

***THE FORGOTTEN STATES:  
AID VOLUMES AND VOLATILITY IN DIFFICULT PARTNERSHIP COUNTRIES  
(1992-2002)***

Summary Paper Prepared

By

Victoria Levin and David Dollar

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## Executive Summary

This paper summarizes the findings of data analysis conducted for the DAC LAP on aid allocations in difficult partnerships. Difficult partnership countries (DPCs) are countries with weak policies and institutions – some of the most difficult environments for aid programs, although they are also amongst the poorest countries. Little analysis to date has been performed on patterns of aid in these environments.

The analytical framework for this project is provided by three categories of literature. The first is existing aid effectiveness studies, which emphasize a strong policy and institutional environment in aid-receiving countries as necessary for converting aid income into economic growth and poverty reduction. The second is the more recent work performed on post-conflict aid, which indicates that post-conflict countries may have higher aid absorption capacity than other countries at similar poverty and institutional levels. The third is the literature on aid volatility, which suggests that the beneficial effects of aid can be offset by high volatility and unpredictability, dependent on the degree of aid dependency of the recipient country.

This literature would indicate the following hypotheses about aid flows to difficult partnership countries:

- DPCs receive less aid than their stronger performing peers, in a broadly continuous relationship with their population, poverty and policy levels.
- Post-conflict DPCs will receive higher aid flows, but aid to other DPCs will be roughly consistent within the group dependent on their population, poverty and policy levels.
- Aid flows to DPCs are more volatile than those to other aid recipients; however, this volatility is explained by the more unstable policy and institutional climate of DPCs and its greater preponderance for vacillation between conflict and peace.

We compare aid flows to DPCs to two other mutually exclusive and dynamic groups: stronger-performing Low Income Countries (LICs) and Middle Income Countries (MICs). Using data from the DAC International Development Statistics database and the World Bank, we examine aid patterns between 1992 and 2002. Our findings confirm some of the hypotheses above but not others.

Firstly, DPCs do receive less aid than more strongly performing countries. However, this relationship is not continuous with their population, poverty and performance. When we control for these factors, we find that DPCs still receive around 40% less aid than predicted by their policy and institutional strength in pooled cross-sectional regressions, primarily due to disproportionately low flows from bilateral donors.

Secondly, there are substantial differences within the DPC group. We predict the per country per capita aid flows which would result if donors allocated aid neutrally on the basis of poverty and policy. We see that one subgroup of DPCs receives substantially higher aid flows than poverty and policy would predict (the “aid darlings”), while a similar number receive substantially lower flows (the “aid orphans”). Post-conflict DPCs receive higher amounts, as expected: we have also done an analysis of post September 11 pledges and this gap appears to be increasing. Among the non-post conflict group, very large countries, very small countries, very poor countries, very badly governed countries, and countries with a small number of donors have more likelihood of becoming “aid orphans.”

Thirdly, as we had expected, DPCs experience much higher aid volatility than other LICs – almost double in the period studied. We tested for whether this was due to a pragmatic donor reaction to change on the ground by controlling for rapid improvement or deterioration in policies and institutional strength and the onset or cessation of conflict. While this reduced the differential, aid to DPCs is still two times as volatile as aid to other LICs.

What can we conclude from these results? In aggregate, the finding that DPCs receive disproportionately lower flows than those predicted by their policy and institutional indicators suggests that donors could modestly increase aid to the group as a whole without challenging the performance basis of aid allocations.

However, there are wide differences within the DPC group: the “darlings” already receive more aid than their policy and institutional indicators would predict, although some of this may be an appropriate response to post-conflict transitions and changes on the ground. Capacity for additional aid absorption is likely to stem from within the “aid orphan” group who are currently receiving less than their policies and institutional indicators would predict.

The finding on aid volatility is perhaps the most interesting result of the paper. In addition to their high aid-dependence, DPCs are by definition very weak capacity countries. In weak capacity countries, the duration needed for any aid-financed program to produce results is likely to be longer than in a country with similar poverty levels but stronger institutions. Turning the tap of aid on and off frequently may therefore be the wrong way to achieve the results donors are looking for. Since difficult partnership countries have greater development challenges than other aid recipients, as evidenced by their lagging performance on the Millennium Development Goals, it is important for the donor community to look more closely at their aid allocation patterns to these forgotten states.

## I. Introduction

This research project is conducted in cooperation with several bilateral and multilateral donors as part of OECD/DAC's Learning and Advisory Process on Difficult Partnerships.

During the last decade, the topic of aid effectiveness, and the concomitant issues of absorptive capacity, donor behavior, and the effects of aid flows on recipient countries' policies have attracted increasing attention of academics as well as policymakers. The donor community has responded with great interest to research exploring the effect of aid on poverty reduction, especially to the idea that a strong institutional and policy environment is necessary for converting aid income into economic growth (World Bank 1998, Burnside and Dollar 2000 and 2004, Collier and Dollar 2002).<sup>1</sup> Indeed, many bilateral and multilateral donors have altered their aid allocation patterns to focus on recipients with stronger institutions (Dollar and Levin 2004). Without detracting from the validity of the above strand of aid effectiveness literature, the present paper questions whether there is a set of "forgotten states" with low income and weak institutions, which receive significantly less aid than other recipients, even controlling for the variables discussed in aid effectiveness studies.

Related to the issue of aid effectiveness is literature focusing on absorptive capacity in societies emerging from conflict. The pioneering work of Paul Collier and his co-authors suggested that since conflict causes reductions in involved countries' output as well as capital stock (Collier 1999), countries emerging from war can effectively use

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<sup>1</sup> This idea has been widely debated, with some critics arguing that aid contributes to growth irrespective of policies albeit with diminishing returns (Hansen and Tarp 2001) or as a response to shocks (Guillaumont and Chauvet 2001) and others questioning the significance of aid's impact on growth even in countries with sound policies (Easterly, Levine and Roodman 2003).

much higher levels of aid flows during the first post-conflict decade (Collier and Hoeffler 2004, Collier et al. 2003). Analyses of current aid allocation patterns, however, reveal that aid levels to post-conflict recipients increase dramatically in the first few years after cessation of conflict but taper off very quickly afterwards (Collier and Hoeffler 2004, Kang and Meernik 2004). In this paper, we look more closely at whether donors are responding to post-conflict opportunities within the difficult partnership country group.

Within the broad spectrum of aid effectiveness literature, there is also a strand that focuses on the burdens imposed on recipients by high aid volatility. According to the literature, aid flows are found to be a relatively unstable source of government revenue (Gemmell and McGillivray 1998). Furthermore, the beneficial effects of aid can be offset by high volatility and unpredictability, which complicate the planning and conduct of fiscal and monetary policy as well as having adverse impacts on exchange rate variability in aid-dependent countries (Edwards and Wijnbergen 1989, Bulíř and Hamann 2003). Since difficult partnership countries are low-income and do depend on aid to balance their budgets and/or provide basic services, the negative impact of aid volatility would put a disproportionate strain on their scarce institutional resources. Thus, we explore whether donors' aid allocation patterns to these recipients are effective in preventing high aid volatility, and what characteristics within the DPC group are associated with high and low aid volatility.

The broad framework of aid effectiveness literature, described above, frames the analysis of aid allocation to difficult partnership countries, presented in this paper. In particular, we test the following hypotheses, based on the conclusions from the literature:

- DPCs receive less aid than their stronger performing peers in a broadly continuous relationship with their population, poverty and policy levels.
- Post-conflict DPCs receive higher aid flows, but aid to other DPCs is roughly consistent within the group dependent on their population, poverty and policy levels.
- Aid flows to DPCs are more volatile than those to other aid recipients; however, this volatility is explained by the more unstable political climate of DPCs and its greater preponderance for vacillation between conflict and peace.

This paper is organized as follows. Section II will define the study groups and provide data sources used in the analysis. Basic comparative analysis of aid flows will be presented in Section III, while Section VI will look into this issue in more depth, using multivariate regression analysis. Section V will explore within-DPC variation in aid per capita flows. Section VI will focus on aid volatility and the country characteristics associated with high and low aid volatility. Section VII will conclude with implications of the findings as well as recommendations for further research.

## II. Data Sources and Study Groups

The data used in this study came from several sources. The main source of aid data was DAC International Development Statistics database. For poverty and social indicators, we focused on Millennium Development Goals and drew on the resources of World Bank's Statistical Information Management and Analysis database and UNSTAT Millennium Indicators Database. Finally, to analyze institutional and policy environment

of developing countries, we used the Country Policy and Institutional Assessment scores provided by the World Bank.

