Financing the peace: Evaluating World Bank post-conflict assistance programs

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Abstract Does World Bank aid to countries damaged by civil conflict meet its stated goals of speeding economic recovery and reducing the risk of conflict recidivism? We contend that the Bank's success depends on its ability to bolster and signal the credibility of politicians' commitments to peaceful politics and tailor its programs to the post-conflict environment. In the first systematic evaluation of World Bank post-conflict assistance, we estimate selection-corrected event history models of the effect of Bank programs on recovery and recurrence using an original dataset of all World Bank programs in post-conflict environments. Among key results, we find that the Bank tends to select aid recipients according to their pre-existing probability of conflict recurrence and that, once we control for this non-random selection, the Bank has no systematic effect on either conflict recurrence or economic recovery.

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1 Introduction

Little by little, the World Bank has become an institution focused on war. It has channeled immense resources, restructured its operations, and directed considerable intellectual energy, all for the purpose of effecting positive change in conflict-prone countries (Ball and Halevy 1996; Kreimer et al. 1998; World Bank 2004b). In 1997, the Bank issued its *Framework for World Bank Involvement in Post-conflict Reconstruction*, for the first time establishing goals and guidelines explicitly tailored to countries recovering from civil conflicts. It soon reinforced the *Framework* by dedicating impressive resources to programs under its auspices, establishing the Post-Conflict Fund (PCF) in 1997 and the Low-Income Countries Under Stress (LICUS) Trust Fund in 2004. Located within the Bank's Conflict Prevention and Reconstruction Unit, these Funds have awarded over 170 grants to date, most much smaller than typical World Bank programs and given to non-traditional recipients (World Bank 2006b, c). Whether measured as a raw figure or as a percentage of the World Bank's total loan portfolio, these programs represent an important effort by the Bank; according to one recent account, World Bank assistance to post-conflict countries now comprises between 20% and 25% of total current lending (Weiss 2004: 1).

The Bank's dramatic expansion of its role in conflict prevention and reconstruction originates in its deepening appreciation (often based on its own research) of the role of civil conflict in derailing economic progress in much of the developing world. Paul Collier and his World Bank (2003) research team argue that, as countries exit civil conflicts, continuing economic stagnation intensifies the already dire risk of renewed political violence, creating a grim cycle of economic paralysis and violent political conflict that often proves impossible to exit. Our own research strongly suggests that new democracies and countries implementing negotiated settlements face particularly bleak odds of recovering economically and achieving political stability (Flores and Nooruddin 2006).

Given such research, the Bank has re-defined its mission in fragile post-conflict countries. By promoting economic reconstruction and political reconciliation, the Bank quite literally hopes to finance the peace.[1] Though operations in post-conflict reconstruction comprise a diverse set of lending and non-lending activities whose focus varies across projects and countries, the Bank has delineated two overarching and related objectives for its deepening involvement. First, the Bank wishes to accelerate economic recovery in the immediate post-conflict period. Lending operations focus on "jump-starting the economy" and the "repair of war-damaged infrastructure" (Kreimer et al. 1998: 9). Non-lending operations "help define broad recovery and reconstruction strategies and assist in mobilizing and coordinating international

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[1]The World Bank, of course, is not the only international organization devoting its energies to post-conflict situations. For a detailed account of the role the United Nations is playing in these societies, see Doyle and Sambanis (2006).

resources" (Ibid.). Through its efforts to support economic recovery, the Bank hopes to accomplish its second goal – a sustainable peace (World Bank 2006b: 4). The Bank emphasizes its determination to create "targeted programs for veterans and vulnerable groups such as widows and children" and focus on political stability, human rights, social inclusion, improved access to public services, and an adequate standard of living (Kievelitz et al. 2004: 2).

Ironically, though the Bank is returning to its original mandate as the International Bank for *Reconstruction* and Development, it also finds itself treading in unfamiliar political waters. Its own relative lack of expertise in these environments presents major challenges to the success of its efforts. Until the creation of the 1997 *Framework*, the Bank gave little explicit recognition to the particular economic and political obstacles in post-conflict countries, essentially treating them no differently from countries recovering from natural disasters (Kreimer et al. 1998: 5). These circumstances force many to doubt the Bank's ability to promote peace and prosperity in recovering countries.

The obvious stakes of this debate provide the sub-text for this paper's central question: *does World Bank assistance, all else equal, meet its stated goals of speeding economic recovery and decreasing the probability of conflict recidivism?* In answering this question we conduct the first systematic evaluation of World Bank post-conflict assistance, which in turn allows us to consider carefully how the Bank might better design such programs in the future.

Our answer to this question marries previous research into the politics of civil conflicts with careful attention to the internal politics of the World Bank. We propose that at the conclusion of hostilities, former adversaries find it difficult to commit credibly to post-conflict peace; neither can trust the other to foreswear violence. The Bank may leverage its lending and expertise to facilitate the creation of commitments to the peace. However, it appears just as likely that the Bank's dependence on rich donors, internal competition for resources, and its own research produce a strong incentive to "pick winners" by favoring aid to countries where a credible commitment to the post-conflict peace seems more probable (Dollar and Svensson 2000). If so, then the Bank does little to help politicians solve the fundamental dilemma of the post-conflict period. Nevertheless, the Bank may still assist countries successfully if its programs serve as a credible signal of politicians' commitment to the peace or alleviate shortages of financing and expertise for its aid recipients (i.e., countries already exhibiting a credible commitment to the peace). However, the Bank also risks aggravating post-conflict tensions if it pressures governments to implement policies that exacerbate short-run distributional conflicts. We treat the question of which effect dominates as an empirical matter.

This theoretical approach emphasizes that the Bank selects recipient countries according to unobserved factors (i.e., the credibility of politicians' commitment to peace) that also drive the outcomes of interest (namely, the risk of conflict recurrence and the promise of economic recovery). If we do not account for such non-random selection, we will bias our results in the World Bank's favor. As previous research into the activities of international financial

institutions (IFIs) has shown, selection bias based on unobserved factors makes the evaluation of their economic consequences methodologically difficult (Vreeland 2003; Nooruddin and Simmons 2006). Furthermore, methods of correcting for selection bias based on observed factors are of little use here. Thus, we use an instrumental variables approach that is well-suited to this problem. Our results support the premise that the Bank tends to select aid recipients according to their *ex ante* probability of conflict recurrence. When we control for this non-random selection, the Bank has no systematic effect on either conflict recurrence or economic recovery.

The remainder of this paper unfolds as follows. We begin by establishing a theoretical framework that concentrates on the major challenges facing post-conflict reconstruction and how the World Bank may figure into their resolution. In particular, we consider the Bank's role in strengthening credible commitments to the peace and its potential post-commitment effects (i.e., signaling credible commitments, enhancing financial resources, and offering policy advice). Next, we describe an original data set of World Bank programs in post-conflict environments and describe more systematically the Bank's growing role in reconstruction efforts. We then define a competing risks event history model and the instrumentation strategy that we use to quantify the effect of World Bank aid, accounting for selection bias. We conclude with a consideration of the implications of this research for the World Bank and our understanding of how best to build peace in fragile states.

2 Credible Commitments, the World Bank, and Post-conflict Economic Recovery

What role does the World Bank play in assisting post-conflict countries in the search for economic reconstruction and a return to peaceful politics? Answering this question demands, at least minimally, that we first describe the fundamental political and economic obstacles the Bank faces and how it best confronts them. Why do some countries escape the poverty-conflict trap while others remain mired in it?

