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KIEL WORKING PAPER

**Recent Patterns of
Post-Conflict Aid:
Did Donors Help
Sustain Peace?**



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Peter Nunnenkamp

ABSTRACT

RECENT PATTERNS OF POST-CONFLICT AID: DID DONORS HELP SUSTAIN PEACE?*

Peter Nunnenkamp

Donor reactions to recent settlements of internal conflicts have been highly diverse, in terms of both overall aid and its sectoral composition. The allocation of post-conflict aid tends to be needs-based by favoring particularly poor countries. There is no conclusive evidence, however, that the allocation was shaped by the severity and type of conflicts prior to settlement. Furthermore, the sustainability of conflict resolution appears to be unrelated to the amount and composition of post-conflict aid. These findings, though based on a limited number of post-conflict episodes, underscore concerns voiced by the OECD and non-governmental organizations that traditional approaches to post-conflict aid are not effective.

Keywords: foreign aid, civil war, conflict resolution

JEL classification: D74; F35

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1. Introduction

About 1.5 billion people are living in fragile and conflict-affected countries (OECD 2012a). Various countries appear to be trapped in conflict in the sense that settlements cannot be sustained and conflicts regularly flare up again. According to Panić (2011: 164), “the sheer scale and complexity of problems in post-conflict countries is such that the risk of another civil war in these states is fairly high, around 50 per cent according to some estimates” (see also Bigombe et al. 2000). Given the high (financial and social) costs suffered by countries trapped in conflict, it would be highly desirable if foreign aid helped escape such traps (Duponchel 2008).

Uvin (2001: 177-8) regards the genocide in Rwanda in 1994 as a watershed that has shaped the emerging post-conflict agenda: “The development community has begun codifying, and tentatively implementing an agenda of using international aid (...) to promote peace and reconciliation in recipient countries.” Major donors such as the United States seem to have adopted a new way of thinking, according to which foreign aid “can be used as a catalyst to prevent fragile states from returning to violent conflict by promoting sustained economic recovery” (Toh and Kasturi 2012: 203). The highly influential analysis of Collier and Hoeffler (2004: 1142) pushed the post-conflict agenda by showing that “aid is considerably more effective in augmenting growth in post-conflict situations than in other situations.”

As a result, a large and growing share of overall aid has been granted to fragile and conflict-affected countries. The World Bank (2011: 183) reports that aid to these countries increased from 29 percent of total aid in 1996-1998 to 41 percent in 2006-2008. OECD member countries provided US\$ 46.7 billion of aid to fragile states in 2009 (OECD 2012b).

Apart from the overall amount of aid, the sectoral composition of aid is likely to matter, even though it has been largely ignored in previous empirical research on the allocation and effectiveness of post-conflict aid.¹ Collier and Hoeffler (2002: 444) note explicitly that they do not investigate changes in the composition of aid. However, the reasoning in another paper by the same authors suggests that it might be important to fill this gap. Collier and Hoeffler (2004: 1137) make the point that particular domestic policies in the recipient country are differently important under post-conflict conditions. Specifically, domestic social policies are regarded as a key priority (ibid: 1142). This implies that the composition of foreign aid matters, too, e.g., if aid for social infrastructure effectively supports domestic social policies. The need for “distinctive sectoral intervention” is also stressed by Chauvet et al. (2010:19). They find that World Bank projects targeting specific sectors such as transport and urban development tend to be particularly successful under post-conflict conditions. Furthermore, aggregate aid figures disguise that donors pursue different objectives by granting post-conflict aid. According to Demekas et al. (2002), it is important to distinguish humanitarian and reconstruction objectives.² Hence, these authors argue that total aid should be decomposed accordingly.

Against this backdrop, I focus on disaggregated aid granted during recent post-conflict episodes to address three questions in the following. First, how did donors react to conflict settlements, in terms of scaling up overall aid and prioritizing specific sectors (Section 2)? Second, was the allocation of post-conflict aid shaped by country-specific needs and the severity of previous conflicts (Section 3)? Third, was the sustainability of conflict resolution associated with increases in post-conflict aid, both overall and sector-specific (Section 4)? Most of the findings are clearly

¹ Thiele et al. (2007) analyze the allocation of sector-specific aid to assess whether donors prioritized aid in line with the Millennium Development Goals. Öhler and Nunnenkamp (2014) find that the determinants of the allocation of World Bank projects within aid-recipient countries differ between major sectors; see also Nunnenkamp et al. (2016b).

² While humanitarian aid addresses basic human needs, reconstruction aid is meant to promote investment and longer-run growth.

tentative given the limited number of observations across countries. All the same, my findings underscore concerns voiced by the OECD and non-governmental organizations that traditional approaches to post-conflict aid are not effective.

2. Diverse donor reactions after recent conflict settlements

Historically, foreign aid has often not been scaled up by donors after conflict resolution in recipient countries (Collier and Hoeffler 2004). Collier and Hoeffler attribute the large variation in donor reactions to the highly politicized nature of some post-conflict situations. Likewise, the World Bank (2011: 184) observed an “uneven international support” under post-conflict conditions in West Africa.

As noted in the Introduction, donors have channeled a large and growing share of overall aid to conflict-prone states since the late 1990s. All the same, donor reactions to recent conflict settlements continued to be highly diverse. The evidence presented in Figures 1 and 2 and Table 1 is based on the UCDP/ PRIO Armed Conflict Dataset.³ I consider a sample of 26 countries where conflicts defined in the source as “a contested incompatibility that concerns government”⁴ with at least 25 conflict-related deaths were settled at least temporarily during the period 1998-2006.⁵ The OECD’s Development Assistance Committee (DAC) reports committed aid flows to

³ Version 4-2015 of this dataset is available from the Uppsala Conflict Data Program (UCDP) and the International Peace Research Institute (PRIO) in Oslo; see Pettersson and Wallensteen (2015) for the most recent presentation of the data.