To address the research questions presented above, we divided the sample of aid recipients in 1992-2002 into three mutually exclusive dynamic groups. The group that is the focus of this study is Difficult Partnership Countries (DPC). Countries in this group have two criteria. First, all these countries are low-income, according to the World Bank's classification based on gross national income per capita. Secondly, DPCs have weak institutions – as agreed with our DAC colleagues, we used two bottom quintiles of World Bank's Country Policy and Institutional Assessment (CPIA) to proxy for this concept. The other two groups are LICs, or low-income countries that have stronger institutions than DPCs (thus, they are in the top three quintiles of CPIA) and middle-income countries that receive aid (MICs).<sup>2</sup> We also divided our sample of aid recipients into post-conflict and non-post-conflict groups, using the first four years after conflict's cessation as a post-conflict period. For more information on definitions of groups and their Robust (heteroskedasticity-adjusted)ness to division based on other proxy variables, please refer to appendix A. The list of country-year groupings is presented in Appendix Table A.2.

To assess whether our groups differ with respect Millennium Development Goals, we take a look at some basic social indicators. Figure 1 below presents the population-weighted averages for our three study groups on a number of MDG indicators.<sup>3</sup> From

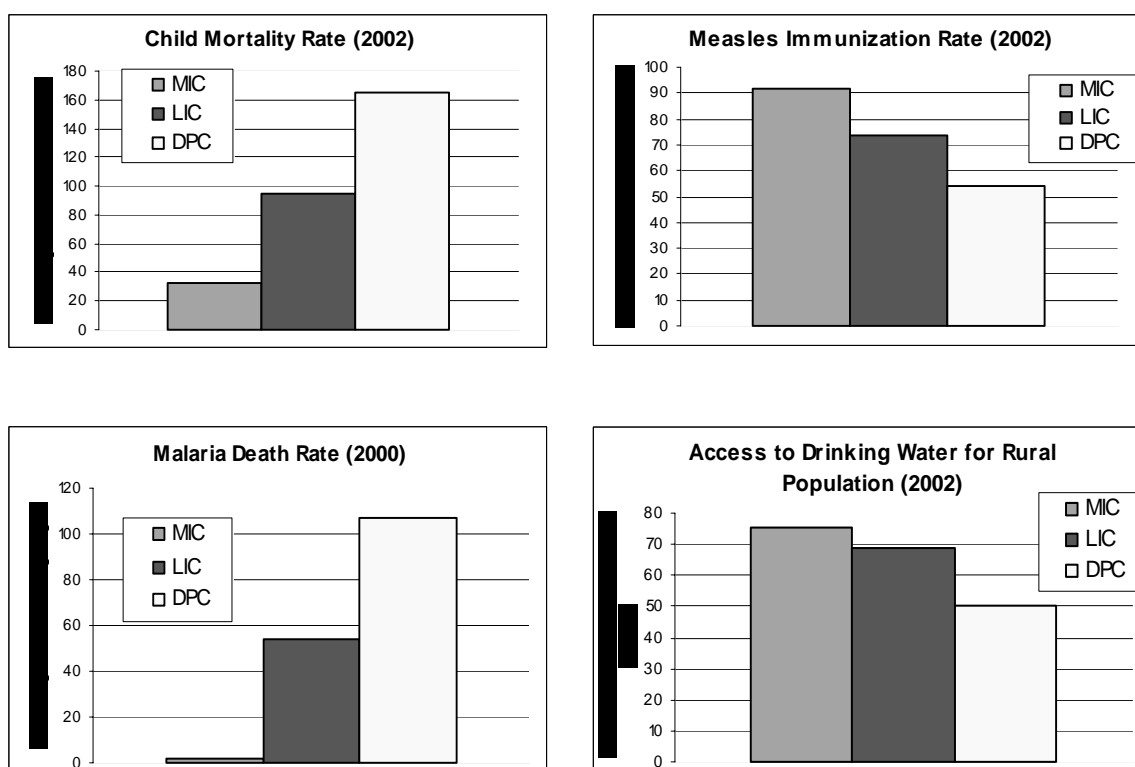
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<sup>2</sup> Since we will frequently use population-weighted group averages in this paper, China and India (both of them LICs, until recently for China) have been taken out of our sample to prevent their disproportionate influence on these population-weighted averages.

<sup>3</sup> The choice of MDG indicators to focus on was driven by the availability of data for DPCs, which is the group that has the most missing data in all series.

this figure it becomes obvious that difficult partnership countries face tremendous challenges with respect to health and basic sanitation. Child mortality in DPCs is five times that in MICs and almost twice that in LICs. Since measles is a leading cause of death for children in the developing world, measles immunization is essential for combating child mortality; however, DPCs lag significantly behind MICs and LICs in this preventative measure. Although middle-income countries seem to be quite successful in combating malaria, DPCs stand in stark contrast not only to MICs (which may be partly explained by geographical differences) but also to LICs (who could well be their neighbors). Finally, although LICs have caught up to MICs on rural access to drinking water, DPC are again far behind. Since access to drinking water is more highly correlated with state capacity than most other social indicators (reference? - Sarah), this graph could indicate the relative success of development programs in LICs, and their disappointing performance in DPCs.

Figure 1. Comparison of Study Groups on MDG Indicators





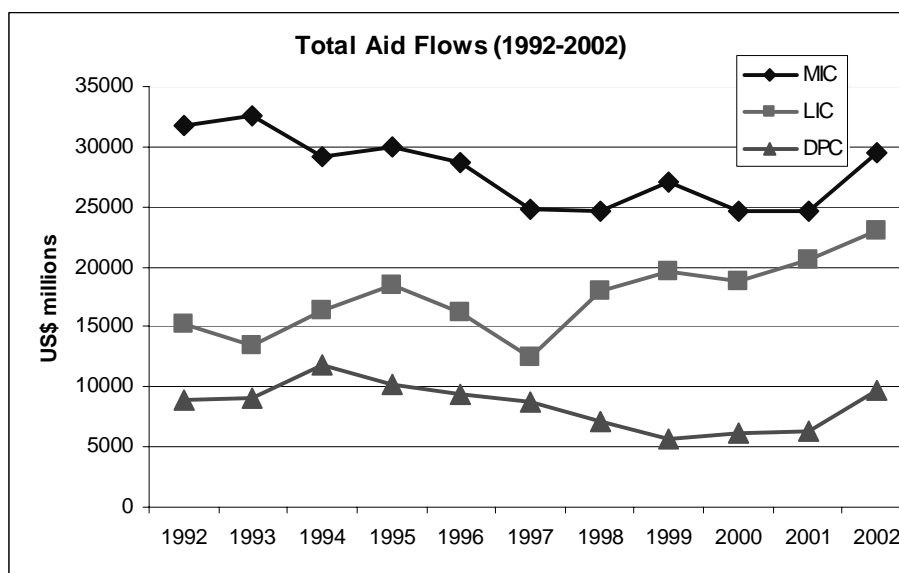
With these tremendous obstacles on the development path of DPCs in mind, we now turn to comparing aid levels, which can potentially be used to alleviate the socio-economic deprivation of people in these developing countries.

### III. Basic Comparative Analysis of Aid Allocation

In this section, we begin to evaluate aid flows received by DPCs in comparison with LICs and MICs. By aid, we mean gross disbursements of Official Development Assistance (ODA).<sup>4</sup>

How much have DPCs been receiving in aid in the last decade? As we can see from Figure 2, disbursements of aid flows in the past 10 years have not tended towards this group of recipients. Not only has the largest amount of aid gone to middle-income countries, but the gap between LICs and DPCs has widened recently.

Figure 2. Total Aid Flows (sum to group; 1992-2002)

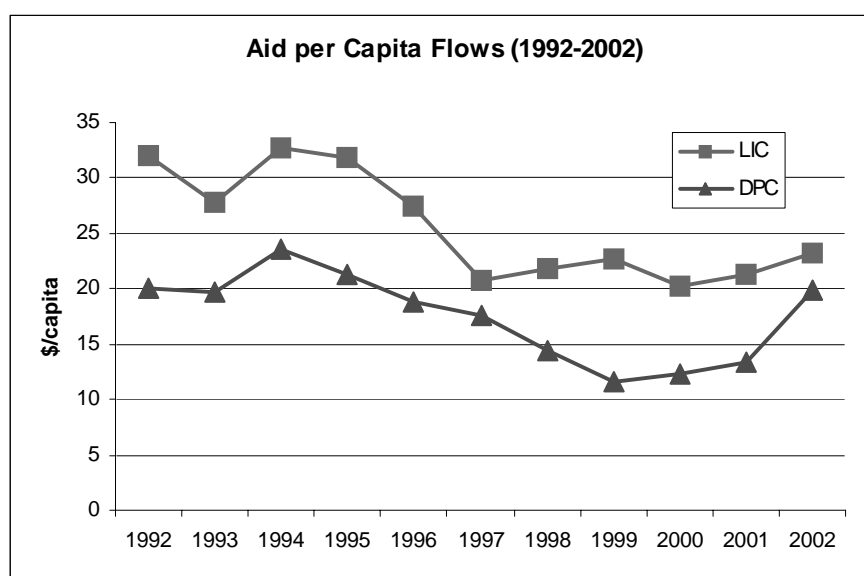


<sup>4</sup> We have also performed this analysis with net ODA, and the results appear to be almost identical to those presented below. This remarkable similarity between gross ODA and net ODA could be due to data availability issues with regard to loan repayment and debt relief.