The chief barrier to peace and reconstruction is the inability of former combatants to commit credibly to foreswearing violence (Walter 1997, 1999, 2002, 2004; Flores and Nooruddin 2006). The tendency of civil conflicts to end in negotiated settlements signifies that mutually acceptable political settlements of the root causes of civil conflict do exist. The problem lies in their implementation and enforcement. At the conclusion of a civil conflict, a country's politics more closely resemble the anarchy of interstate relations than the hierarchy of domestic politics.[2] Apart from the government (itself a party to the political settlement) no higher authority can police the agreement, leading to what Posen (1993) has termed a "domestic security dilemma." If a

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[2]We use the word "anarchy" in the sense it is used in international relations, implying the dearth of central authority that individuals can appeal to for assistance (Lake 2007).

former combatant group honors its commitment to disarm, it places itself at the mercy of the government, which then possesses a nearly unconstrained power to inflict retribution on the now powerless former combatant group. However, attempts to guard against this possibility will themselves be regarded by the government as proof of an intention to defect, because the newly minted post-conflict government faces an identical dilemma. Sadly, the post-conflict peace is threatened not only by *ex ante* revisionist parties, but even by actors who sincerely wish to preserve the peace, but fear unilateral disarmament. Promises to respect the peace are inherently non-credible.

Focusing on the difficulty of supporting credible post-conflict peace commitments reframes our interpretation of the political and economic challenges governments face. The success of many intermediate steps in economic reconstruction depends on the government's credibility, since post-conflict policies have inherent distributional consequences. The temptation to implement particularistic policies designed to punish former enemies and reward wartime constituents is high and risks undermining a tenuous peace by demonstrating the government's commitment to retribution, rather than reconciliation.[3] At least two key tasks (the re-establishment of private property rights and the development of new budgetary priorities) reflect this logic. Re-settling populations displaced in the war requires a system capable of adjudicating rival property rights claims and doing so in a manner that is fair to newly demobilized combatant groups, their supporters, and other marginalized populations (Collier et al. 2003). Developing new budgetary priorities also presents post-conflict governments a choice between public and private goods. Rather than maintaining conflict-era levels of military spending, governments can signal the transformation of their priorities by re-allocating resources toward public services and physical infrastructure (e.g., re-building roads, electricity grids, water pipelines, and telecommunication networks). However, these investments must prioritize the provision of genuinely *public* services, rather than selectively re-building infrastructures in areas more loyal to the government (Collier et al. 2003; Roberts-Schweitzer et al. 2006; Thyne 2006; World Bank 2005b, 2006b). Though these economic policy goals are inherently important, their impact on post-conflict reconstruction is perhaps most profound as an indicator of the government's credibility.

The credibility of the government's commitment to peaceful political competition also remains instrumental to galvanizing private investment, which in turn provides greater opportunities to farmers and laborers returning to their lands and jobs.[4] The post-conflict period represents a potentially lucrative environment for investment, but the specter of conflict recidivism makes

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[3]Keefer (2007) emphasizes that, even in the pre-conflict period, political leaders can spark violent insurgency when they under-supply public goods while over-supplying private and club goods, all due to a weak commitment to pursuing peaceful politics.

[4]Certainly, this concern is not unique to post-conflict government; a burgeoning literature in political economy provides evidence of the credibility problems faced by peaceful developing countries seeking to attract foreign direct investment (Jensen 2006; Henisz 2002).

potential investors' expected returns highly volatile. Investing in physical capital (e.g., factories, farm equipment) and infrastructure development require long time-horizons, since the returns to these investments are delayed, but the investments are largely up-front and sunk. Risk-averse investors, both domestic and foreign, will shy away from making such irreversible investments (Aizenman and Marion 1999). Any assurances on the part of the government that the risk of conflict recidivism has been contained are scarcely credible.

The roots of the poverty-conflict trap are clearly visible here. The World Bank's own research indicates that the probability of another conflict for a country emerging from civil war is almost twice as high as it was on the eve of the first conflict (Collier et al. 2003: 83). This high risk of further violent political conflict foments under-investment and slowed economic recovery, which itself sows the seeds of conflict recurrence. Mendelson-Forman and Mashatt (2007) argue that "golden hour" job creation (i.e., in the first year after the cessation of hostilities) is critical to preventing conflict recurrence. Without credible commitments to the peace, the risk of being caught in the poverty-conflict trap intensifies. Recognizing this fundamental challenge, the Bank has stated explicitly its mission to end this vicious cycle through facilitating a return to peaceful politics and sparking economic growth. We consider each role in turn.

2.1 Can the Bank Underwrite Credibility?

The foregoing logic regarding the roots of economic stagnation and conflict recurrence suggests that the central political role for World Bank post-conflict assistance is to facilitate the creation of credible commitments to the peace. How might the World Bank use its financial resources and advisory power to do so? We answer this question by examining the bargaining relationship between the Bank and potential post-conflict aid recipients and recognizing the strategic nature of that process.

Consider first the interests of the political leadership of a potential aid recipient country. All else equal, political leaders wish to maximize the financial resources flowing into their country, particularly given the often severe budget constraints they face. However, they likely have a more ambivalent attitude towards World Bank conditionality, which may require financial commitments to confidence-building measures. A political leadership dedicated to reconciliation might accept such conditions, even eagerly so, as a means to obtaining an external signal of the credibility of its commitment to the peace.[5] However, a more recalcitrant political leadership might resist such conditions, preferring to maintain political and economic autonomy in the face of uncertainty over the commitment of former combatant groups. Alternatively, politicians may engage in "cheap talk" in order to secure aid, making commitments to

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[5]In the case of the IMF, Vreeland (2003) forwards a persuasive case that politicians advancing difficult reforms will leverage IMF assistance more for its policy conditions than the financial assistance itself.

policy changes they have no intention of honoring. Evidence on World Bank projects supports this strategy; numerous scholars have found that World Bank aid commitments are disbursed fully, even when governments fail to enact promised reforms (Dollar and Svensson 2000; Svensson 2003).

The World Bank also faces a conflicting set of incentives. The principal goal of World Bank post-conflict assistance (partially a result of rigorous bank-mandated research) is to speed economic reconstruction and forestall conflict recurrence. We certainly do not dispute that basic motivation. However, the pursuit of that goal, in combination with its reliance on rich countries for its funding, places the World Bank in a dilemma.[6] Externally, the World Bank is dependent on its largest shareholders, primarily OECD countries, for its capital, and generates most of its financing by borrowing on international capital markets. Consequently, the Bank must deliver positive results to its sponsors in order to justify further funding, demonstrating its utility to key constituents by stabilizing volatile post-conflict countries, particularly those of importance to its sponsors. Conversely, it must avoid public failures (e.g., collapsed projects, exacerbating post-conflict tensions, etc.) that communicate irrelevance or, at the extreme, policy incompetence. The Bank's internal politics reinforce this external dictum, as the Conflict Prevention and Reconstruction Unit has an incentive to demonstrate its expertise and relevance to the Bank's overall mission, thereby maximizing its share of the Bank's funding.

These institutional motivations, combined with the pressing challenges of the post-conflict period, place the World Bank in a quandary. By aiding post-conflict countries, it demonstrates relevance to its donors and fulfills an integral part of its mandate. However, the post-conflict environment represents a high-risk, high-reward scenario for the Bank. Politicians' incentives to misrepresent their intentions potentially risk leaving the Bank enabling recalcitrant governments intent on punishing their enemies, precisely the kind of policy failure that impugns the Bank's motives and competence. Research suggests that increased effort from the World Bank does little to affect the success of structural adjustment programs, particularly in comparison to domestic political will and competence; expending Bank resources on creating strict conditions designed to cajole hesitant governments is actually counterproductive (Dollar and Svensson 2000).[7] Recognizing these risks generally, the Bank has emphasized a performance-based allocation scheme that allocates resources where they can be used most effectively (World Bank 2006c). As the Bank's own financial reports make clear, creditworthiness represents a critical criterion for loans (World Bank 2006d).