⁴ I do not consider settlements of conflicts for which the database specifies ‘territory’ as the exclusive category of incompatibility. Some countries such as India, Indonesia and Myanmar experienced multiple and overlapping localized conflicts, often over small parts of their territory. The settlement of such conflicts is unlikely to trigger donor reactions that have a measurable impact on the recipient country as a whole.

⁵ Settlements of conflicts in earlier years than 1998 are not covered. The reason is that reliable sector-specific aid data are available only since 1995 from the OECD’s Development Assistance Committee. The aid data are required for three years prior to the settlement of conflicts to calculate the change in aid by comparing pre-settlement and post-conflict periods (see below for details). Settlements of conflicts in more recent years than 2006 are excluded

these (and other) countries; since 1995 these aid data are available for specific sectors such as social infrastructure, economic infrastructure, production sectors, and humanitarian relief.⁶

Figure 1 shows the (logged) change in overall aid for the 26 sample countries by comparing average annual commitments (in constant prices) in the three years after the settlement of a conflict with average annual commitments prior to the settlement.⁷ As can be seen, donors scaled up aid considerably after some conflict settlements. The steepest increase in aid occurred after conflict resolution in the Democratic Republic of the Congo in 2001, followed by the cases of Liberia in 2003 and the Congo in 2002. However, when adjusted for general aid trends to all developing countries, aid flows to almost half of the sample of post-conflict countries actually declined after settlements. The decline in aid was most pronounced for the post-conflict episode in Côte d'Ivoire after 2004.

The composition of post-conflict aid to the overall sample reveals that, on average, aid for social infrastructure such as education and health figured most prominently (Figure 2). More surprisingly perhaps, debt relief – which does not belong to aid proper according to critics – contributed more to overall donor commitments than aid for economic infrastructure, i.e., transport, communication, energy and finance. It should also be noted that humanitarian aid accounted for just ten percent, on average, to overall commitments in post-conflict situations.

Donor reactions differed not only with regard to changes in overall aid after conflict settlements, but also with regard to the sectoral composition of post-conflict aid. Aid for social infrastructure accounted for more than half of post-conflict aid in six sample countries, whereas it contributed

since it would not be possible to observe post-conflict situations over at least eight years after settlement (see Section 4).

⁶ <http://stats.oecd.org/index.aspx?DataSetCode=CRS1> (accessed: May 2016).

⁷ The change in aid for each post-conflict country is calculated relative to the change in aid for all developing countries during the corresponding period of time.

just 12-15 percent in the Congo and the Democratic Rep. of the Congo (Table 1). Aid for economic infrastructure played a marginal role in various post-conflict situations (particularly in Angola, Côte d'Ivoire and Somalia), while it exceeded 30 percent of overall commitments in Lesotho and Uzbekistan. Low shares of aid for economic and social infrastructure may be attributed to less serious conflict-related destruction and social needs. In several instances, however, they rather appear to be the arithmetical consequence of large debt-relief operations and humanitarian aid programs. Particularly the two Congos stand out insofar as debt relief accounted for the larger part of the donors' post-conflict assistance. Moreover, the relatively low average share of humanitarian aid in Figure 2 tends to disguise its overriding role in some countries, most notably in Somalia and Liberia (Table 1).

3. Allocation of post-conflict aid: poor targeting?

The lack of specific and comparable data on conflict-related destruction, social needs and humanitarian challenges renders it extremely difficult to assess whether the composition of post-conflict aid, as portrayed in Figure 2 and Table 2, reflects country-specific priorities and appropriate targeting by donors. What is more, to the best of my knowledge, the previous literature did not even pay much attention to the allocation and targeting of overall post-conflict aid. This represents a major gap, considering that a needs-based allocation is a necessary, though hardly sufficient condition for aid to be effective (e.g., Collier and Dollar 2002).

In this section, I draw on the traditional building blocks of more general aid allocation models to address the targeting of post-conflict aid at least tentatively: recipient need, recipient merit, and

donor self-interest).⁸ The basic model includes fairly standard measures:⁹ the recipient country's GDP per capita (in terms of PPP) since poorer countries typically have greater need for aid; voice and accountability, taken from the World Bank's Worldwide Governance Indicators,¹⁰ since more democratic and better governed recipient countries are supposed to make better use of aid; the availability of oil and minerals¹¹ and the recipient country's role as an export market to reflect the donor countries' commercial self-interest,¹² and temporary membership of recipient countries in the United Nations Security Council (UNSC) to account for geostrategic donor motives.¹³ The basic model also controls for initial values of aid per capita in the recipient country during the three years prior to conflict settlement.

In addition to standard determinants of aid allocation, the regressions on post-conflict aid include some characteristics of previous conflict episodes which may have shaped the donors' reaction after settlement. Specifically, donors may scale up aid especially after the settlement of major conflicts in terms of intensity, duration and internationalization. To account for this possibility, I make use of several indicators available from the UCDP/ PRIO dataset: The intensity of the conflict is captured by a dummy variable set to one if at least 1,000 conflict-related deaths were reported in the year of the settlement or one the previous three years.¹⁴ Duration is calculated as the length of the conflict episode under consideration, coded as 0 for episodes that lasted less than

⁸ See, for instance, Nunnenkamp and Thiele (2006), Nunnenkamp and Öhler (2011), Hoeffler and Outram (2011), and Nunnenkamp et al. (2016).

⁹ If not mentioned otherwise, the data for the explanatory variables refer to the year of conflict settlement.