The same figure using ODA commitments instead of disbursements reveals a similar widening gap between LICs and DPCs (see Figure B.1 in Appendix B, which also discusses the disbursements to commitments ratio). Since donor commitments represent future disbursements, we get a very discouraging picture about aid that will be disbursed to DPCs for years to come.

While the figure above presents a vivid picture, it is somewhat misleading since it does not take into account recipients' population size. Figure 3 fixes this problem, providing an aid per capita comparison between LICs and DPCs.<sup>5</sup> Indeed, DPCs have consistently received lower per capita aid flows than LICs.

Figure 3. Aid Per Capita Flows (population-weighted group averages; 1992-2002)<sup>6</sup>



We might expect these aid allocation patterns to be appropriate for a variety of reasons. For one, they may be reflecting emergency aid and/or debt relief flows, for

<sup>5</sup> MICs were excluded from the picture, as their low aid/capita levels are easily explained by their higher level of development and thus lower need for aid to support incomes.

<sup>6</sup> The sudden increase in aid per capita to DPCs from 2001 to 2002 is mainly due to Democratic Republic of Congo, which, due to its large population, is very influential and whose aid/capita increased from \$5 in 2001 to \$29 in 2002; and to Afghanistan, also quite influential in this population-weighted average, for which aid/capita increased from \$15/capita in 2001 to \$48/capita in 2002.

which allocation decisions follow somewhat different patterns than for the rest of aid. Appendix C looks closely at this hypothesis but finds that netting out debt forgiveness grants and emergency aid does not eliminate the difference in aid per capita levels between LICs and non-post-conflict DPCs (see Table C.5 in Appendix C).

Secondly, since non-post-conflict DPCs have lower absorptive capacity due to their weak institutions, we would not be surprised if these countries received less aid than LICs, which have, by definition, stronger institutions. To explore the second hypothesis, we need to look at donors' revealed preferences in more detail, and to see whether donors apply the same criteria for aid allocation to DPCs as they do to other aid recipients. We turn to this analysis in the next section.

## VI. Regression Analysis of Current Aid Allocation

We use multivariate regression analysis to evaluate the first hypothesis presented in the introduction of the paper: we test whether donors allocate to DPCs the funds that would be expected given their population, GDP per capita level, and institutional and policy environment. The underlying model for this analysis was introduced in Dollar and Levin (2004):

$$(1.1) \quad \text{Log}(\text{aid}_{ij}) = b_0 + b_1 \text{Log}(\text{population}_j) + b_2 \text{Log}(\text{per capita GDP}_j) + b_3 \text{Log}(\text{index of institutions/policies}_j),$$

where  $i$  represents the donor (or donor group) and  $j$  represents the recipient.

To test our hypothesis of differential treatment of DPCs by donors, we introduce a dummy to the original model:

$$(1.2) \quad \text{Log}(\text{aid}_{ij}) = b_0 + b_1 \text{Log}(\text{population}_j) + b_2 \text{Log}(\text{per capita GDP}_j) + b_3 \text{Log}(\text{index of institutions/policies}_j) + b_4 \text{DPC}_j$$

The coefficient on the DPC dummy would capture whether this recipient group receives more (or less) aid than would be predicted by the other independent variables. Since DPCs are defined by income level and CPIA (which are included as separate independent variables), we would not expect the coefficient on this dummy to be statistically different from zero, if donors are treating GDP per capita and CPIA as continuous variables. However, if donors treat countries up to certain levels of GDP per capita and CPIA differently than those which pass the threshold levels that separate DPCs from other recipients, we would see a statistically different from zero coefficient on the DPC dummy.

We use a pooled regression of 1992 through 2002 with year dummies to capture year-to-year fluctuations in aggregate aid levels. Our dependent variable is log of aid net of emergency aid and debt forgiveness grants (for reasons discussed in Appendix C). The three columns of Table 1 below represent three different aggregates of aid flows used as dependent variables: the first one sums across all donors, the second one only across bilateral donors, and the third one only across multilateral donors.<sup>7</sup>

As you can see in Table 1, the coefficients on GDP per capita (what Dollar and Levin (2004) call “poverty elasticity index”) and on CPIA (or “policy elasticity index”) are of the expected sign and are both statistically different from zero. Total, bilateral and multilateral aid flows in general appear well-targeted to countries with lower incomes and stronger institutions. Multilateral aid is found to be better targeted to these two variables than bilateral aid, which is consistent with the findings of Dollar and Levin (2004). The coefficient on population points to the “small-state bias,” according to which donors give more aid per capita to countries with smaller populations.

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<sup>7</sup> EC is included as a multilateral donor, based on OECD/DAC classification.

The coefficient of interest in this study is that on DPC dummy. Table 1 reveals that this coefficient is negative, and both statistically and economically significant. Focusing on column (1), we estimate that, on average, DPCs received approximately 43% less in total aid than would have been predicted by their population, poverty level, and policy and institutional environment. Comparing the coefficient on the DPC dummy for bilateral and multilateral aid (columns (2) and (3)), we see that DPCs receive 58% less bilateral aid and 34% less multilateral aid, controlling for other independent variables.

Table 1. Total, Bilateral and Multilateral Aid Allocations to Developing Countries, Net of Emergency Aid and Debt Forgiveness Grants (1992-2002)<sup>8</sup>

	<i>Log Total Aid</i> (1)	<i>Log Bilateral Aid</i> (2)	<i>Log Multilateral Aid</i> (3)
Log GDP/capita	-0.430 (17.73)***	-0.352 (12.71)***	-0.798 (18.97)***
Log CPIA	0.792 (6.13)***	0.454 (3.17)***	1.118 (6.54)***
Log Population	0.498 (50.36)***	0.546 (44.79)***	0.369 (24.08)***
DPC	-0.429 (7.39)***	-0.578 (8.33)***	-0.336 (4.15)***
Constant	0.283 (1.00)	-1.110 (3.52)***	3.279 (6.03)***
Observations	1212	1212	1212
R-squared	0.71	0.67	0.50

Notes: Robust (heteroskedasticity-adjusted) t statistics in parentheses (\* significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%)

Year dummies suppressed for presentation purposes.

The regression sample consists of 651 MIC country-year observations, 306 LIC country-year observations, and 255 DPC country-year observations (24 of which are post-conflict DPC).

<sup>8</sup> Although all the regressions presented in this paper are with gross ODA, we replicated the analysis with net ODA flows. However, since all of our regressions are of log-log form, we could not preserve the most important piece of new information provided by net ODA – the negative numbers (e.g. countries for which loan repayments exceeded new disbursements of grants and loans). If we simply dropped the negative observations from the regression, we get results similar to those obtained with gross ODA flows. If, on the other hand, we replace negatives and zeroes with really small values (.01 million, or \$10,000), so that these observations remain in the regression albeit with a transformed dependent variable, then the results with net ODA for the whole sample show greater poverty selectivity, lower policy selectivity, lower post-conflict sensitivity, and greater discrimination against non-post-conflict DPCs.

Thus, we observe that DPCs receive, on average, lower aid volumes than MICs and LICs, even controlling for the obvious factors, on which donors might base their allocation decisions.<sup>9</sup> The above findings do not mean, however, that all DPCs should be given more aid. There could be tremendous variation in this broad group of low-income countries with weak institutional and policy environment, and we need to explore this intra-group variance in more detail.