This framework for understanding the strategic interactions between the World Bank and post-conflict governments suggests three potential roles for

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[6]Our discussion of the Bank's incentives are based primarily on Kapur et al. (1997), which provides a comprehensive history of the World Bank's first half-century, and on Nielson et al. (2006), which offers a more recent analysis of organizational imperatives and reform movements at the World Bank.

[7]The comparison may be quite apt, as the depth of reforms needed in the post-conflict period mirrors that of a structural adjustment program.

the World Bank in the creation of credible commitments to the post-conflict peace: *facilitator*, *signaler*, and *bystander*. According to the first perspective, the Bank, eager to avoid policy setbacks, will seek to force governments and former combatant groups to commit to peace by making future financing contingent on those steps. World Bank aid to a government, for example, might be conditioned on steps to reduce the size of the military. Similarly, the Bank may make key aid projects in a region once the territory of armed actors contingent on demobilization, giving these former combatant groups a financial incentive to do so. Therefore, self-interested political actors who wish to obtain World Bank funding for reconstruction will be forced to take steps to bolster the credibility of their peace commitments.

Our discussion of the challenges facing the World Bank in post-conflict countries suggests that successfully acting as a *facilitator* might run counter to the Bank's incentives. In contrast, the second and third perspectives on the World Bank's role both emphasize that the Bank's institutional and sub-institutional incentives will drive it to exhibit great prudence in choosing the post-conflict countries it assists. Before offering assistance, it will seek evidence of politicians' commitments, in order to assess the *ex ante* likelihood that they will respect the peace. Recognizing politicians' incentives to misrepresent their intentions, the Bank will seek credible cues, relying on government policies, the behavior of former combatants, and World Bank and outside consultants' expert assessments. The Bank will, in effect, choose countries already predisposed towards post-conflict success, or at least those countries less strongly predisposed to failure. In some cases, the Bank's decision might be easier, as in cases where violent conflict immediately returns or instability is relatively apparent. However, in many other cases, the Bank must make difficult decisions, given its organizational prerogatives. But according to this perspective, this effort to "pick winners" by waiting for countries to build a credible commitment to the peace *before* dedicating aid will leverage the Bank's scarce resources to its goal of spurring economic recovery (Dollar and Svensson 2000).

2.2 A Post-credibility Role?

If forming credible commitments to the peace represents the fundamental challenge of the post-conflict environment and the Bank may play only a minor role in underwriting credible commitments, how might it speed reconstruction? Put differently, how might the Bank assist a country that already has forged a strong commitment to peaceful politics?

First, the presence of the Bank may act as a *signal* of the credibility of the post-conflict commitment. Because of the Bank's key role in the post-conflict environment, it likely gathers information not easily accessible to other economic actors. The Bank negotiates directly with post-conflict governments regarding the parameters of World Bank programs. In doing so, it learns about the intentions of political leaders and former combatant groups. Meanwhile, as previously discussed, private economic actors must make a decision analogous

to the World Bank's, judging whether the peace is credible enough to justify long-term investment. However, these private actors lack access to the kind of private information the Bank possesses regarding the nature of the risk. Economic actors will therefore consider a larger commitment amount on the part of the World Bank a credible signal of the existence of a commitment to the peace. Consequently, they will react by investing more heavily in those countries that receive the Bank's stamp of approval. Even if the World Bank selects the countries it assists by their probability of success, it will meet its stated goals of recovery and peace if it communicates private information in its choice of aid recipients.

Second, World Bank funding may help its carefully chosen aid recipients through its ability to offer sorely needed *financing* and *policy advice.* Purely domestic solutions to either of these needs most likely lie outside the grasp of post-conflict politicians. This combination of circumstances presents an opportunity for the World Bank to assist countries climbing out of the poverty-conflict trap. First, Bank programs should go a long way toward providing scarce financial resources. Obviously, a primary function of the Bank is to provide loans and grants (resources) to countries in need. Further, even when the Bank's own financial contributions are relatively small, the Bank plays an important role in mobilizing funds in the initial aftermath of the conflict, and of coordinating aid from other external donors.[8] Thus, at the risk of stating the obvious, if the Bank should be expected to do anything, it is to ease resource constraints in post-conflict states. With the funds typically comes policy advice. The role of the Bank in providing policy expertise is difficult to understand fully since there is no equivalent to the IMF's 'letter-of-intent' in which the country states its understanding of the policy requirements required in exchange for the loans, but case-study evidence makes clear that World Bank country experts play an active role in negotiating with governments the most effective ways of spending resources and fostering reconstruction (World Bank 2006c). Indeed, this role has now been formalized in the form of watching briefs, transitional support strategies, and post-conflict needs assessments prepared by observers prior to the initiation of a new program (Kievelitz et al. 2004; Kreimer et al. 1998).

In contrast to this optimism, other accounts instill doubt regarding the Bank's ability to play these post-conflict roles. First, the Bank might not gain the kind of private information discussed above when it negotiates with post-conflict governments. Economic actors' access to risk assessments and news accounts of post-conflict countries place them on solid enough footing to form relatively accurate expectations regarding post-conflict outcomes, therefore guiding their investment decisions well without the World Bank as a signaler. This seems a reasonable assumption. Furthermore, the Bank's *Framework for World Bank Involvement in Post-Conflict Reconstruction* was not implemented until 1997; until then, the Bank did not differentiate post-conflict countries

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[8]See Babson (2006), Boyce (2004, 2007), Forman and Salomons (1999), as well as the Bank's own assessments (World Bank 2006b, c).

from those suffering from natural disasters. This suggests that the Bank often has approached post-conflict countries with only a rudimentary understanding of their political dynamics, making its search for cues of credible commitment decidedly imperfect (World Bank 2006c). This skeptic's logic suggests that the Bank's informational advantage is more myth than reality; other investors are parties to the same information as the Bank and analyze that information as expertly. If so, then the Bank likely has not proven to be a reliable signaler for private economic actors, at the very least forcing them to rely on their own judgments in place of the Bank's.[9]

Similar doubts exist regarding the Bank's funding and economic policy advice roles. Research on the World Bank's sister institution, the International Monetary Fund (IMF), has found that IMF programs retard economic growth and hurt labor (Vreeland 2003) and have deleterious consequences in democracies for spending on public services such as education and health care (Nooruddin and Simmons 2006). Critics thus may well ask why we should expect the World Bank to do any better in post-conflict countries. This is exactly the tack taken by the Bretton Woods Project, a critical watch-dog group that focuses on the IFIs. Their critique makes two main arguments about why World Bank programs might hurt prospects for recovery and encourage conflict recidivism (Lefrancois 2004). First, policies recommended and/or mandated by the Bank might be polarizing. While former World Bank President James Wolfensohn made 'social inclusion' a key theme of his tenure, the fact remains that reducing fiscal deficits and controlling inflationary pressures is an important aspect of the recovery program. In the absence of self-conscious safeguards, incentives exist to cut public services, which disproportionately benefit those groups in society least likely to be well-organized or possess much political influence (Nooruddin and Simmons 2006). Such reduction in public service provision could deepen resentments and foster conditions for recidivism (Collier et al. 2003; Thyne 2006). Furthermore, Paris (2004) argues that rapid market reforms in post-conflict countries potentially inflame political tensions.