¹⁰ For details, see: <http://info.worldbank.org/governance/wgi/index.aspx#home> (accessed: May 2016).

¹¹ I include a dummy variable that is set to one for countries which UNCTAD classifies as oil exporters or exporters of minerals and mining products.

¹² Export data are taken from the IMF's Direction of Trade Statistics. The size of export markets is approximated by the exports of OECD countries to the particular recipient country, as a percentage of total exports of OECD countries.

¹³ I tried two alternative dummy variables on UNSC membership: (i) set to one for the three years prior to the settlement of conflicts, and (ii) set to one for the year of settlement and the three following years. For information on UNSC membership, see: <http://www.un.org/en/sc/members/elected.asp> (accessed: May 2016).

¹⁴ By contrast, the dummy variable is zero for minor conflicts with 25-999 conflict-related deaths. See below for an alternative definition of the intensity of conflicts.

one year, 1 for episodes that lasted for one to two years, 2 for episodes of two to three years, and 3 for episodes of more than three years. An internationalized internal conflict is captured by a dummy variable set to one when other states intervened on one or both sides of the conflict in the year of the settlement.

Considering the small sample of 26 countries, I proceeded as follows to arrive at the regression results reported in Table 2. For a start, I ran the basic model with the standard variables introduced above and the dependent aid variable defined as the change between pre-settlement and post-conflict periods as in Figure 1. I then dropped those standard variables that proved to be insignificant at conventional levels in the estimations for total and sector-specific aid in order to maintain sufficient degrees of freedom. The dropped standard variables include voice and accountability, donor exports, and UNSC membership. In other words, I don't find evidence that the allocation of post-conflict aid depends on recipient merit, export-related donor interest, or geostrategic interests related to UNSC membership.¹⁵ This holds not only for total post-conflict aid (column 1 of Table 2); it also holds when excluding specific sectors from total post-conflict aid (columns 2-8), and when running the estimations for specific sectors of post-conflict aid (as in columns 9 and 10 for social infrastructure).

By contrast, two standard variables prove to be statistically significant in most of the estimations in Table 2. First, donors scaled up post-conflict aid in particular where their engagement in terms of aid per capita had been weak prior to the settlement of the conflict (*Aid_before*). This adaptive or backward looking donor behavior, reflected in negative coefficients on *Aid_before*, also prevailed in some specific aid sectors (e.g., production sectors, multi-sector aid, and commodity

¹⁵ Temporary UNSC membership by sample countries was extremely rare which may explain that UNSC membership did not appear to play any role for the allocation of post-conflict aid. Furthermore, the post-conflict countries in the sample played a marginal role as export markets for donor countries. Egypt accounted for the highest share in total OECD exports with less than 0.4 percent.

aid/ general program aid; not shown in Table 2), though the coefficient is insignificant for social infrastructure as the quantitatively most important sector. Second, the allocation of post-conflict aid appears to be needs-based insofar as the donors reacted more strongly to post-conflict situations in poorer recipient countries. However, the negative coefficient on the recipient countries' GDP per capita typically turned out to be statistically insignificant in the sector-specific estimations (shown only for social infrastructure).¹⁶ I also retained the dummy variable on the availability of oil and minerals in the recipient countries (*Min/Oil*), even though there is only weak evidence that the allocation of post-conflict aid was shaped by the donors' self-interest to gain better access to these resources by granting higher aid.¹⁷

In the estimations reported in Table 2, I added the conflict characteristics one by one to the basic specification with the remaining standard variables. For the sake of brevity, Table 2 does not show the results with the duration of conflict episodes added to the basic model as this characteristic proved to be insignificant throughout. What is more, the intensity of conflict episodes (*Intensity*) did not affect the allocation of overall post-conflict aid. In just a few sector-specific estimations, the coefficient on *Intensity* turned out to be significantly positive. For instance, column (10) of Table 2 indicates that aid for social infrastructure was scaled up especially after the resolution of conflicts with more than 1,000 deaths.¹⁸ In contrast to the duration and intensity, the internationalization of internal conflicts appears to have shaped the allocation of post-conflict aid in a significant way. The dummy variable *Internat* enters significantly positive at the five percent level for overall post-conflict aid in column (1) of Table

¹⁶ It was only for post-conflict aid for economic infrastructure that the coefficient on GDP per capita entered significantly negative (at the five percent level).

¹⁷ In addition to column (2) in Table 2, the dummy variable on the availability of oil and minerals entered positive and statistically significant in the sector-specific estimations for commodity aid/ general program aid and debt-related assistance (not shown).

¹⁸ In addition, the coefficient on *Intensity* turned out to be significantly positive for debt-related assistance (not shown). Similarly weak results were achieved when using the 'cumulative intensity' of conflicts. The dummy variable is then set to one for conflicts with at least 1,000 deaths since the onset of the conflict.

2, indicating that internationalization was associated with steeper increases in post-conflict aid. This result typically holds when excluding specific aid sectors from total post-conflict aid (columns 2-8 in Table 2).¹⁹ The same applies to some sector-specific estimations, notably for the quantitatively most important social infrastructure (column 9).²⁰

To summarize, the regression results hardly point to a systematic targeting of post-conflict aid. This is even though donor reactions proved to be relatively strong after conflict resolution in poorer recipient countries, in line with a poverty-oriented allocation of post-conflict aid. It may also be good news that the self-interest of donors appears to have played a minor role when deciding on aid in recent post-conflict episodes. At the same time, donors did not scale up aid under post-conflict conditions in better governed and more democratic countries, i.e., where aid may have been used more productively. Most strikingly, the allocation does not appear to be related to more specific conflict-related needs as reflected in the intensity and duration of previous conflict episodes.