#### V. Differences within the DPC Group

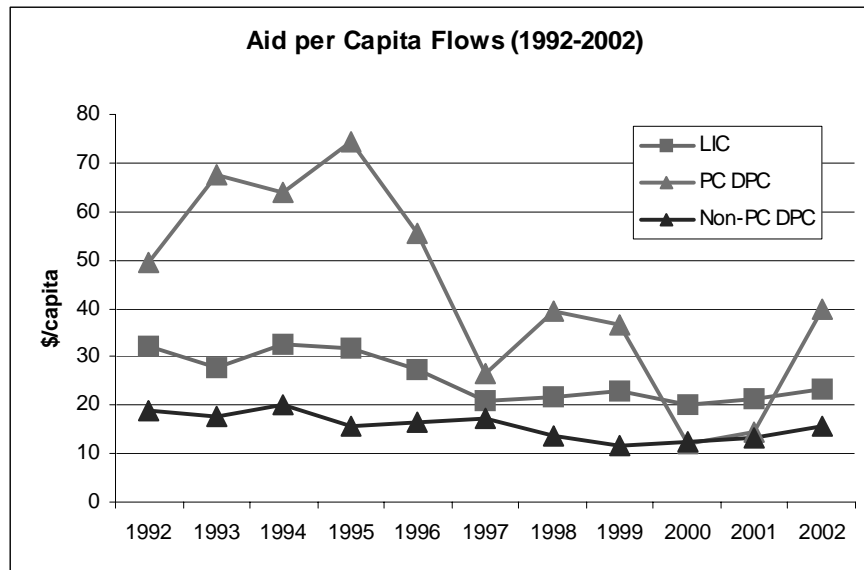
We first turn to the differences that could exist between post-conflict and non-post-conflict difficult partnership countries with respect to aid allocation. The second hypothesis of this paper, based on the relevant literature, proposed that we would find that post-conflict DPCs receive more aid than their non-post-conflict peers. Figure 4 reveals that, indeed, donors are fairly responsive to greater demand for aid in post-conflict countries by giving post-conflict DPCs much higher aid per capita levels than those allocated to non-post-conflict DPCs or LICs.<sup>10</sup>

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<sup>9</sup> We have also performed the same analysis with post-conflict dummy in the regression, and with the sample constrained to LICs and DPCs only. These results are described in Appendix D.

<sup>10</sup> The sudden drop in post-conflict DPC aid per capita levels in 2000 and 2001 is due to low aid flows to Democratic Republic of Congo, which constituted 84 and 90 percent of the population in this group for these years, respectively. Donors increased aid/capita to DRC from \$5 in 2000-2001 to \$28 in 2002, thus bringing the population-weighted average for the group up again in 2002. Afghanistan's entry into the post-conflict group in 2002 and its high aid/capita levels also propped up the 2002 aid/capita number for this group.

Figure 4. Aid Per Capita Flows, with Separation of DPC into Post-Conflict and Non-Post-Conflict (population-weighted group averages; 1992-2002)



Although the period under study (1992-2002) does reveal donors' tendency to allocate more aid to post-conflict DPCs, we would expect this tendency to be even more dramatic for post-9/11 period. Although the estimates in Table 2 below are based on donors' pledges and not actual disbursements, they support our hypothesis that donors increasingly pay attention to post-conflict opportunities.

Table 2. Donors' Disbursements and Recent Pledges per Capita to Post-Conflict DPCs  
(1992-2002; 2002-2005)<sup>11</sup>

Country	<i>Post Conflict per annum – Post Conflict DPC 1992 - 2002</i>										
	<i>Actual Disbursements</i>										
	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Cambodia	21.17	30.44	33.73	52.17							
Central African Rep.						30.28	39.15	36.70	24.64		
Georgia			32.99								
Haiti			93.85	104.77							
Mozambique			81.42	80.61	58.94						
Rwanda				126.60	84.42	34.86	50.19				
Sierra Leone									42.16	72.27	75.05
Somalia	85.21	115.43									
Tajikistan				11.21	17.44	14.28	26.21				
Timor-Leste									315.94	258.90	281.76

Country	<i>Post Conflict per annum – Post Conflict DPC 2002 - 2005</i>				
	<i>Actual</i>			<i>Pledged</i>	
	2002	2003	2004	2004	2005
Afghanistan	47.71	65.84	96 <sup>12</sup>		148.38
Congo, DR				19.26	
Haiti					53.19
Liberia				86.94	84.89

Besides the post-conflict status, there is much other variance within the DPC group. Indeed, although we found in Table 1 that DPCs as a group receive less aid than predicted by their policies, incomes and populations, some countries within that group receive more than expected. To look at this in more detail, we compare actual aid per capita allocations and those predicted by two variations on our original model (1.1), both

<sup>11</sup> Population for future pledges is forecasted using the World Bank data for 2003 and applying UN population growth rate [http://www.un.org/esa/population/publications/longrange2/Country\\_Tables.xls](http://www.un.org/esa/population/publications/longrange2/Country_Tables.xls)

<sup>12</sup> The 'actual' amount for 2004 includes the pledged and actual for 2004. From January 2004 to September 2004 disbursed amount is \$US 934.79 million and for the period October 2004 – December 2004, US\$1891.94 million have been pledged. It must be noted that this is just an estimated, a redistribution of SY 1383 that has 1<sup>st</sup> and 2<sup>nd</sup> quarter distributions of US\$ 526.2 million and US\$ 3537.1 million pledged and US\$ 526.2 million that was disbursed in SY 1382 (portion for 2004).



with log aid/capita as the dependent variable and without log of population on the RHS to suggest an ideal one-to-one relationship between population and aid/capita. The first specification only includes log of GDP/capita and log of CPIA as independent variables, while the second adds to those a dummy for small states<sup>13</sup> and a dummy for post-conflict countries (see Appendix E for details on these regressions and comparisons of actual and predicted aid/capita).<sup>14</sup> We then divided the sample of DPCs in 2002 into two groups: “darlings” are those DPCs which received at least \$2.50 more in aid/capita terms than what is predicted by both regressions, “orphans” are those DPCs, which received at least \$2.50 less in aid/capita terms than what is predicted by both regressions. There is also a group of small states, which look like “darlings” in the first regression and “orphans” in the second. Table 3 below presents the countries that fell into each group.

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<sup>13</sup> Small states were defined based on the participation in the 2004 Small States Forum. The DPC regression sample of Table 4 had 23-25 small-state observations of Comoros, Guinea-Bissau, and Solomon Islands as small states, depending on whether lagged newspaper headlines were in the regression or not.

<sup>14</sup> Although we again use a pooled regression for 1992-2002 with year dummies to get more precise estimates for each coefficient, we focus on DPC aid allocations in 2002 for simplicity of presentation.

Table 3. Country Groupings based on Actual and Predicted Aid/Capita Levels (2002)

<i>Darlings</i>	<i>Orphans</i>
Cambodia	Burundi
Guinea	Central African Republic
Laos	Democratic Republic of Congo
Papua New Guinea	Republic of Congo
Sierra Leone	Niger
	Nigeria
	Sudan
	Togo
	Uzbekistan
<i>Small States: Darlings or Orphans?</i>	
Comoros	
Guinea-Bissau	
Solomon Islands	

Notes: (i) A number of DPCs in 2002 are not in the table above due to lack of data to predict their aid/capita level. These DPCs, which could be either “darlings” or “orphans,” are Afghanistan, Liberia, Myanmar, Sao Tome & Principe, Somalia, Timor-Leste, and Zimbabwe.  
(ii) Two DPCs’ predicted aid levels were actually less than \$2.5 aid/capita away from their actual aid levels, so we considered them neither darlings nor orphans. These are Chad and Yemen.  
(iii) Finally, some countries (besides small states) were “darlings” or “orphans” only in one regression, but not the other. These “marginal darlings” are Angola, Cameroon, and Haiti (all darlings only in the second regression); the “marginal orphans” is Tajikistan (orphan only in the first regression).