Second, World Bank programs might not be well-matched to realities on the ground. The Bank has come to realize that the instability inherent in post-conflict institutional environments makes predicting the path of program implementation difficult. Consider this assessment from the 1998 Report: "In Uganda's TA III, project designers realized that they could not predict the form and timing of every contingency that might arise. They thus adopted a flexible project design that incorporated both 'blueprint' and 'process' elements with emphasis on the latter" (Kreimer et al. 1998: 17). A failure to recognize such realities does more than make program implementation harder; it can also have negative political ramifications that undermine the fragile peace in place. In Uganda, for instance, the Bank's insistence on raising tax revenues "had a chilling effect on private investment, driving economic activity into subsistence" because it ignored the legacy of predatory taxation during

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[9]Stone (2002) makes a similar argument about IMF programs.

the conflict years (Ibid.: 34). Likewise, in Cambodia, the Bank's insistence on streamlining the civil service was dangerously counter-productive, given that "the political coalition arrangement under the peace accords was based in part on raising the size of the civil service to absorb large numbers of the incoming parties' functionaries" (Ibid.).[10]

In summary, our depiction of the underlying bargaining process between the Bank and post-conflict governments yields several empirically verifiable hypotheses regarding the effect of Bank post-conflict assistance programs. If the Bank successfully uses its financing to enforce commitments to vital intermediate policy goals (e.g., reduced military spending, public good provision), then it acts as a *facilitator.* However, pressure on the Bank to produce policy successes and its sincere desire to optimally distribute its scarce resources may limit its ability to help create credibility where none existed previously. Even so, an optimistic view of the Bank suggests that it can act as a *signaler* for less informed private actors of governments' dedication to the peace. Furthermore, the Bank may play the role of a *funder* and *adviser*, endowing politicians with financing and policy expertise they otherwise lack. In contrast, its relative lack of expertise in the post-conflict environment implies that the Bank plays the role of a *bystander* or even an *impediment* to the very goals it hopes to pursue. We use this theoretical portrait to guide our choice of empirical methods in the next section.

3 Estimating the Effect of World Bank Post-conflict Assistance

The foregoing discussion suggests strongly that a common underlying factor influences both World Bank participation in post-conflict societies and the probability that its programs will yield positive outcomes. This argument also implies that this underlying factor (a credible commitment by previously warring factions to the peace) is by its nature difficult to observe, though external actors such as the World Bank may gather information to deduce whether or not the peace will last. In more technical terms, we have reason to believe that World Bank aid is non-randomly assigned, complicating program evaluation. Failing to account for this non-random selection biases estimates of the Bank's efficacy in these societies, with the size and direction of the bias dependent on the nature of the selection mechanism. Therefore, we

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[10]The implications of this point are worth considering more fully. The Bank has incentives that pull it in different directions. On the one hand, it wishes to achieve "peace" results, while, on the other, it seeks to impose economic reforms. To the extent that economic reform involves austerity that may undermine peace prospects, this raises the threshold for cases that can be safely selected. This point is more easily understood by conceptualizing three types of states that the Bank might aid: high-risk states that are likely to relapse into conflict no matter what is done; medium-risk states that might succeed if given aid but might fail if austerity measures are imposed; and low-risk states that are likely to succeed even with the Bank's preferred reforms enacted. In this case, the Bank's cross-cutting incentives might lead it to choose only low-risk states for its projects. We thank an anonymous reviewer for suggesting this point.

utilize instrumental variable regression. Before we discuss the details of our instruments and the results of that exercise, we describe the data used in this section. We then estimate 'base-line' models of World Bank program efficacy in which we do not account for possible selection bias, following which we present the results of the instrumental variables regression.

3.1 A New Data Set on World Bank Post-conflict Assistance

The World Bank has given aid to countries recovering from civil conflicts throughout its existence, though only in recent years (i.e., since 1997) has a comprehensive framework been developed to guide such post-conflict aid. One consequence of this is that there is no single auspice under which all aid to post-conflict situations is channeled. That is, there is no one definition of what constitutes a post-conflict aid program, which makes collecting data on such programs difficult. Our solution to this problem is to rely on the universe of recovery episodes identified in Flores and Nooruddin (2006).[11] Operationally, a 'recovery episode' begins once the conflict ends, either due to an explicit peace agreement or because the violence falls below a particular threshold.

Deciding what marks the end of a recovery episode involves answering the question of what constitutes success for the World Bank. Put simply, if one is to evaluate the World Bank's role, then a criterion against which to compare its performance is needed. One strategy might be to conduct such an evaluation at the level of the individual project. The World Bank's Independent Evaluation Group's evaluation of World Bank lending to LICUS is an example of such a strategy (World Bank 2006c), but as that report makes clear the lack of clearly-defined success-criteria limits the utility of such an exercise. The evaluators therefore focused their inquiry on assessing how major stake-holders thought the program had performed. While such subjective assessment is clearly useful, in this paper we take a different tack and focus on a definition of success that is more easily comparable across countries. This permits us to aggregate individual World Bank programs within a particular post-conflict country and ask if deeper and larger involvement yields more positive outcomes. As such, we require definitions of outcomes at the national, rather than project, level.

Given our focus on national-level outcomes, how would we know that a recovery episode has ended and whether World Bank assistance exerted a positive or negative effect on that episode? As discussed above, the Bank has defined two overarching goals for itself: fostering economic recovery and preventing further conflict (Kreimer et al. 1998; World Bank 2006b, c). Therefore, we follow Flores and Nooruddin (2006) in defining two possible ways in which recovery episodes can end: economic recovery and conflict recurrence. Technically, episodes can also be censored when the data end before recovery or recurrence occurs. While admittedly broad in scope, these, we believe are fair criteria to define the end of a recovery episode and evaluate the World Bank's performance. We define recovery as a return to pre-conflict

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[11] Available in the on-line Appendix.

levels of GDP per capita, which establishes minimally that pre-conflict patterns of consumption and investment have been reached. More specifically, we define the pre-conflict level of GDP per capita as the highest attained in the five-year period before the conflict, which avoids the problems of an overly low bar for recovery and the fact that the road to conflict might have been accompanied by an economic downturn.[12] We define conflict recurrence as the commencement of another civil conflict in that country.[13] Therefore, we define World Bank success on the basis of whether, all else equal, the Bank hastens economic recovery and/or prevents conflict recidivism. Future studies would do well to develop more finely-grained indicators of performance, but as a first systematic analysis of these programs we believe that these two benchmarks are useful.

Accordingly we define recovery episodes as beginning when levels of violence during a conflict fall below a minimum threshold of 25 battle-deaths per day, which is the PRIO/Uppsala threshold for a 'minor' conflict, and ending when the country has returned to its pre-conflict level of GDP per capita ('recovery') or has relapsed into conflict ('recurrence'). Next, we label a Bank program as a 'post-conflict assistance program' if it is in place during a recovery episode. To identify these programs, we rely on two sources. First, for the 1990–2002 period, we rely primarily on the World Bank's Project Database, which is available on-line at www.worldbank.org. The database categorizes programs by 'theme', and includes a category for 'Conflict Prevention and Post-conflict Reconstruction.' This gives us information on 181 programs, the earliest of which was approved in 1990. Second, to identify bank projects in countries recovering from civil conflict prior to 1990, we supplement these data by searching for all projects that fall during a recovery period as coded by Flores and Nooruddin (2006) and have goals consistent with post-conflict recovery and reconstruction. Doing so yields another 274 programs starting in 1964 in Gabon. The 455 programs for which we collect data vary in their sectoral emphases, duration, amounts committed, multilateral partnerships, and so on, but share priorities consistent with the meta-goals of fostering recovery and preventing conflict.