4. Recent peace episodes: no role for aid?

According to earlier theoretical models, foreign aid renders internal conflicts more likely. Grossman (1992: 287) argues that “foreign aid increases the potential booty for insurgents” and, thus, makes rebellion more attractive. In order to deter or suppress rebellion, the ruling elite in aid-recipient countries uses aid at least partly for military expenditure. Accordingly, foreign aid would induce both the ruling elite and potential rebels to divert resources from productive uses

¹⁹ The coefficient on *Internat* becomes marginally insignificant when excluding debt-related assistance in column (7).

²⁰ However, the coefficient on *Internat* proved to be significantly negative for humanitarian aid (not shown), which is counterintuitive.

and to engage in an intensified internal struggle over the distribution of aid.²¹ However, Collier and Hoeffler (2002) arrive at theoretically ambiguous predictions when taking into account that internal rebellion becomes more difficult if aid improves economic conditions in the recipient countries. Furthermore, Collier and Hoeffler (2002: 437) doubt that aid provides a strong incentive to rebellion: “Unlike natural resources, aid is difficult for a rebel organization to capture *during* a conflict.” The costs of rebellion could easily exceed the discounted value of aid resources to be reaped only after a successful rebellion.

The empirical analysis of Collier and Hoeffler (2002) suggests that aid has no direct effects on the risk of civil conflict. However, they find that aid reduces conflict risk indirectly through promoting economic growth in the recipient countries and reducing their dependence on primary commodity exports.²² Likewise, De Ree and Nillesen (2009) do not find a statistically significant direct effect of aid on the probability of civil conflicts to start (i.e., the onset probability). But they do find that aid significantly reduces the duration of conflicts (i.e., the continuation probability) in sub-Saharan African countries in the 1980s and 1990s. Nielson et al. (2011) focus on the effects of negative shocks in terms of sudden aid shortfalls. Such shocks are associated with a significantly higher probability of armed conflict, which the authors attribute to the government’s reduced capacity of military deterrence and its limited ability to prevent conflicts through side-payments to political opponents.²³

In contrast to studies on the onset and duration of conflicts, the focus here is on recent episodes of sustained peace after conflict settlements. The question of whether aid helps sustain peace after

²¹ For a similar line of reasoning, see Azam (1995).

²² It should be noted that the transmission mechanism working through economic growth is heavily disputed in the recent aid effectiveness literature (e.g., Easterly et al. 2004; Rajan and Subramanian 2008).

²³ Collier and Hoeffler (2007) find that foreign aid is an important determinant of military expenditure by the government in the recipient country.

conflict settlement has received scant attention so far.²⁴ This is hardly surprising: sophisticated econometric analyses to identify causal effects of aid under post-conflict conditions are almost impossible due to the small number of relevant observations (Collier and Hoeffler 2002: 436). The pioneering study of Collier and Hoeffler (2004) covers post-conflict episodes in just 14 countries to assess the a priori ambiguous question of whether aid is more or less effective in promoting economic growth under post-conflict conditions.²⁵ The empirical results of Collier and Hoeffler (2004: 1135) suggest that temporary growth spurts under post-conflict conditions are mainly to be attributed to a particularly strong and positive interaction effect between foreign aid and sound domestic policies in the recipient country: “In the absence of aid there would be little or no growth spurt.”²⁶

Here, I use the somewhat larger sample of 26 post-conflict countries introduced in Section 2 to address the question of whether peace was more likely to last for at least eight years when donors substantially increased aid during the three years after conflict settlement, compared to the three years prior to conflict settlement.²⁷ Descriptive statistics are presented in Figure 3 and Table 3.²⁸ Figure 3 ranks the sample countries in descending order with respect to the change in overall aid after the settlement of conflicts. The dark grey (parts of the) horizontal bars indicate the duration

²⁴ In an unpublished study, Duponchel (2008) assesses the effect of overall aid on the duration of peace after civil wars using survival analysis. She finds that aid increases the duration of post-conflict peace, though with decreasing returns to scale.

²⁵ On the one hand, aid may be particularly productive under post-conflict conditions, e.g., by helping restore destroyed infrastructure. On the other hand, post-conflict societies may suffer from persistent corruption and eroded trust so that aid resources are wasted.

²⁶ Garriga and Phillips (2014) regard aid as a signal to private investors to predict foreign direct investment (FDI) in post-conflict countries. Indeed, they find that aid helps attract FDI to poor-information environments, as long as aid granted to post-conflict countries is not perceived to be motivated by geostrategic donor interests.

²⁷ The UCDP/PRIO dataset covers new conflict episodes up to 2014. Consequently, it is not possible to observe new conflict episodes after more than eight years for countries with settlements in 2006. For reasons of consistency, I limited episodes of peace to eight years also for those countries with settlements in earlier years than 2006.

²⁸ Clearly, the descriptive statistics in Figure 3 and Table 3 represent just a first step of assessing the role of aid for sustained peace after the settlement of conflicts. In addition, I performed Probit estimations with the change in overall aid and the sectoral composition of post-conflict aid as possible determinants of sustained peace. Country as well as conflict characteristics were included as control variables in these estimations. The results did not offer additional insights and are thus not reported in detail.

of peace of up to eight years after settlement. As can be seen, peace was sustained for at least eight years in 15 out of 26 post-conflict countries. At the other extreme, peace lasted for just one year and two years, respectively, until the next conflict episodes began in Burundi and Chad. If (larger) increases in post-conflict aid had been associated with sustained peace, the dark grey bars should reach further to the right at the top than at the bottom of Figure 3. This is hardly the case; episodes of sustained peace over eight years are almost as frequent in the upper half of the sample as they are in the lower half of the sample.