What characteristics separate the “darlings” from the “orphans”? While each donor recipient is different in its own way, and it would be outside the scope of this paper to attempt an exhaustive analysis of the differences between these two groups, we can begin unpacking this problem by looking at several characteristics. One obvious characteristic of the “orphans” is that all except Uzbekistan are located in Africa, and the majority are francophone.<sup>15</sup> To give us a sense of what other factors attract donors to DPCs, we look at the following two regressions. Instead of considering each characteristic separately, we again turn to multivariate regression analysis to see how

<sup>15</sup> Thus, international community’s lack of interest in and attention to this region in the 1990s as well as France’s changing aid allocation patterns have had a great influence on the overall low aid levels in these countries, probably resulting in them becoming “orphans.” We thank Stephen Jones from OPM for pointing this out.

donors distribute the funds *among* difficult partnership countries. We regress log aid per capita (netting out emergency aid and debt forgiveness grants) on the same independent variables as before (excluding the dummies) and on a few more characteristics, which might be correlated with aid levels. These new variables are the number of bilateral donors (including EC) that give positive sums of aid (net of emergency aid and debt forgiveness grants) to the recipient; the number of major newspaper headlines containing the recipient country's name, drawn from Lexis-Nexis to proxy for international public attention<sup>16</sup>; and a dummy for small states. Table 4 below reveals that donors do take into account the institutional and policy environment in allocation aid among DPCs, as the coefficient on log of CPIA is positive and statistically different from zero. The coefficient on GDP per capita is positive, pointing to absorptive capacity constraints in these very low-income countries. The negative coefficient on log population again reminds us that donors give significantly less aid per capita to DPCs with larger population size. The post-conflict dummy comes out positive and significant – *ceteris paribus*, post-conflict DPCs receive about 30% more in aid per capita terms than non-post-conflict DPCs, confirming our second hypothesis. Also, Table 4 reveals that donor engagement is significant for aid levels: holding everything else constant, a 1% increase in the number of bilateral donors giving aid to a recipient is correlated with 130-140% increase in aid/capita. The dummy on small states is negative and significant, pointing out that although donors do give higher aid/capita levels to smaller countries (as evidenced by the coefficient on log of population), the smallest countries get less aid than

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<sup>16</sup> The data was assembled from Lexis-Nexis Academic Universe by searching each country's name (with alternative name and/or capital, when necessary) within the category of "General News: Major Newspapers." The search was restricted to "headlines" to ensure that the bulk of the story was focused on the particular DPC. Since donor responses to international events and media attention are most likely delayed, we have entered this variable with a one-year lag.

would be predicted by the highly negative linear relationship between aid/capita and population. Finally, the lagged newspaper headlines, which proxies for international attention, is not statistically different from zero (and enters with a perverse sign); we cannot claim from this regression that donors respond to media attention by providing greater aid volumes to DPCs.<sup>17</sup>

Table 4. Aid Per Capita Allocation Among DPCs, Net of Emergency aid and Debt Forgiveness Grants (1992-2002)

	<i>Log Aid/Capita</i>		
	(1)	(2)	(3)
Log CPIA	0.961 (6.42)***	0.929 (6.17)***	0.965 (6.17)***
Log GDP/capita	0.213 (2.47)**	0.194 (2.21)**	0.256 (2.82)***
Log Population	-0.768 (16.73)***	-0.821 (14.74)***	-0.824 (14.17)***
Post-conflict	0.294 (2.38)**	0.239 (1.84)*	0.300 (2.28)**
Log Number Bilateral Donors	1.400 (6.82)***	1.315 (6.47)***	1.330 (6.38)***
Small State		-0.368 (2.46)**	-0.356 (2.27)**
Lagged Newspaper Headlines			-0.002 (0.21)
Constant	9.442 (11.19)***	10.734 (9.94)***	10.252 (9.07)***
Observations	255	255	235
R-squared	0.73	0.74	0.75

Robust (heteroskedasticity-adjusted) t statistics in parentheses

\* significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%

Year dummies suppressed for presentation purposes

The regression sample contains 225 DPC country-year observations (in column (3) the number of observations decreases due to lag of newspaper headlines, eliminating the first observation for each recipient). The 255 DPC sample was reduced by the lag of newspaper headlines, which eliminated the first observation for each recipient.

What about determinants of donor engagement in DPCs? Is the number of bilateral donors working in each DPC explained by similar characteristics as aid volumes? To answer this question, we use the same regressions as in Table 3 above, with

<sup>17</sup> The regression with newspaper headlines without the lag did not reveal this to be a significant variable either.

the log number of bilateral donors as our dependent variable.<sup>18</sup> Table 5 below confirms bilateral donors' preference for more sound institutions and policies. It also reveals that the number of bilateral donors increases with population of DPCs, although, as we just saw in Table 4, the aid/capita volumes decrease with population. Surprisingly, the number of donors is not significantly different between post-conflict and non-post-conflict DPCs (coefficient on post-conflict is not statistically different from zero). Finally, donor engagement, similar to donor aid volumes, does not appear to increase with our proxy for international media attention.

Table 5. Bilateral Donor Engagement in DPCs (1992-2002)

	<i>Log Number of Bilateral Donors</i>		
	<i>(1)</i>	<i>(2)</i>	<i>(3)</i>
Log CPIA	0.089 (2.22)**	0.073 (1.89)*	0.071 (1.76)*
Log GDP/capita	-0.006 (0.27)	-0.014 (0.58)	-0.013 (0.54)
Log Population	0.144 (9.55)***	0.117 (11.45)***	0.119 (9.18)***
Post-conflict	0.024 (0.68)	0.001 (0.02)	-0.003 (0.08)
Small state		-0.154 (1.89)*	-0.176 (2.06)**
Log Lagged Newspaper Headlines			-0.001 (0.23)
Constant	0.531 (1.58)	1.054 (3.78)***	1.080 (3.55)***
Observations	255	255	235
R-squared	0.50	0.51	0.52

Robust (heteroskedasticity-adjusted) t statistics in parentheses

\* significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%

Year dummies suppressed for presentation purposes

The regression sample contains 225 DPC country-year observations (in column (3) the number of observations decreases due to lag of newspaper headlines, eliminating the first observation for each recipient). The 255 DPC sample was reduced by the lag of newspaper headlines, which eliminated the first observation for each recipient.

<sup>18</sup> The number of bilateral donors was calculated as donors giving positive aid to the recipient, after netting out emergency aid and debt forgiveness grants. EC is included as a bilateral donor in this exercise.

Hense, *among* DPCs, donors appear to give more aid to and more of them appear engaged in smaller, richer, better governed, and post-conflict difficult partnership countries.

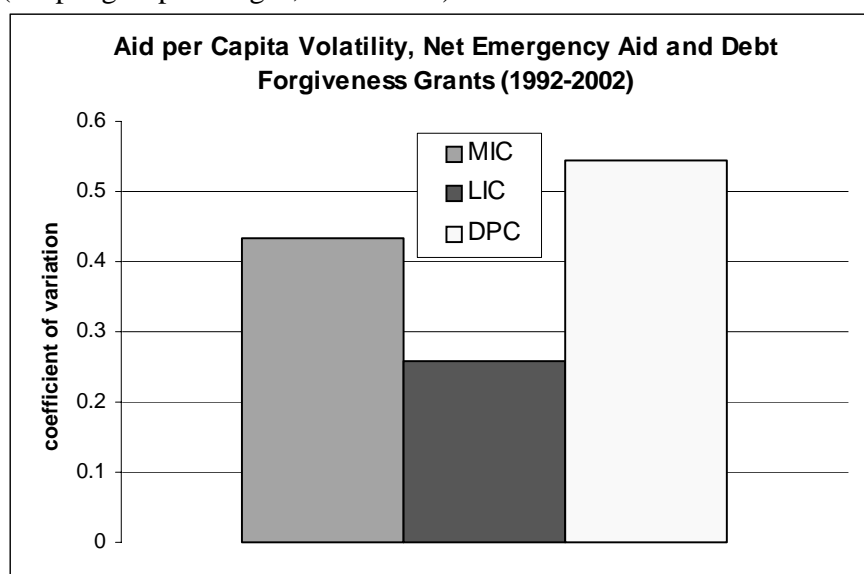
## VI. Comparative Analysis of Aid Volatility

As we discussed in the previous section, donors appear to give less aid to DPCs than to other aid recipients, even controlling for population, poverty, and policies. But are the aid flows to DPCs also more volatile than those to other aid recipient groups? We know that high aid volatility makes budget policy more difficult in developing countries (Bulíř and Hamann 2003). We analyze aid volatility by focusing on aid net of emergency aid and debt relief, since humanitarian assistance and debt forgiveness are naturally more volatile than development aid. We calculate the coefficient of variation by standardizing the standard deviation of aid/capita received by each country by the mean of aid/capita received by each country.

Looking at Figure 5, one can see that aid volatility to DPCs is much higher than that to LICs, and even a little higher than that to MICs. We would expect aid to middle-income countries to be more variable than aid to low-income countries for two reasons. First, aid to middle-income countries is more likely to depend on geostrategic and political concerns of donors than on poverty reduction goals; political and geostrategic factors are more prone to change from year to year than recipients' GDP per capita. Second, middle-income countries are more prone to balance-of-payments shocks, and donors are likely to be more exposed to risk in these countries than in low-income countries. While high volatility of aid to middle-income countries is not necessarily worrying, aid volatility in DPCs is more troubling. The graph below tells us that aid to

DPCs comes in spurts – one year the majority of donors can be moved by the suffering of people in one of the DPCs, and the next they could all move on to alleviate the poverty in another DPC. This makes aid flows unpredictable, and such aid volatility could put an additional strain on already-struggling institutions of DPCs.