Figure 1 graphs the number of individual post-conflict countries in which the World Bank was involved during a recovery episode for each year between 1963 and 2006, as well as the total number of post-conflict programs in place and the Bank's total commitment amount. As has been documented elsewhere, the Bank's portfolio of such cases grew steadily through the 1970s,

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[12]A potential critique of this approach is that it ignores the "opportunity costs" of conflict. That is, in the absence of conflict, if the country had maintained its normal growth rate, its GDP per capita would have increased as well, which suggests that some counter-factual level should be the threshold for recovery. While we recognize this critique's validity, we believe our definition's advantages outweigh its potential disadvantages. Most importantly, our approach does not require us to speculate about the country's counter-factual growth rate, which is particularly important because high levels of growth-rate volatility in the developing world make speculations about future growth paths tenuous at best (Pritchett 2000).

[13]Flores and Nooruddin (2006) offer a fuller discussion of these coding choices.

Fig. 1 World Bank involvement in post-conflict assistance has grown steadily
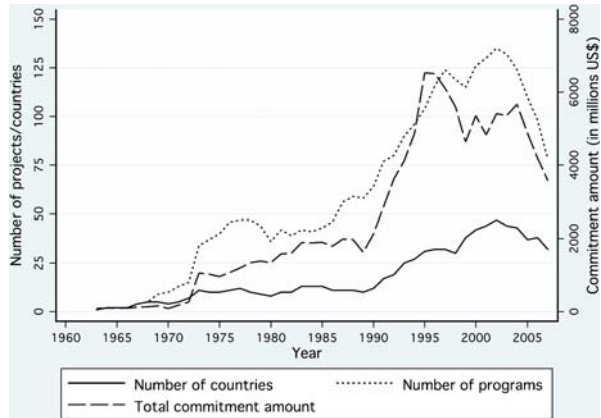
1980s and 1990s. At its peak, according to our data, the Bank had 135 programs in a single year in 46 distinct countries. With this growth in number of programs has come a concomitant increase in total amount of Bank resources allocated. Figure 1 confirms the Bank's own claim in its 1998 report that spending on post-conflict programs has increased 800% since 1980. The question we wish to answer is whether these resources are yielding their desired effects.

3.2 Baseline Model of World Bank Post-conflict Assistance Performance

International interventions in post-conflict societies seek to revive damaged economies and bolster the peace. As discussed earlier, the poverty-conflict trap perspective implies that each country emerging from civil conflict must re-build its economy or risk slipping back into violence. We can imagine a clock ticking ominously in the background: the more quickly the country can re-build, the more quickly it builds a barrier to violent relapse. In the language of event history analysis, countries in a post-conflict environment face a multi-state competing-risks problem.[14] Any given recovery episode ends with either successful recovery or recurrence of conflict. States experiencing neither outcome are right-censored. As such, a competing-risks analysis is suitable because it parallels the dilemma facing post-conflict countries. A careful examination of the baseline hazard suggests the use of the log-normal distribution for the duration portion of the model. The hazard rate peaks slightly after 4 years from the end of the conflict, and then falls away steadily, which suggests that most successful economic recoveries occur within 4 years.[15] Statistically, the non-monotonic shape of the hazard function suggests the use of the log-normal distribution for the duration portion of our model, since the

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[14]See Box-Steffensmeier and Jones (2004) for an excellent treatment of event history models in political science.

[15]The baseline hazard graph is available in the on-line Appendix.

alternative exponential and Weibull models assume constant and monotonic hazards respectively (Box-Steffensmeier and Jones 2004).[16]

In the statistical models that follow, the variable used to measure the presence of the World Bank is the *per capita commitment amount* (in US$) aggregated across all projects in place in the country in a given year.[17] Therefore, a negative coefficient on our World Bank variable in the recovery equation indicates that, all else equal, increasing World Bank aid per capita speeds economic recovery. In contrast, when examining the conflict recurrence dependent variable, a positive coefficient for World Bank aid per capita indicates that more aid prolongs the peace after a conflict.

The statistical models also control for the nature of the political transition (whether in a democratic or autocratic direction with unchanged regime type as the baseline category), pre-conflict levels of GDP per capita, whether the conflict had secessionist roots,[18] the duration of the preceding conflict episode and its square to account for possible non-linearities,[19] international aid,[20] the extent of economic damage caused by the preceding conflict,[21] the nature of conflict termination (Licklider 1993, 1995; Fortna 2004),[22] a measure of

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[16]We also estimated Cox non-parametric equations for each of the models presented in this text. The log-normal distribution generates the lowest Akaike information criterion (AIC) and Bayesian information criterion (BIC) scores. And our results hold when we use the Cox model instead; see on-line Appendix.

[17]In models not reported here but available in the on-line Appendix, we used the total commitment amount in millions of US$ and also its log as alternative measures. We prefer the *per capita* measure as it mirrors conventional practice in studies of international aid. Another possibility would be to use the actual amount disbursed from that committed. We prefer the commitment amount on theoretical grounds since it comes closer to approximating the signaling role played by a World Bank program. The commitment amount also is more comparable across programs since some more recent programs are still in progress and therefore have had fewer funds disbursed.

[18]The PRIO/Uppsala data set includes a variable for whether the conflict had its roots in a territorial or secessionist issue or if it was for the control of the center. We code the variable '1' if it had a territorial basis and '0' otherwise.

[19]Seminal work by Organski and Kugler (1977) on the 'Phoenix effect' after world wars leads us to suspect that longer wars might be easier to recover from since economies begin their recovery process earlier.

[20]We control for all bilateral official development assistance (ODA) flowing into the country. The data are drawn from the OECD and are measured on a per capita basis. Due to earlier research by Collier and Hoeffler (1998) and Flores and Nooruddin (2006) that shows that the efficacy of aid is conditional on its timing, we define three time categories (1–3 years post-conflict, 4–6 years post-conflict, and 7 or more years post-conflict) and interact our time-varying aid per capita variable with these categories. The result is three variables (aid in the first time category, aid in the second, etc.), each of which is equal to bilateral aid in that year only if that year falls in that time category. This allows us to see if aid has a different effect depending on when it's given.

[21]This is measured as the difference between the country's GDP per capita in the year the conflict episode ends and the year the conflict began.

[22]We utilize a new data set on termination types assembled by PRIO/Uppsala, which codes different ways in which conflict episodes can end. We include dichotomous indicators for 'outright military victories and formal peace agreements, with a reference category of informal cease-fires or cessations of violence without any explicit termination.

contract-intensive money as a proxy for the strength of property rights in the state,[23] and a counter for the number of previous recoveries.[24]

We report our results in Table 1. Because the model reported in Table 1 uses a log-normal parameterization, positive coefficients indicate that increases in the independent variable *increase* the time to the event. Therefore, in the recovery model, since the goal is to facilitate the quickest possible recovery, the smaller the coefficient value the better. In models of conflict recurrence, we normatively prefer a long and stable peace and thus larger coefficients.

The first column in Table 1 presents a model of economic recovery; the second column presents a model of conflict recurrence. To facilitate discussion of the results of these baseline models, we consider each separately.