The calculations reported in Table 3 are based on refined measures of aid treatment. The upper half of the table divides the sample into two equally large sub-groups by taking the median of the change in aid after conflict settlement as the dividing line. In addition to the change in overall aid (column 1), the calculations in columns (2)-(8) are based on sector-specific aid treatments, i.e., the change in sector-specific aid after conflict settlement. To assess whether the aid treatment of countries above the median was associated with longer episodes of peace, the first two rows compare the frequency of sustained peace over at least eight years between countries above and below the median; the next two rows compare average years of peace until the beginning of the next conflict episode, if a new conflict episode started within the eight years under consideration.²⁹

The frequency of sustained peace is somewhat higher for countries above the median (61.5% of all countries in this group) than for those below the median (53.8%) when the treatment is defined in terms of total aid or aid for social infrastructure (columns 1 and 2). However, the corresponding differences for average years of peace in columns (1) and (2) are marginal (and of opposite sign). More pronounced differences in favor of countries above the median are observed

²⁹ Note that cases of sustained peace over at least eight years are included in this comparison (with a value of eight).

for aid for economic infrastructure and debt-related assistance in columns (3) and (7), suggesting that these types of aid might have been more effective in sustaining peace. However, exactly the opposite pattern with higher frequency of sustained peace and longer periods of peace for countries below the median is shown for aid for production sectors, multi-sector aid, and humanitarian aid in columns (4), (5) and (8). Taken together, these highly ambiguous findings cast further into doubt that post-conflict aid helped sustain peace after recent conflict settlements.³⁰

Alternatively, the sample is divided into terciles for the calculations in the lower half of Table 3. The tercile in the middle is then excluded from the calculations in order to separate countries receiving the aid treatment more clearly from those not receiving the treatment. In other words, the frequency of sustained peace as well as average years of peace are now compared between the top tercile of countries with respect to changes in aid and the bottom tercile of countries. Indeed, the differences are often more pronounced than in the upper half of Table 3. For instance, the frequency of sustained peace is clearly higher for countries in the top tercile than for those in the bottom tercile when the treatment is defined in terms of total aid. All the same, the findings remain highly ambiguous when defining the treatment in terms of aid in different sectors.³¹

5. Discussion and conclusion

The evidence from a sample of 26 countries suggests that foreign aid has not played a significant role for sustaining peace after recent settlements of internal conflicts. This finding contrasts with

³⁰ The contrasting – and sometimes counterintuitive – results for sector-specific aid treatments may be attributed to the widely varying sectoral aid shares between sample countries (Table 1), together with the finding in Section 2 that the composition of post-conflict aid was hardly related to conflict-related needs.

³¹ As noted above, the insignificant results from complementary Probit estimations also suggest that post-conflict aid did not help sustain peace.

the positive assessment of post-conflict aid by Collier and Hoeffler (2004). More research is clearly required to reconcile these different findings. Part of the explanation probably is that Collier and Hoeffler (2004) analyze the effects of aid on temporary growth spurts after the settlement of conflicts, whereas the focus here has been on sustained peace.

At the same time, it cannot be ruled out that post-conflict aid has become less effective than suggested by earlier studies. The weak targeting of foreign aid after the settlement of conflicts during the period 1998-2006 may point into this direction. Strikingly, the allocation of post-conflict aid did not appear to be responsive to specific conflict-related needs as reflected in the intensity and duration of previous conflict episodes.

Critical assessments of post-conflict aid by both official and non-governmental organizations point into the same direction. A few years after donors had agreed to ten Principles for Good International Engagement in Fragile States and Situations (FSPs) in 2007, the OECD report presenting the results of the Second Monitoring Survey revealed that the implementation of various FSPs was “off track” (OECD 2011). Limited commitment and poor to non-existent implementation was observed for principles such as ‘agree on practical co-ordination mechanisms between international actors’, ‘act fast ... but stay engaged long enough to give success a chance’, and ‘avoid pockets of exclusion.’³² InterAction (2013), a US-based alliance of non-governmental organizations engaged in disaster relief and international development programs, concluded after a series of summits and declarations about making foreign assistance

³² See also OECD (2012a). A lack of donor coordination has also been observed by Aldasoro et al. (2010), Nunnenkamp et al. (2013), and Nunnenkamp et al. (2016a).

in conflict-affected and fragile states more effective: “Traditional approaches to foreign assistance in fragile and conflict-affected countries are not working.”³³

Uvin (2001: 178) discusses the case of Rwanda and concludes that donors “have differed radically in their assessments of basic matters” so that they were unable to agree on priorities and policies. However, this does not necessarily imply that stronger donor commitment and better coordination among them would be sufficient to render post-conflict aid more effective. According to Bigombe et al. (2000), the governments of post-conflict countries share responsibility for inefficient policies. What is more, general guidelines and principles have an important limitation in common with simple cross-country studies like the present one: The risks of being trapped in conflict and the appropriate policy responses may differ considerably from country to country (Bigombe et al. 2000). As noted by De Ree and Nillesen (2009: 304), “the absence of significant between country correlations may result from the extreme complexity of the matter.”

³³ Fragile states and donor countries endorsed a New Deal for Engagement in Fragile States at the Fourth High-Level Forum on Aid Effectiveness in Busan, Korea, in 2011 (OECD 2012b).