Figure 5. Aid per Capita Volatility, Net Emergency Aid and Debt Forgiveness Grants (simple group averages; 1992-2002)<sup>19</sup>



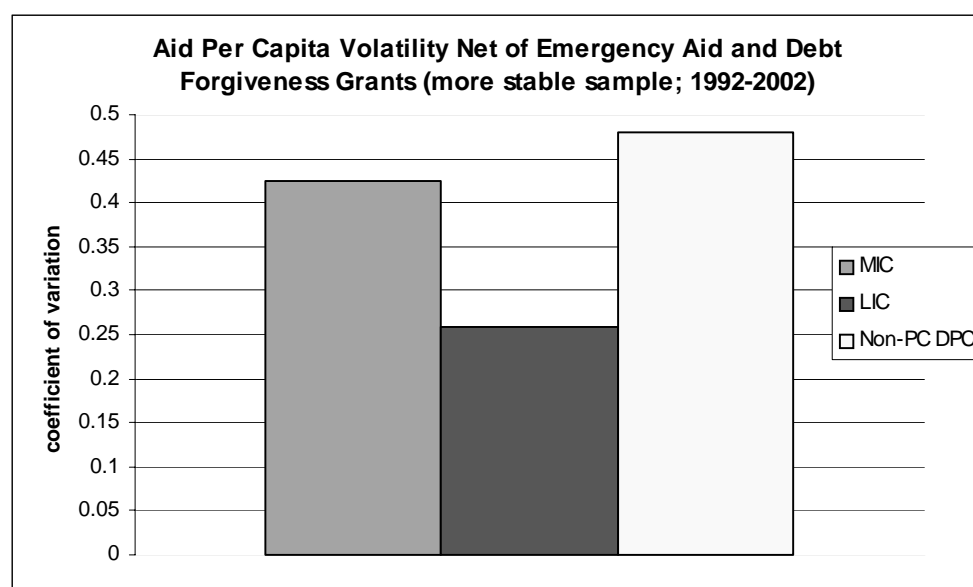
But could this volatility in aid be rational? Donors react to improvements or deteriorations in recipient countries' policy climate and, as we discussed before, to countries coming out of conflict by increasing or decreasing aid allocations. To investigate whether the higher aid volatility in DPCs in comparison to LICs is due to these kinds of recipient country dynamics, we constrain the sample of countries further to eliminate the potential triggers donors use to change aid levels.

The two triggers that we used were changes of status among DPC recipients from non-post-conflict to post-conflict and vice versa, and year-to-year changes in CPIA

<sup>19</sup> Since we measure aid per capita volatility over the 1992-2002 period, we constrain the sample under analysis only to those countries which did not switch between categories (MIC, LIC, DPC) during that period. This leaves us with 98 MICs, 8 LICs, and 16 DPCs.

greater than 1. Thus, we eliminate from this exercise post-conflict country-periods and we re-calculate the coefficient of variation for each recipient using the residual country-periods. We also drop from this exercise countries which had a large year-to-year swing in CPIA.<sup>20</sup> The comparison of aid volatility in thus constrained sample of countries is displayed in Figure 6. Although some volatility in DPCs was due to changes in status from non-post-conflict to post-conflict and vice versa, and some was due to changes in policy climate, even with the constrained sample eliminating these triggers, we see that aid per capita volatility in DPCs is almost twice that in LICs.<sup>21</sup>

Figure 6. Aid Per Capita Volatility, Net of Emergency Aid and Debt Forgiveness Grants (more stable sample; simple group averages; 1992-2002)



<sup>20</sup> Thus, the new sample contains 94 non-post-conflict periods of MICs, 8 non-post-conflict periods of LICs, and 12 non-post-conflict periods of DPCs.

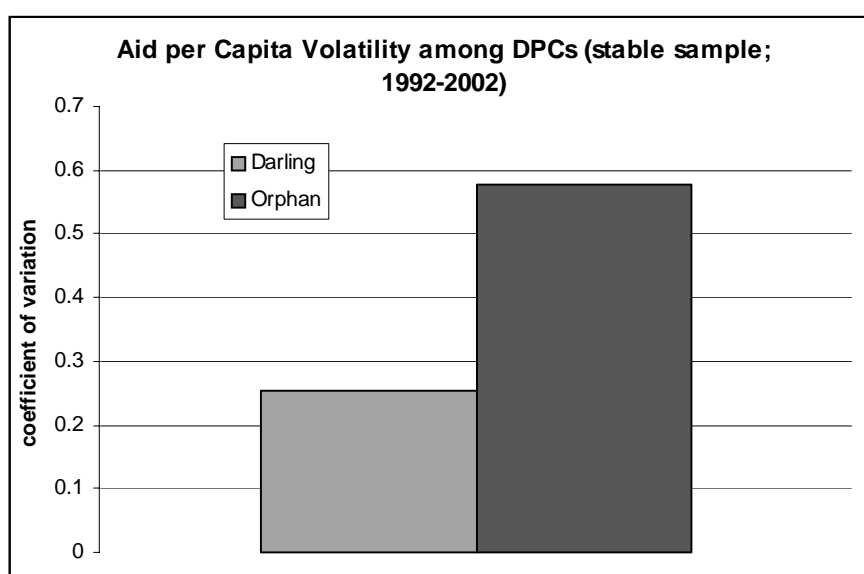
<sup>21</sup> We also looked at aid volatility of on-budget assistance (see Figure E.2). This and other issues related to aid modality can be found in Appendix F.



Just in the previous section we explored the characteristics *within* DPCs that attracted donors and increased aid, we can look at intra-group aid volatility to investigate which characteristics are correlated with higher aid volatility.

Again, it is important to notice that higher aid/capita volatility of DPCs when compared to LICs and MICs conceals the heterogeneity within the DPC group. To take a closer look at whether some DPCs have higher volatility than others, we go back to our concept of “darlings” and “orphans,” introduced in the previous section. Since “darlings” possess certain characteristics that attract donors more than the characteristics of “orphans,” it would be interesting to see whether there are also differences in aid volatility between these two sub-groups of DPCs. Looking at Figure 7 suggests that there is indeed heterogeneity within the DPC group with respect to aid/capita volatility. In fact, aid per capita volatility of “darlings” is very close to that of LICs in the previous figure. It is the high aid/capita volatility of “orphans” that causes the average volatility of DPCs to come out so high.

Table 7. Aid per Capita Volatility among DPCs (1992-2002; stable sample)





## VII. Conclusion

What do the above findings mean for the donor community? As we have shown in this paper, DPCs receive disproportionately lower flows than those predicted by their policy and institutional indicators in a cross-sectional regression. This implies that donors could modestly increase aid to the group as a whole without challenging the performance basis of aid allocations.

This conclusion requires a word of caution. There are wide differences within the DPC group, with “darlings” already receiving more aid than their policy and institutional indicators predict (although some of this may be an appropriate response to post-conflict transitions and changes on the ground). Hence, capacity for additional aid absorption is likely to stem from within the “aid orphan” group who are currently receiving less than their policies and institutional indicators would predict.

Another implication that should be further explored by donor agencies is the excessive burden imposed on DPCs by high aid volatility. In weak capacity countries, the duration needed for any aid-financed program to produce results is likely to be longer than in a country with similar poverty levels but stronger institutions. Turning the tap of aid on and off frequently may therefore be the wrong way to achieve the results donors are looking for.

Since difficult partnership countries have greater development challenges than other aid recipients, as evidenced by their lagging performance on the Millennium Development Goals, it is important for the donor community to look more closely at their aid allocation patterns to these forgotten states.

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## APPENDICES

### Appendix A. Study Groups

It is important to note that our study groups are mutually exclusive, such that although both LICs and DPCs have low incomes, the DPC group only includes recipients with weaker institutions, and the LIC group only includes recipients with stronger institutions. Also, these groupings are dynamic – a country can switch between categories from one year to another based on its GNI/capita and overall CPIA. Finally, to avoid too much volatility between categories, we used a two-year smoothing rule: a country that fell into in a certain category for only a year was re-classified as being in the category in the adjacent years.