We begin with the model of economic recovery. Previous work in this area found that democratic transitions obstruct economic recovery, and that regime stability aids it (Flores and Nooruddin 2006; see also Paris 2004). This result is borne out in our analysis. The democratic transition variable has a positive and statistically significant coefficient, which means that countries undergoing a transition towards democracy take longer to recover. The coefficient for the autocratic transition variable, on the other hand, is effectively zero. The other factors found to be significant predictors of recovery are (1) whether the conflict has a territorial or secessionist basis, which lengthens the time until recovery; (2) official development assistance, which also lengthens the time until recovery especially if given later in the first post-conflict decade; and (3) the level of economic damage caused by the conflict, which, unsurprisingly, lengthens the time taken to achieve economic recovery. Disappointingly, the size of the commitment made by the World Bank does not have a statistically significant effect on time until recovery.

What of the World Bank's other goal – conflict prevention? Column 2 of Table 1 provides the estimates of an event history model where the event in question is the recurrence of conflict. Once more, the results confirm previous research in finding strong evidence of the 'virtues' of authoritarian transition for staunching further conflict. Democratic transitions, by contrast, have a negative coefficient indicating that conflict recurrence is hastened in these cases, though the effect only falls within an 85% confidence interval. Another factor that has only a marginal statistical significance is pre-conflict levels of economic development, but the substantive effect is worth noting: richer countries take longer to relapse into violent conflict, which endorses the poverty-conflict perspective guiding much recent work on these topics. Other variables with statistically significant effects at the $p < 0.10$ level or better are: (1) secessionist conflict, which experiences quick relapses into violence; (2) conflict duration, where we find that longer conflicts are less likely to fall

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[23]A plausible alternative hypothesis is that countries with better property rights are more likely to recover quickly from conflict. We use the measure of contract-intensive money described by Clague et al. (1996, 1999) as a proxy for strength of property rights.

[24]We include the counter for number of previous recoveries as a crude first cut for possible stratification (Beck et al. 1998).

		Recover	Recur
Table 1 Effects of World Bank assistance	Autocratic transition	−0.07	3.63
		$(0.25)^{0.78}$	$(0.47)^{0.00}$
	Democratic transition	0.97	−0.45
		$(0.25)^{0.00}$	$(0.30)^{0.14}$
	Pre-conflict GDP per capita	0.004	0.03
		$(0.10)^{0.96}$	$(0.12)^{0.81}$
	WB commitment per capita	0.01	0.02
		$(0.01)^{0.59}$	$(0.01)^{0.04}$
	Secessionist conflict	0.44	−0.44
		$(0.18)^{0.01}$	$(0.22)^{0.04}$
	Conflict duration	0.002	0.09
		$(0.03)^{0.93}$	$(0.06)^{0.11}$
	(Conflict duration)^2	−0.001	−0.002
		$(0.001)^{0.70}$	$(0.002)^{0.20}$
	ODA per capita: 1–3 years	0.001	0.001
		$(0.001)^{0.70}$	$(0.003)^{0.64}$
	ODA per capita: 4–6 years	0.02	−0.0001
		$(0.01)^{0.00}$	$(0.01)^{0.99}$
	ODA per capita: 7+ years	0.07	0.02
		$(0.02)^{0.00}$	$(0.01)^{0.25}$
	Damage	0.02	0.01
		$(0.01)^{0.02}$	$(0.004)^{0.15}$
	Termination: victory	0.13	1.01
Robust standard errors corrected for clustering by country are in parentheses with *p*-values super-scripted. Coefficients are from a competing-risks event history model with log-normal parameterization. Therefore, larger coefficients indicate a longer time until the event occurs (i.e., failure)		$(0.19)^{0.49}$	$(0.29)^{0.00}$
	Termination: peace agreement	0.15	0.55
		$(0.28)^{0.59}$	$(0.34)^{0.11}$
	Contract intensive money	0.42	−0.89
		$(0.47)^{0.33}$	$(0.65)^{0.17}$
	Recovery number	−0.05	0.16
		$(0.12)^{0.66}$	$(0.11)^{0.14}$
	Constant	0.25	0.74
		$(0.71)^{0.72}$	$0.84^{0.38}$
	Number	220	220

back into conflict quickly;[25] and (3) termination type: outright military victories experience the longest peace periods following conflicts, followed by explicit formal peace agreements.[26] Clearly either of these modes of terminating conflict are preferable to less formal strategies. Finally, and most relevant to our inquiry, the World Bank variable has a positive and statistically significant coefficient, indicating that larger commitments to post-conflict countries yield a peace dividend in postponing the recurrence of conflict. This is a potentially important finding, and should spur future researchers to uncover the causal mechanisms by which the World Bank has this apparent dampening effect on conflict recidivism.

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[25]There is some evidence of a non-linear effect but the inflection point is around 22 years, which is much longer than virtually all of the recovery episodes in our data set.
[26]Quinn et al. (2007) report a similar finding.

The baseline models discussed in this section represent a first systematic analysis of the effectiveness of World Bank programs in post-conflict assistance at fostering economic recovery and preventing further conflict. Our results indicate that larger commitments of World Bank resources are not correlated with speedier economic recovery but are correlated with delays in conflict recidivism. But are these results spurious? Are they the result of a selection effect driven by the fact that the World Bank is more likely to make larger commitments to those governments already predisposed to avoid recidivism, as suggested earlier?

3.3 An Instrumental Variables Analysis of World Bank Post-conflict Assistance

Program evaluation requires an explicit assumption that the treatment is randomly assigned across participants. This randomization enables causal inference, but in most social science or public policy settings, experiments are typically infeasible. While one could imagine the World Bank randomizing strategies used at the project-level to evaluate whether some are more effective than other as it has in some of its studies of education quality, the fact is that the World Bank post-conflict assistance is not randomly assigned across countries.[27]

Empirically, how one deals with non-random assignment depends on whether the 'selection' into the treatment is based on observable versus non-observable factors.[28] If the selection is based wholly or primarily on observable factors, then an analyst might try to control for the factors driving selection or, given ample data, use a 'matching' technique. If, however, the selection is driven by non-observable factors such as political will (as in Vreeland's analysis of IMF programs) or if data are too limited to achieve adequate balance for a matching design, then conventional practice is to use instrumental variables instead. The intuition here is that "if there is some variable (or set of variables) that affects assignment but does not affect the outcome, then this variable (or set of variables) can be used as an instrument to deal with the possibility that assignment to treatment is nonrandom" (Winship and Morgan 1999: 680). The crucial assumption, which cannot be tested, is that this instrumental variable only affects the outcome-of-interest indirectly, via the independent variables included in the model (Ibid.).

While the use of instrumental variables is now commonplace, the strong assumptions required to make their use plausible suggest some caution (Bartels 1991; Bound et al. 1995; Heckman 1997; Winship and Morgan 1999: 680–687).

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[27]Achen (1986) provides an excellent introduction to problems of non-random assignment. See Nooruddin (2002), Vreeland (2003), and Nooruddin and Simmons (2006) for treatments of selection bias in studies of the effectiveness of economic sanctions and IMF programs.

[28]Winship and Morgan (1999) offers an accessible and comprehensive review of techniques used to estimate causal effects from observational data.