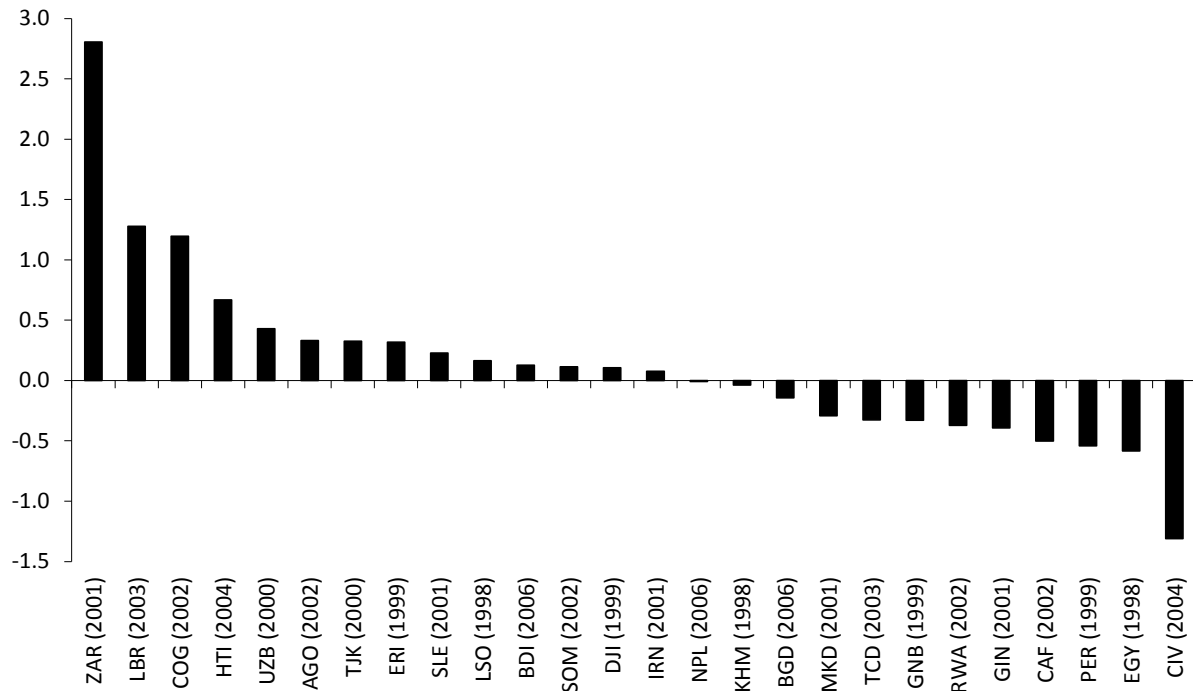
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Figure 1 – Change in total aid, post-conflict period compared to pre-settlement period

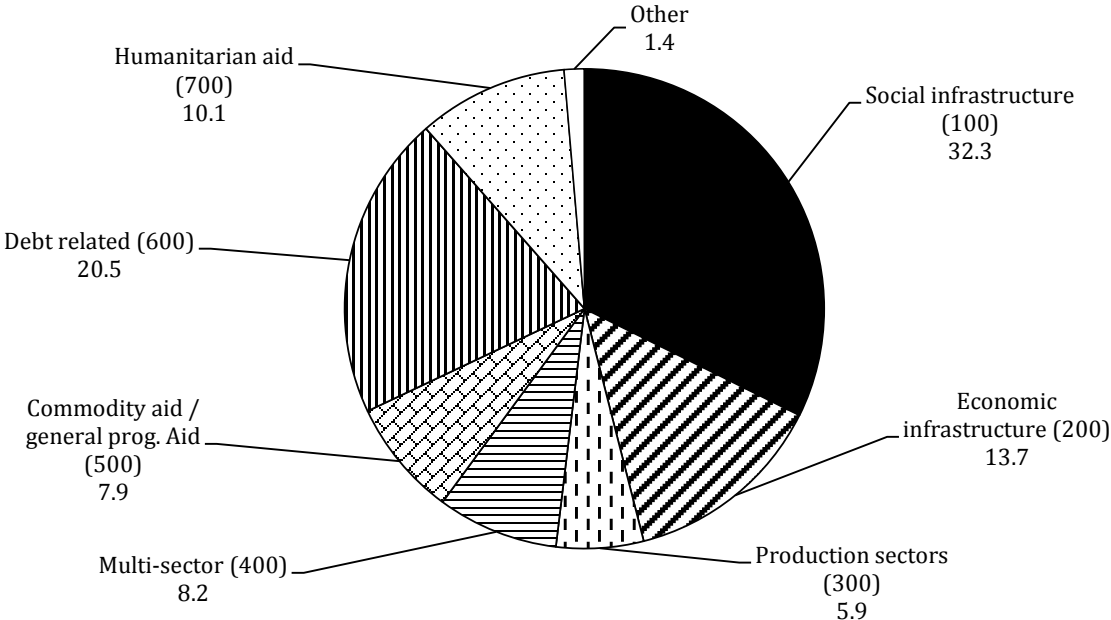


Notes: ZAR: Democratic Rep. of the Congo; LBR: Liberia; COG: Congo; HTI: Haiti; UZB: Uzbekistan; AGO: Angola; TJK: Tajikistan; ERI: Eritrea; SLE: Sierra Leone; LSO: Lesotho; BDI: Burundi; SOM: Somalia; DJI: Djibouti; IRN: Iran; NPL: Nepal; KHM: Cambodia; BGD: Bangladesh; MKD: Macedonia; TCD: Chad; GNB: Guinea-Bissau; RWA: Rwanda; GIN: Guinea; CAF: Central African Republic; PER: Peru; EGY: Egypt; CIV: Côte d'Ivoire.

Average annual aid (US\$ million of commitments in constant prices) in three years after settlement of conflict, relative to average annual aid in three years before settlement; logged. Aid in the year of settlement (given in brackets) is not included. Period of observation differs across countries, depending on the year of settlement. The change in aid for the specific country is calculated relative to the change in aid for all developing countries during the corresponding period of time.

