitable. As Collier et al. (2003) put it, war is "development in reverse".

The often tragic costs of civil conflict have inspired large bilateral and multilateral aid transfers to post-conflict countries (Keefer 2009; Flores and Nooruddin 2009b). Developed countries provide large amounts of aid to countries recovering from conflict, and, more recently, the international financial institutions have gotten in the act as well. The World Bank, for example, allocates between 20% to 25% of its total lending portfolio to post-conflict countries, according to one estimate (Weiss 2004: 1). Such aid serves two related functions: by providing opportunities outside of violence, it makes committing to the peace process easier for former combatants, and it can serve as a signal to other actors of how credible donors view the commitment. In the latter sense, international aid can serve a catalytic function and help mobilize additional capital flows for the country.

Susan Woodward makes a persuasive case for the centrality of economic recovery efforts within the larger post-conflict reconstruction paradigm. She identifies three sets of economic tasks “necessary” for sustainable peace: “sufficiently rapid economic revival to buy confidence in the peace process; funding to implement specific commitments in the peace agreement; and the economic foundations necessary to sustain peace over the long term” (2002, p. 185). Yet, the accumulated evidence is pessimistic about the usefulness of external donor efforts in post-conflict situations. Collier and Hoeffler (2002), for instance, find that donors suffer aid “amnesia” and that aid tapers out towards the end of the first decade after the cessation of violence, and, further, that donor efforts are often misguided, emphasizing macroeconomic policy reform over much more important social policies. Woodward’s survey of the literature reaches a similar conclusion: external assistance is too often misguided, misappropriated, and misallocated.

Aid’s alleged ineffectiveness would be less troubling if it was not for the potentially critical role those resources could play in assuaging the credible commitment problem, and,

further, that the misuse of these funds undermines the brittle peace in place. Allegations of corruption, or of biased allocation of aid resources, can fan concerns among groups that they are being ignored at the expense of their enemies, and that such discrimination will place them in a permanently inferior position. Donors must therefore design aid programs to encourage transparency as a confidence-building mechanism.

The logic of the credible commitment problem suggests that aid's effectiveness in post-conflict countries depends on whether or not it is a means to fostering credible commitments to the peace. Keefer (2009) argues that 'political market dysfunctions' make it unlikely that aid will be used effectively in a post-conflict country, but that donors too often ignore this reality in their emphasis on the size of aid transfers. Rather Keefer argues for a greater focus on how aid is utilized through the use of "peace conditionality" in which aid is linked to specific steps taken to bolster peace and to enforce the provisions of the peace agreement (see also Frerks 2006 and Boyce 2008). Violations of these provisions by contrast could result in aid sanctions, increasing the expected benefits from peace.

A potential limitation of Keefer's advice is that it reinforces the temptation to give aid only where it is most likely to be successful. While understandable from the donor's perspective since aid funds are scarce and donors must account for their use (Dollar and Svensson 2000), it does mean that aid would flow away from the hardest-hit countries and towards those with the "easiest" problems. Such choices also make the evaluation of aid's effectiveness more complicated. For instance, Flores and Nooruddin (2009b) analyze the World Bank's efforts in post-conflict reconstruction. They argue that the World Bank, needing to provide evidence of success to its principals, picks countries where conditions are most propitious to success. Indeed, their empirical analysis indicates that once the World Bank's selection process is accounted for,

there is no discernible effect of the World Bank on either conflict recidivism or economic recovery.

Concurrent research with considerable promise does suggest that aid can be ‘locally’ effective if designed and allocated more wisely. Fearon, Humphreys, and Weinstein (2009) use a randomized field experiment to evaluate the impact of ‘community-driven reconstruction’ (CDR) programs in northern Liberia. Their results are extremely encouraging, and suggest that CDR had a positive impact on community cohesion, social inclusion for marginalized groups, and democratic norms and values. Future work should identify the potential for “scaling” up these findings to the national level.

This discussion suggests that, while post-conflict aid from the international financial institutions has done little to aid economic recovery or prevent conflict recurrence, aid has the power to strengthen credible commitments to the peace if focused on grassroots social cohesion and/or conditioned on continued respect for peace agreements. Coupled with findings of economic recovery’s contributions to the peace in the Doyle and Sambanis work on peacekeeping, this finding is a siren call for peace researchers to pay as much attention to butter as they do to guns.

4. Conclusions

As the number and intensity of civil wars has increased in recent years, a new problem has become prominent for development and peace researchers: how best to re-build war-torn societies? In this essay, we have utilized a dominant framework for analyzing the post-conflict environment to identify the strengths and weaknesses of the most commonly-attempted interventions in these situations. We argue that the problems of post-conflict reconstruction stem

from a double-edged credible commitment problem. First, erstwhile combatants must develop technologies enabling them to signal credibly to each other their intentions to honor the provisions of the negotiated settlement that brought fighting to a close. Second, these principals must find a way to signal credibly their mutual commitments to external audiences comprised of domestic and external audiences of economic investors and aid donors. Though the shape and intensity of the commitment problem shifts, its essential nature does not – credible commitments are simply difficult to make during the post-conflict period. Even when conflicts end in the outright military victory of one side over others, the victors must credibly commit to forswearing vengeance against the communities formerly represented by armed groups. Failure to do so will likely slow short-term recovery and raise the long-term probability of further conflict.