We use two instrumental variables. Each of these indicators is consistent with the logic about non-random selection offered in the last section. The World Bank's dependence on its largest shareholders for funding implies that it will, all else equal, more likely assist countries of strategic importance to those shareholders. Doing so helps the Bank demonstrate its usefulness to these key constituents. Alternatively, we sensibly can expect strategic importance to an OECD country likely has little effect on the speed of economic recovery, ceteris paribus.[29] Therefore, each of our instruments measure the closeness of the post-conflict country in question to key members of the World Bank. First, we use the country's average political affinity to the USA, UK, and France, since these three countries are the major donors to the World Bank and might therefore exercise some influence over its decision-making.[30] We measure affinity using the UN-voting-based S-score (Gartzke 1998, 2000; Gartzke and Jo 2002). We gather data on defense-pact alliances with France since previous research has found that the French are more likely to use development assistance as an instrument of foreign policy (Quinn and Simon 2006).[31] Together these two variables are strong predictors of per capita World Bank commitments ($\beta_{affinity} = 6.52$; $\beta_{french-ally} = 15.66$), with an F-statistic of 31.61 ($p = 0.00$), well above the suggested threshold of 10 (Staiger and Stock 1997).[32]

The use of selection models in event history analysis is still in its infancy. To our knowledge, there is only one published paper at this point developing such a model (Boehmke et al. 2006). That solution focuses, as in the original Heckman-labor-market-participation problem, on sample selection. It is also limited to settings where the covariates in the event history model are time-invariant. For these reasons, this estimator was not suitable for our purposes.

We therefore use a two-stage strategy. In the first stage, we use an instrument to predict levels of World Bank commitments to post-conflict countries. We then utilize only the predicted values in the second stage. However, as is well-known when one uses a generated-regressor in the second stage, the standard errors of the second stage are incorrect (specifically they are heteroskedastic; see Achen (1986) or Greene (2005)). When analytic solutions to correct these second-stage standard errors are available, one can estimate

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[29]That is, neither instrument affects the speed of recovery directly; rather their effect is through factors like World Bank aid.

[30]Dreher et al. (2008) find that members of the UN Security Council receive more World Bank projects, even after accounting for economic and political factors, as well as regional and country effects. In a similar spirit, Dreher and Jensen (2007) find that affinity to the USA reduces the number of conditions in IMF structural adjustment loans; Kuziemko and Werker (2006) find that the USA uses its control of UNICEF to provide strategically important countries additional aid.

[31]Alliance data are obtained through EUGene, a data management tool for creating data sets for use in international relations created by Scott Bennett and Allan Stam, and available on-line at www.eugenesoftware.org.

[32]The French alliance indicator is a much stronger predictor of World Bank aid than is the UN-voting-based S-score. When we use each of these variables separately as an instrument, our results do not change. See on-line Appendix.

Table 2 Selection-corrected effects of World Bank assistance on economic recovery: 95% confidence intervals

	Observed coef.	Bias	Bootstrap std. err.	95% Confidence interval (BC$_a$)	
Autocratic transition	−0.09	0.04	0.30	−0.74	0.49
Democratic transition	1.04	0.34	1.02	**0.13**	**3.14**
Pre-conflict GDP per capita (log)	0.05	0.04	0.13	−0.33	0.24
WB commitment per capita	−0.05	−0.01	0.05	−0.15	0.07
Secessionist conflict	0.50	0.02	0.30	**0.04**	**1.03**
Conflict duration	−0.003	−0.02	0.07	−0.13	0.17
(Conflict duration)^2	−0.0004	0.002	0.004	−0.02	0.01
Aid: 1–3 years	0.001	0.001	0.003	−0.01	0.01
Aid: 4–6 years	0.02	0.01	0.04	**0.01**	**0.19**
Aid: 7+ years	0.07	0.41	0.79	**0.02**	**1.96**
Damage	0.02	0.01	0.02	**0.002**	**0.05**
Termination: victory	0.14	−0.07	0.24	−0.22	0.82
Termination: peace agreement	0.20	−0.06	0.45	−0.41	2.06
Contract-intensive money	0.24	−0.07	0.59	−0.81	1.59
Recovery number	−0.06	−0.0004	0.19	−0.27	0.63
Constant	0.56	−0.09	0.89	−0.97	2.63

Estimates based on 2000 replications. Variables with 95% BC$_a$ confidence intervals that do not encompass 0 are in bold

BC$_a$ Bias-corrected and accelerated confidence interval

this model in a single equation or correct the second-stage standard errors manually. However, no analytical solution for correcting these second-stage event history standard errors yet exists, and so we bootstrap them.[33]

Tables 2 and 3 report the results of this analysis. Effects that are statistically significant at the 0.05 level have 95% confidence intervals that do not encompass 0 and are in bold print in the tables.

As is clear from considering Tables 2 and 3, the bootstrapped confidence intervals for the instrumented World Bank commitment variables do not fall fully on either side of 0. More simply, in no case is the effect of the World Bank's involvement statistically significant at the 0.05 level or better. Together with our earlier results from Table 1, Tables 2 and 3 suggest two initial insights into the role of the World Bank in post-conflict countries. First, there is tentative evidence that the Bank selects recipients according to factors related to the recurrence of conflicts (i.e., one of the outcomes). In the non-selection-corrected results in Table 1, the effect of World Bank commitments per capita is positive and statistically significant, implying that the Bank lengthens time

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[33]We perform 2000 replications of the model. To preserve space, we report only the Bias-corrected and accelerated confidence (BC$_a$) intervals, but the results do not change if we use either the percentile or the bias-corrected (without acceleration) confidence intervals. For more on bootstrapping and the different confidence intervals, see Efron and Tibshirani (1986, 1993), Mooney (1996), and Mooney and Duval (1993). We thank Chris Achen and Jan Box-Steffensmeier for answering questions about this strategy.

Table 3 Selection-corrected effects of World Bank assistance on conflict recurrence: 95% confidence intervals

	Observed coef.	Bias	Bootstrap std. err.	95% Confidence interval (BC_a)	
Autocratic transition	3.83	−0.56	0.74	**3.15**	**10.78**
Democratic transition	−0.40	−0.001	0.43	−1.54	0.23
Pre-conflict GDP per capita (log)	0.0004	0.05	0.24	−0.53	0.39
WB commitment per capita	−0.03	0.02	0.10	−0.29	0.16
Secessionist conflict	−0.48	−0.03	0.44	−1.38	0.27
Conflict duration	0.08	−0.07	0.33	−0.22	0.39
(Conflict duration)^2	−0.002	0.01	0.04	−0.01	0.03
Aid: 1–3 years	0.001	0.0003	0.01	−0.01	0.02
Aid: 4–6 years	0.004	0.01	0.05	−0.02	0.03
Aid: 7+ years	0.02	0.02	0.06	−0.04	0.17
Damage	0.01	0.003	0.01	−0.02	0.02
Termination: victory	1.19	−0.17	0.52	**0.53**	**2.91**
Termination: peace agreement	0.58	−0.14	0.64	−0.22	2.82
Contract-intensive money	−0.55	−0.27	1.22	−2.64	2.23
Recovery number	0.23	0.05	0.29	−0.16	0.87
Constant	0.91	−0.11	1.65	−1.87	4.49

Estimates based on 2000 replications. Variables with 95% BC_a confidence intervals that do not encompass 0 are in bold

BC_a Bias-corrected and accelerated confidence interval

to conflict recurrence. However, in Table 3, the positive effect of the Bank on recurrence largely disappears, and the effect is not statistically significant. This dissipation of the World Bank's effects in the instrumental variables analysis implies a correlation between the factors driving World Bank participation and those affecting the probability of conflict recurrence. Second, taking into account the Bank's non-random selection of post-conflict assistance recipients, it has no systematic effect on either economic recovery or conflict recurrence.