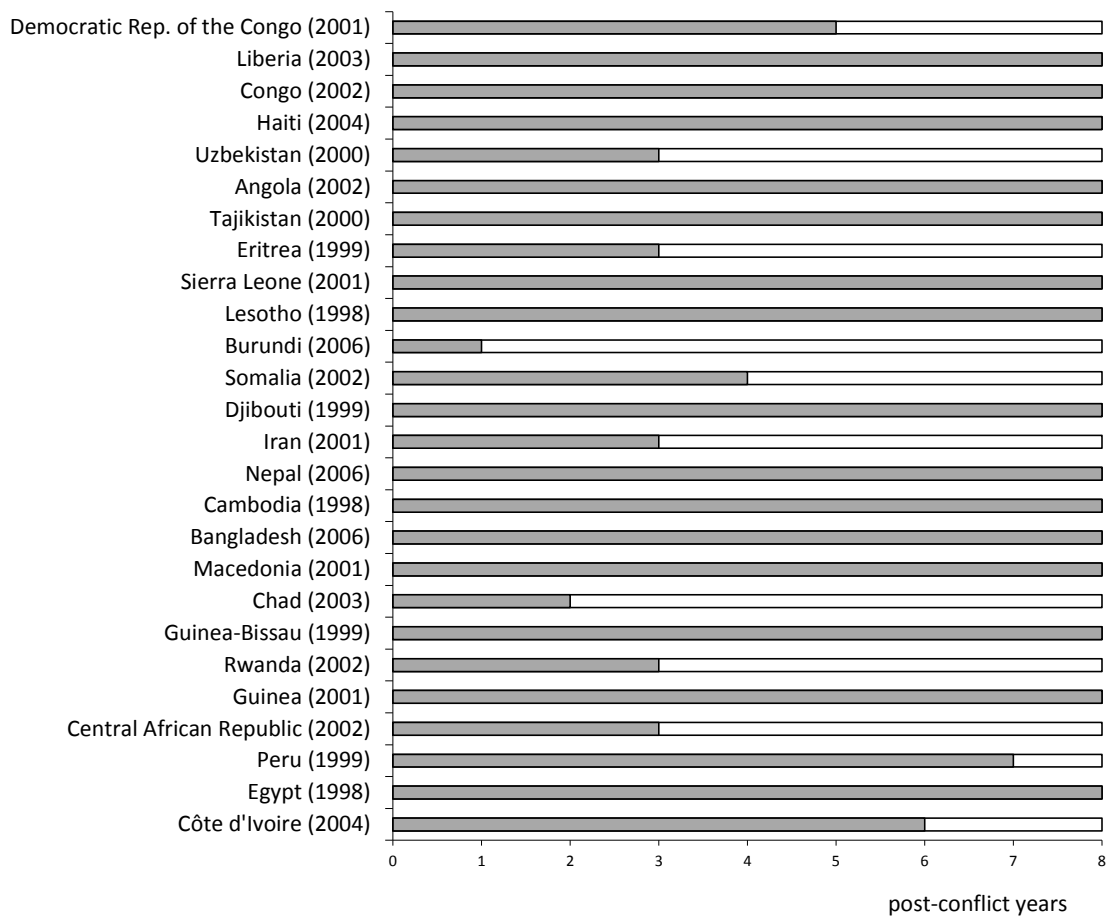
Source: OECD–DAC, Creditor Reporting System.

Figure 2 – Sector composition of post-conflict aid to 26 countries (% of total aid)



Notes: Average annual commitments in constant prices during three years after settlement of conflict. Period of observation differs across countries, depending on the year of settlement. CRS codes in brackets.
 Source: OECD–DAC, Creditor Reporting System.

Figure 3 –Post-conflict aid and the duration of peace after settlement of conflict (in the year given in brackets)



Notes: Countries ranked (in descending order) in terms of post-conflict aid treatment, as shown in Figure 1. Time span restricted to eight years after settlement of conflict; the UCDP/PRIO dataset covers new conflict episodes up to 2014; i.e., it would not be possible to observe new conflict episodes after more than eight years for countries with settlements in 2006 (Bangladesh, Burundi, Nepal). In some countries where conflicts flared up again, new settlements ended subsequent conflict episodes within the time span of eight years after the previous settlement given in brackets.

Source: UCDP/PRIO, Armed Conflict Dataset; OECD–DAC, Creditor Reporting System.

Table 1 – Sector composition of post–conflict aid (% of total aid)