A theory of post-conflict reconstruction that emphasizes credible commitments allows not only theoretical insight, but also a guide to the politics of interventions intended to stave off further violence and galvanize reconstruction. In the broadest sense, successful interventions must raise the benefits from peaceful involvement in politics and/or the costs of defections and continued violence. We therefore re-evaluate five major post-conflict policy interventions that have dominated this literature. Politically, scholars typically advocate a rapid transition to democracy, particularly in the form of early elections, as a means of installing a government with some claim to domestic legitimacy. In addition to its obvious normative desirability, democracy could bolster the credibility of commitments to peace by constraining leaders from exacting retribution through its system of checks and balances; credibly signaling the commitment of former military commanders when they participate in democratic politics; and raise the expected benefits of cooperation, since former combatant groups will anticipate sharing power in future

governments. However, the winner-takes-all – or at least takes-most – nature of elections makes potential losers insecure and embryonic democratic institutions likely cannot constrain a newly elected leader who has promised peace, but is bent on subverting all opposition. Indeed, ongoing research suggests that such rapid transitions to democracy can be counterproductive.

An alternative to elections involves negotiated power-sharing arrangements written into the peace agreement. Power-sharing arrangements have the theoretical virtue of reducing the volatility of stakeholders' assessment of their post-conflict political power and reducing their fears that their former enemies will have access to unparalleled political or military power to reinstate violence with a significant advantage. More realistically, however, power-sharing agreements seem to replicate the very enforcement difficulty that we describe here. The precise sharing of power itself is an element to bargain over in peace agreements and is not inherently self-enforcing. Furthermore, such arrangements reflect a static view of the power balance in society and, as previous statements of the credible commitment problem state, the anticipation of such changes in the future may drive violations of such agreements, exacerbating the credible commitment problem.

This discussion suggests the difficulty of solving the credible commitment problem without a third-party that is willing and able to enforce the agreement. One high-profile form of external intervention is a peace-keeping operation in which foreign governments contribute troops charged with maintaining domestic law and order, monitoring disarmament and demobilization efforts, and maintaining a channel for communication between the two sides. In short, such interventions replace the anarchy that underlies the enforcement problem with hierarchy through the imposition of a third-party that can arbitrate and enforce the agreement. On the whole, such operations play an invaluable role in prolonging peace after conflict, though

critics validly point out that they might undermine the building of domestic state capacity by providing the security services typically offered by governments. Therefore, they risk trading long-term capacity-building – perhaps the only means to post-conflict rehabilitation – for short-term security. Another aspect of such interventions is a DDR program, which limits the ability of combatant groups to reform through the rapid remobilization of soldiers and command structures. Such programs should bolster the credibility of the peace because they raise the costs of returning to violence, but there are few systematic evaluations of such programs.

The last noteworthy external action is the provision of bilateral or multilateral aid. Ideally such aid plays multiple roles, beginning with reviving the economy to providing jobs for former combatants and improving social services for marginalized groups to the longer-term goals of establishing the foundations of a robust economy. Unfortunately too often aid has been squandered because of a lack of transparency over its spending or incentives to do otherwise in the absence of conditionality, or the advice offered by donors has focused too heavily on macroeconomic orthodoxies relative to practical peacekeeping tasks. However, in principal post-conflict aid packages might be better designed if including peace conditionality terms, which credibly withdraw aid if combatants pursue paths anathema to peace.

The credible commitment problem thus provides a window to understand the complicated political economy of post-conflict reconstruction, as well as a means to evaluate post-conflict interventions. Multiple sources of evidence point to the tragic track record of countries emerging from civil conflicts. If post-conflict interventions more carefully attend to these dynamics, involve third-parties dedicated to enforcement, and allow for a longer period for the incubation of native institutions, there is hope for reversing that record.

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ⁱ Collier (1999) argues that the capital stock rebounds quickly after longer civil wars, whereas it continues to decline after shorter civil wars.

ⁱⁱ Examples of the applications of such techniques in political science include Achen (1986), Flores and Nooruddin (2009b), Lemke and Reed (2001), Nooruddin (2002), Nooruddin and Simmons (2006), Reed (2000), Przeworski and Vreeland (2000), Savun (2008), Vreeland (2003).

ⁱⁱⁱ DDR programs are formally part of peace-keeping operations. However, since they fulfill a different function than security guarantees or peace-keeping operations involving intervening soldiers, we consider their effects separate from their parent operations.

^{iv} The authors rightfully point out that, without a randomized control trial in which combatants are randomly assigned to the DDR programs, it is impossible to conclude that DDR programs were unsuccessful.