Taken together, these results do not support an optimistic evaluation of the Bank's performance in post-conflict countries. First, they suggest strongly that the World Bank selects the countries it assists on the basis of factors related strongly to the country's time until conflict recurrence; the positive effect of the Bank on conflict recurrence disappears when we instrument for Bank involvement. Clearly, the Bank is not a *facilitator*. Second, the results also reject the notion that the Bank, despite its non-random selection, nevertheless meets its stated goals through signaling credible commitments, providing financial resources, or offering policy advice. Thus, there is little evidence supporting the *signaler*, *funder*, or *adviser* role. However, neither does it exert a statistically negative effect on recovery and recurrence in the selection-corrected results; nor does the Bank act as an *impediment* to economic recovery. Altogether, these results most strongly suggest that the role of *bystander* for the Bank, neither hastening nor slowing economic recovery. Moreover, we caution against an overly pessimistic interpretation of the Bank, for several reasons. First, the lack of precision in our estimates in Tables 2 and

[3](#) is not uncommon when one uses instrumental variables, especially when the sample size is small as it is in this case (Winship and Morgan [1999](#): 683). In fact, the instrumental-variables confidence interval is *always* wider than its OLS equivalent. Second, the problem of statistical precision is compounded by the low number of observations in the regressions. Given the potential normative importance of the baseline result that Bank aid delays conflict recidivism, these caveats suggest caution before discarding that result in favor of the bootstrapped non-results reported in Table [3](#). Clear much more research, using different modes of research where feasible, is required to uncover the Bank's true effects.

In our concluding section, we discuss the implications of these findings more fully, and offer suggestions for future research on these questions.

4 Conclusions

Over the past twenty-five years, the World Bank's role in conflict-ridden societies has grown dramatically. That growth has accelerated in the last ten years as the Bank has dedicated an impressive array of financial and institutional resources to developing its ability to assist such countries. The importance of these events should not be under-estimated. Given the priority it has placed on these issues, the Bank has staked its reputation on its ability to help some of the most volatile countries in the world avoid conflict and re-build their polities and economies after conflicts. In short, it has begun to define itself as a *peace-building institution.* In turn, this shift in the World Bank's role in development has at least partially been fueled by the Bank's own research into the economics of conflict, which has reinforced its sense that conflict and development are inextricably linked and that it is impossible to foster economic development unless we can prevent the outbreaks of violence to which many of these countries have been tragically prone.

To evaluate the Bank's efforts, we have sought to blend two distinct literatures – one on conflict recurrence and the other on the politics of international financial institutions – to consider whether and how the World Bank aids post-conflict countries. We argue that the pattern of Bank aid to post-confllict countries is the result of a bargaining process between the Bank and the post-conflict political leaders. Careful attention to the internal politics of both the Bank and post-conflict countries suggests strongly that the Bank tends to select aid recipients on the basis of their *ex ante* likelihood of escaping the poverty-conflict trap. The Bank's ultimate effect on the recovery process depends on its ability to signal more favorable post-conflict environments and tailor its lending and non-lending practices. This argument, in addition to standard practices in program evaluation, provides an *ex ante* rationale to correct for non-random selection in evaluating World Bank post-conflict assistance. We therefore assemble an original data set of all World Bank programs in post-conflict environments, employ an instrumental variables approach to

non-random selection, and estimate event history models of the effect of Bank programs on economic recovery and conflict recurrence. Our findings are as follows. Larger commitments of resources by the Bank have no effect on time till economic recovery but do appear to delay conflict recurrence, though this result is likely the result of the Bank's selective engagement with countries less likely to experience conflict recidivism. When we control for this non-random selection, our analysis suggests that the Bank has no positive effect on either recovery or recidivism. In short, the World Bank seems to do little to facilitate credible commitments to peace or support economic recovery through loans and policy advice in countries that have already formed such commitments. Then again, neither does it worsen the post-conflict environment.

We caution against interpreting either the theoretical discussion or empirical results of this paper as an indictment of the World Bank's competence in its efforts to rehabilitate countries devastated by civil conflict. The World Bank's goals and the definition of program success in this paper (to delay conflict recurrence while speeding economic recovery) represent an extraordinarily difficult task. The sample of countries considered in the analyses contained herein covers countries predisposed towards violent conflict; these are the countries that face the grave danger of entering the poverty-conflict trap. In this sense, the Bank's efforts in these countries face severe obstacles to success at their outset, and any critical conclusions drawn from our results must fairly assess the counterfactual of what would have occurred in these countries had the Bank stayed out.

Though our primary focus here is positive, we recognize the normative questions at stake in this argument and we pause to consider those implications. A cynical interpretation of our theoretical approach and statistical results might declare the World Bank an opportunistic institution, essentially 'cherry-picking' countries predisposed to success. We regard the reality of the matter as more complex. Given budget constraints, the Bank must decide how best to distribute its aid. It could pursue that goal by rushing assistance to the most hopeless cases, regardless of the low probability that such programs will support recovery. Dollar and Svensson (2000) stress the high costs of such a strategy. Since the success of World Bank programs depends fundamentally on characteristics of the recipient country, rather than the effort expended by the Bank itself, they reason that the Bank maximizes its impact on poverty reduction by dedicating its effort and financing to countries that have developed their own reform programs. Failing to do so eliminates the ability of the Bank to galvanize foreign investment by signaling success stories among developing countries. Answering these questions definitively lies far beyond the scope of this paper, but we do well to recognize their eventual importance to this research program.

We conclude by discussing the implications of our argument and findings for possible directions in future research. First, our findings regarding non-random selection of program recipients raise intriguing questions regarding the nature of the selection mechanism. Given scarce and finite resources, the Bank chooses to enter countries and situations where it can achieve its objectives

and do the most good. This strategy of accounting for possible selection bias is consistent with standard operating practice in program evaluation, but more theoretical work is required to understand the nature of the selection mechanism. Such work might emphasize the interaction of potential recipient countries and the Bank. What kinds of offers does the Bank make to post-conflict countries? Do they sometimes resist World Bank aid? How does the World Bank seek to impose conditions on post-conflict countries? Our paper outlines the strategic issues at stake for both the Bank and post-conflict political leaders, but future research would do well to delve still deeply into the selection mechanism. Game theoretic and case study approaches might be particularly useful in this regard.

Similarly, our results strongly suggest a need for further empirical research into World Bank performance. In short, we do not offer explicit guidance regarding *how* the Bank is helping or hurting post-conflict countries or how Bank programs might be improved. The Bank's rich data allow a more finely cut analysis of World Bank programs in future work. For instance, does assistance targeted to specific sectors (e.g., social services, physical infrastructure) have a more significant impact than others? Does World Bank assistance attract private investment? Does the timing of aid matter? Do longer World Bank commitments help more than shorter commitments? What are the negative ramifications of failing to fund a World Bank commitment? Does the World Bank perform better in some circumstances than others? Each of these questions is potentially answerable, and the answers to them collectively hold the promise of improving the design and execution of World Bank programs in post-conflict societies. Given that this is a role we sadly expect the Bank to be playing for some time to come, these questions are urgent.

Finally, we also encourage scholars to sustain their attention to these issues. The overwhelming majority of programs in our data set occurred prior to the creation of the Post-Conflict Fund in 1997. Thus, we arguably have evaluated the weakest attempts of the World Bank in this paper. Under the auspices of the PCF, the Bank will hopefully develop its expertise in post-conflict assistance, better understanding how programs should be tailored to the specific needs of countries emerging from very different kinds of conflicts. As the Bank does so, we will do well to reevaluate its performance (we can only hope that future investigations yield more sanguine results).

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