	Social infra- structure	Economic infra- structure	Production sectors	Multi-sector	Commodity aid / general prog. aid	Debt related	Humani- tarian aid
Angola (2002)	36.18	0.67	1.37	2.03	4.15	32.45	19.77
Bangladesh (2006)	34.73	25.57	5.27	18.93	5.66	0.26	9.30
Burundi (2006)	41.43	10.09	6.05	6.86	18.14	2.19	14.79
Cambodia (1998)	34.03	20.37	11.11	15.07	6.50	0.00	11.71
Centr. African Rep. (2002)	35.54	25.65	7.95	12.86	4.61	7.25	3.60
Chad (2003)	26.81	15.48	6.91	9.71	6.36	2.36	30.59
Congo (2002)	11.56	4.31	0.62	0.97	5.10	73.76	2.19
Côte d'Ivoire (2004)	48.27	0.21	5.79	5.18	1.10	11.00	25.63
Dem. Rep. of Congo (2001)	15.32	8.52	4.06	1.02	7.86	57.24	5.76
Djibouti (1999)	54.23	16.81	3.42	1.31	21.04	0.65	1.79
Egypt (1998)	26.40	23.31	10.86	16.65	3.71	18.96	0.00
Eritrea (1999)	41.16	12.36	8.86	2.04	18.38	0.00	16.28
Guinea (2001)	30.94	15.05	13.21	6.80	7.05	14.50	9.95
Guinea-Bissau (1999)	32.11	26.58	9.34	1.33	14.83	11.10	3.55
Haiti (2004)	51.80	9.63	4.07	6.51	9.54	3.13	12.23
Iran (2001)	51.73	1.84	1.26	2.82	0.63	0.00	26.37
Lesotho (1998)	34.29	33.55	5.08	10.11	13.04	0.33	0.07
Liberia (2003)	36.66	2.10	0.46	3.58	1.00	0.00	55.09
Macedonia (2001)	59.63	9.07	7.01	12.45	5.19	0.10	4.56
Nepal (2006)	55.19	19.53	7.13	7.45	2.49	0.74	7.00
Peru (1999)	51.20	6.02	9.74	14.54	12.57	2.97	2.01
Rwanda (2002)	47.86	6.91	4.60	7.98	23.87	3.21	3.39
Sierra Leone (2001)	43.40	9.73	5.11	0.56	12.33	6.42	21.10
Somalia (2002)	20.46	0.17	1.25	3.48	1.85	0.57	53.20
Tajikistan (2000)	22.90	19.55	15.16	4.82	20.56	0.00	16.08
Uzbekistan (2000)	35.55	30.77	6.84	11.58	13.85	0.00	0.52

Notes: Average annual commitments in constant prices during three years after settlement of conflict. Period of observation differs across countries, depending on the year of settlement (given in brackets).

Source: OECD–DAC, Creditor Reporting System.

Table 2 – Allocation of post-conflict aid: selected regression results

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	Total aid excluding:									
	Total aid	Social infra- structure	Economic infra- structure	Produc- tion sectors	Multi- sector	Com- modity aid / general prog. aid	Debt related	Humani- tarian aid	Aid for social infrastructure	
Aid_before	-0.26** (-2.10)	-0.37** (-2.79)	-0.31** (-2.49)	-0.26* (-1.98)	-0.25* (-1.89)	-0.25* (-1.96)	-0.23** (-2.39)	-0.22 (-1.57)	-0.10 (-0.76)	-0.11 (-0.88)
GDPpc	-0.31** (-2.24)	-0.38** (-2.56)	-0.26* (-1.92)	-0.31** (-2.22)	-0.31** (-2.21)	-0.31** (-2.27)	-0.30** (-2.75)	-0.32* (-2.05)	-0.20 (-1.42)	-0.09 (-0.60)
Min/Oil	0.33 (1.30)	0.55* (2.02)	0.30 (1.18)	0.35 (1.32)	0.36 (1.37)	0.30 (1.16)	0.12 (0.61)	0.35 (1.22)	-0.16 (-0.61)	-0.18 (-0.69)
Internat.	0.60** (2.12)	0.62* (2.02)	0.62** (2.20)	0.58* (1.99)	0.62** (2.12)	0.54* (1.90)	0.38 (1.71)	0.77** (2.41)	0.52* (1.78)	
Intensity										0.61* (1.94)
Constant	3.10** (2.64)	3.97*** (3.16)	2.88** (2.49)	3.09** (2.56)	3.05** (2.52)	3.13** (2.66)	3.03*** (3.33)	2.98** (2.25)	1.83 (1.51)	0.44 (0.30)
R ²	0.51	0.60	0.52	0.49	0.49	0.47	0.49	0.48	0.24	0.26
Obs	26	26	26	26	26	26	26	26	26	26

Notes: t-values in brackets; ***, **, * significant at the 1, 5, and 10% level, respectively.

Source: own calculation.

Table 3 – Post-conflict aid, total and by sectors, and the duration of peace: sub-groups of countries with/without post-conflict aid treatment

		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
		Total	Social infrastructure	Economic infrastructure	Production sectors	Multi-sector	Commodity aid / general prog. aid	Debt related	Humanitarian aid
Above/below median of change in aid									
Frequency of sustained peace	above	61.5	61.5	69.2	53.8	46.2	58.3	77.8	38.5
	below	53.8	53.8	46.2	61.5	69.2	58.3	33.3	76.9
Average years until next conflict episode	above	6.2	6.4	6.6	5.8	5.5	6.3	6.9	5.3
	below	6.4	6.2	5.9	6.8	7.1	6.4	5.8	7.2
Top tercile vs. bottom tercile of change in aid									
Frequency of sustained peace	top	66.7	66.7	77.8	44.4	55.6	62.5	83.3	44.4
	bottom	44.4	55.6	44.4	55.6	66.7	50.0	33.3	77.8
Average years until next conflict episode	top	6.6	6.3	7.1	5.6	6.1	6.4	7.5	5.3
	bottom	6.2	6.1	6.0	6.3	6.9	5.9	6.0	7.0

Notes: Changes in aid as presented in Figure 1 for total aid; same calculation procedures for changes in sector-specific aid to group countries into two or three equally large sub-samples in terms of post-conflict aid treatment. Frequency equals number of countries with sustained peace over (at least) eight years after conflict settlement, in % of all countries in the corresponding aid group. Countries with sustained peace are included (with a value of eight) in the calculation of average years of peace. Iran missing for commodity and general program aid (CRS 500); seven countries missing for debt-related aid (CRS 600); (logged) changes in aid in these categories could not be calculated for these countries.

Source: UCDP/PRIO, Armed Conflict Dataset; OECD–DAC, Creditor Reporting System.