Another division between countries was made to separate out post-conflict countries. Since the subject of this study is aid flows, and since some donors, e.g. IDA, have made provisions to allocate additional aid to countries emerging from conflict, we need to take this effect into account in the analysis. Our definition of post-conflict period is largely based on the work of Paul Collier and Anke Hoeffler (Collier and Hoeffler 2002 & 2004). A country is labeled post-conflict during the first four years after cessation of conflict. As we wanted to focus on large conflicts, recognized by donors as requiring additional assistance, we constrained the sample of post-conflict countries to those which had UN peacekeeping operations around the time of the conflict's cessation.<sup>22</sup> The end date of a conflict was based on Collier & Hoeffler (2002) if

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<sup>22</sup> From this sample, we excluded countries which had only a border UN mission, or those involving disputed territories (MINURSO in Western Sahara).

available, or on Sambanis (2000) if not.<sup>23</sup> Since both of the conflict databases end in 1999, for 2000-2002 we used the data on reached agreements for end of conflict from UN missions' background data. If a country reverted to conflict within the four years after the end of a previous conflict, the PC status ended in the year of conflict resumption. Table A.1 at the end of this appendix presents the country-years labeled post-conflict for this study along with associated UN peacekeeping missions and conflict end dates. Table A.2 lists all aid recipients and the categories they fall into each year according to the definitions of MIC, LIC, and DPC as well as their post-conflict status.

To see whether our study groups are substantially different from each other, and thus to test our definitions, we compared them on a number of indicators. First, we look at whether the proxy variables by which we defined our groups are Robust (heteroskedasticity-adjusted). What we wanted to measure was, on the one hand, poverty, and on the other hand, weak policy and institutional environment. As described above, we proxied for these concepts by using GNI/capita and overall CPIA. Figure A.1 below looks at a different set of proxies for the same two concepts (GDP per capita, PPP and the governance cluster of CPIA) to test whether our divisions are Robust (heteroskedasticity-adjusted). As we can see, the average GDP per capita in DPCs in 2002 was not only 85% lower than in MICs, it is about half of that in LICs. As for institutional and policy environment, DPCs average 2.4 on the governance cluster of CPIA, while LICs are around 3.2, and MICs around 3.6. It is interesting to note that the difference between DPC and LICs on this indicator is greater than that between LICs and

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<sup>23</sup> The first year a country becomes post-conflict is the end-year of the conflict if the conflict ended in January-June of that year, or the year after the end-year of the conflict if the conflict ended in July-December. Since we are interested in 1992-2002 aid allocations, we looked at conflicts that ended as early as 1988, which would mean that their fourth year of post-conflict aid allocation is 1992.

MICs, thus underlining that DPC are in a bad league of their own when it comes to institutions.

Figure A.1. Comparison of Study Groups on Poverty and Policies

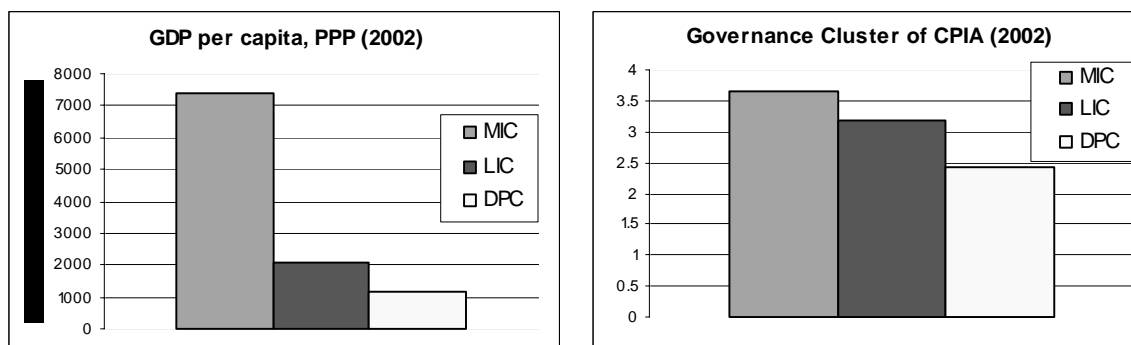


Figure 2

Yet another way to look at the institutional and policy environment is to focus on the success rate of projects in a recipient country. Isham and Kaufmann (1999) have used project-level evidence to argue that development projects are more likely to be successful in countries with sound policies and institutions. Figure A.2 asks whether this hypothesis holds by comparing the performance of our three recipient groups on World Bank projects in 1992-2002, as judged by the Operations Evaluations Department on three dimensions – outcomes, sustainability, and institutional impact. As we can see, fewer projects in DPCs have satisfactory outcomes, likely sustainability, and substantial institutional development impacts than projects in LICs and MICs. In fact, LICs are not far behind MICs on the first two dimensions, while DPCs are far behind on all three indicators.



Figure A.2. Comparison of Study Groups on OED Project Ratings (simple group averages; 1992-2002)

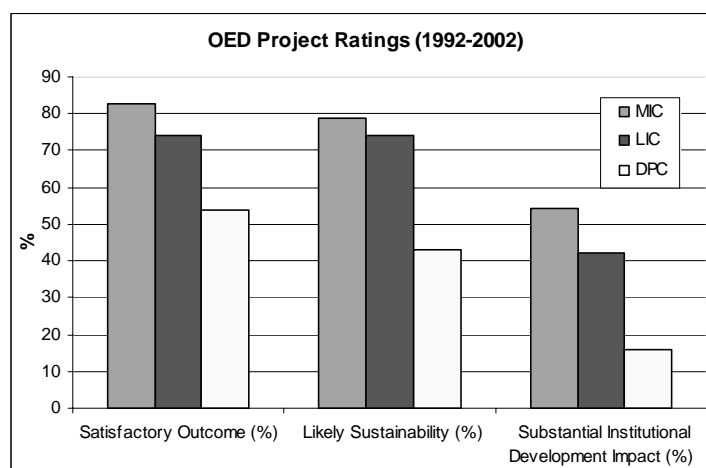


Table A.1. Post-Conflict Country List

<i>recipient</i>	<i>PC years</i>	<i>UN Missions</i>	<i>End of Conflict</i>
Afghanistan	2002	UNAMA	March 2002
Bosnia-Herzegovina	1996-1999	UNMIBH	November 1995
Cambodia	1992-1995	UNAMIC	October 1991
Central African Rep.	1997-2000	MINURCA	January 1997
Congo Dem.Rep. (Zaire)	2000-2002	MONUC	September 1999
Croatia	1995-1998	UNCRO	December 1994
El Salvador	1992-1995	ONUSAL	January 1992
Georgia	1994-1997	UNOMIG	December 1993
Guatemala	1997-2000	MINUGUA	December 1996
Haiti <sup>a</sup>	1994-1995	UNMIH	September 1993
Mozambique	1993-1996	ONUMOZ	October 1992
Namibia	1992	UNTAG	December 1988
Rwanda	1995-1998	UNAMIR	July 1994
Serbia & Montenegro	1995-1998	UNPROFOR	December 1994
Sierra Leone	2000-2002	UNAMSIL	July 1999
Somalia <sup>a</sup>	1992-1993	UNOSOM I	April 1992
Tajikistan	1995-1998	UNMOT	December 1994
Timor-Leste	2000-2002	UNMISET	August 1999

<sup>a</sup> The normal four-year postconflict period in these countries was cut short due to resumption of conflict. Sources: Collier and Hoeffler (2002 and 2004), Sambanis (2000), UN DPKO websites.





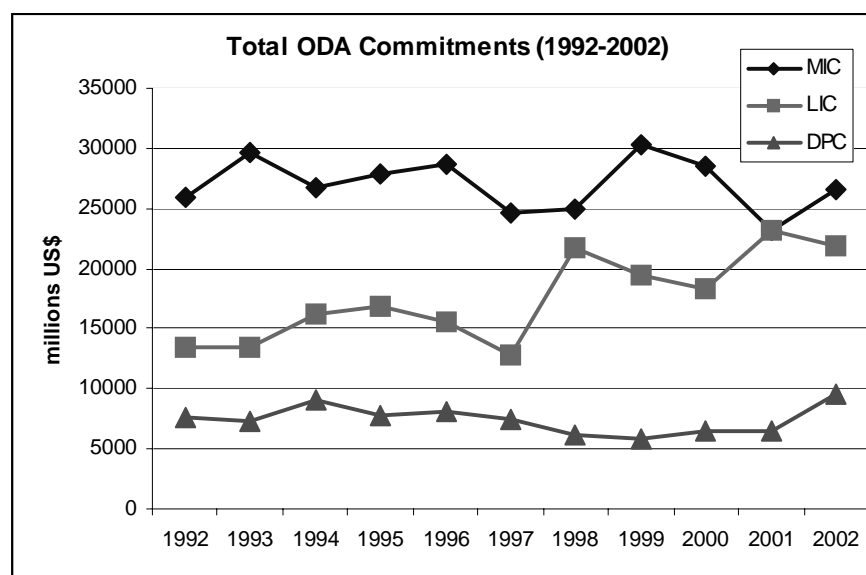
<i>recipient</i>	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Sao Tome & Principe	Non-PC LIC	Non-PC LIC	Non-PC LIC	Non-PC DPC	Non-PC DPC	Non-PC DPC	Non-PC DPC	Non-PC DPC	Non-PC DPC	Non-PC DPC	Non-PC DPC
Saudi Arabia	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC
Senegal	Non-PC MIC	Non-PC MIC	Non-PC LIC	Non-PC LIC	Non-PC LIC	Non-PC LIC	Non-PC LIC	Non-PC LIC	Non-PC LIC	Non-PC LIC	Non-PC LIC
Serbia & Montenegro	Non-PC MIC	Non-PC MIC	Non-PC MIC	PC MIC	PC MIC	PC MIC	PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC
Seychelles	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC
Sierra Leone	Non-PC DPC	Non-PC DPC	Non-PC LIC	Non-PC LIC	Non-PC DPC	Non-PC DPC	Non-PC DPC	Non-PC DPC	PC DPC	PC DPC	PC DPC
Singapore	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC
Slovak Republic	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC
Slovenia	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC
Solomon Islands	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC DPC	Non-PC DPC	Non-PC DPC
Somalia	PC DPC	PC DPC	Non-PC DPC	Non-PC DPC	Non-PC DPC	Non-PC DPC	Non-PC DPC	Non-PC DPC	Non-PC DPC	Non-PC DPC	Non-PC DPC
South Africa	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC
Sri Lanka	Non-PC LIC	Non-PC LIC	Non-PC LIC	Non-PC LIC	Non-PC LIC	Non-PC LIC	Non-PC LIC	Non-PC LIC	Non-PC LIC	Non-PC LIC	Non-PC LIC
St. Helena	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC
St. Kitts-Nevis	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC
St. Lucia	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC
St. Vincent&Grenadines	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC
Sudan	Non-PC DPC	Non-PC DPC	Non-PC DPC	Non-PC DPC	Non-PC DPC	Non-PC DPC	Non-PC DPC	Non-PC DPC	Non-PC DPC	Non-PC DPC	Non-PC DPC
Suriname	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC
Swaziland	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC
Syria	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC
Tajikistan	Non-PC DPC	Non-PC DPC	Non-PC DPC	PC DPC	PC DPC	PC DPC	PC DPC	Non-PC DPC	Non-PC DPC	Non-PC DPC	Non-PC DPC
Tanzania	Non-PC DPC	Non-PC DPC	Non-PC DPC	Non-PC DPC	Non-PC DPC	Non-PC DPC	Non-PC LIC	Non-PC LIC	Non-PC LIC	Non-PC LIC	Non-PC LIC
Thailand	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC
Timor-Leste	n/a	n/a	n/a	n/a	n/a	n/a	n/a	Non-PC DPC	PC DPC	PC DPC	PC DPC
Togo	Non-PC DPC	Non-PC DPC	Non-PC DPC	Non-PC DPC	Non-PC DPC	Non-PC DPC	Non-PC DPC	Non-PC DPC	Non-PC DPC	Non-PC DPC	Non-PC DPC
Tokelau	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC
Tonga	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC
Trinidad & Tobago	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC
Tunisia	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC
Turkey	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC
Turkmenistan	Non-PC LIC	Non-PC LIC	Non-PC LIC	Non-PC LIC	Non-PC LIC	Non-PC LIC	Non-PC LIC	Non-PC LIC	Non-PC LIC	Non-PC LIC	Non-PC LIC
Turks & Caicos Islands	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC
Tuvalu	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC
Uganda	Non-PC LIC	Non-PC LIC	Non-PC LIC	Non-PC LIC	Non-PC LIC	Non-PC LIC	Non-PC LIC	Non-PC LIC	Non-PC LIC	Non-PC LIC	Non-PC LIC
Ukraine	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC LIC	Non-PC LIC	Non-PC LIC
United Arab Emirates	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC
Uruguay	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC
Uzbekistan	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC DPC	Non-PC DPC	Non-PC DPC	Non-PC DPC	Non-PC DPC	Non-PC DPC	Non-PC DPC	Non-PC DPC
Vanuatu	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC
Venezuela	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC
Viet Nam	Non-PC LIC	Non-PC LIC	Non-PC LIC	Non-PC LIC	Non-PC LIC	Non-PC LIC	Non-PC LIC	Non-PC LIC	Non-PC LIC	Non-PC LIC	Non-PC LIC
Virgin Islands (UK)	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC
Wallis & Futuna	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC	Non-PC MIC
Yemen	Non-PC DPC	Non-PC DPC	Non-PC DPC	Non-PC DPC	Non-PC DPC	Non-PC LIC	Non-PC LIC	Non-PC LIC	Non-PC DPC	Non-PC DPC	Non-PC DPC
Zambia	Non-PC LIC	Non-PC LIC	Non-PC LIC	Non-PC LIC	Non-PC LIC	Non-PC LIC	Non-PC LIC	Non-PC LIC	Non-PC LIC	Non-PC LIC	Non-PC LIC
Zimbabwe	Non-PC LIC	Non-PC LIC	Non-PC LIC	Non-PC LIC	Non-PC LIC	Non-PC LIC	Non-PC DPC	Non-PC DPC	Non-PC DPC	Non-PC DPC	Non-PC DPC

Notes: Eritrea became a country in 1993, Timor-Leste in 1999.

Sources: For broad categories, World Bank (2004), for post-conflict status, see Table A.1.

## Appendix B. Disbursements and Commitments

Figure B.1. Total ODA Commitments (sum to group; 1992-2002)

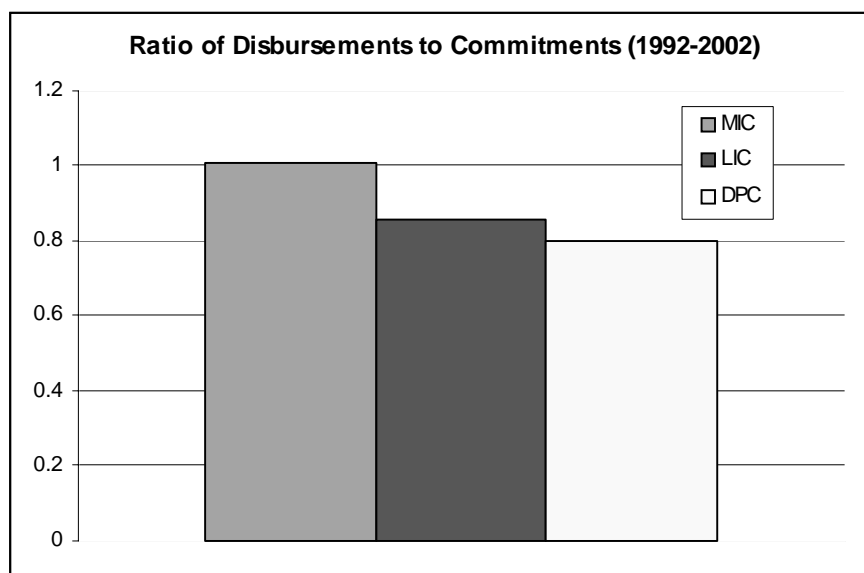


Although donor commitments and aid disbursements are surely correlated, there is not always a perfect match. This could be due to lags in disbursements, to a time-inconsistency problem in commitments, and, more generally, to donors' changing priorities and financial constraints. To see whether the ratio of disbursements to commitments for DPCs is different from that for other recipient groups, we looked at the proportion of each recipient's disbursements, summed over 1992-2002 period, over the sum of commitments to that recipient for the same period.<sup>24</sup> Figure B.2 reveals that although the ratio of disbursements to commitments for both MICs is close to one, as would be the case if donors disburse the funds that they had committed, this is not the

<sup>24</sup> We used ten-year totals instead of yearly observations to avoid the biasing our results with the disbursement lag problem discussed above. Since commitment data is not available for all the donors which report their disbursements, we only summed the disbursements for the donors with reported commitments. To make the comparison between recipient groups fair, we constrained our sample here to recipients which stayed in the same group (MIC/LIC/DPC) for the whole period. Finally, because commitment data does not include emergency aid and debt relief, we took these components out of disbursement data before adding them up. We would like to thank Aimee Nichols in OECD/DAC for providing helpful advice on this issue.

case for LICs and DPCs – for them, donors disburse about 86 and 80 percent of the funds committed, respectively. This inter-group pattern of disbursement to commitment ratio is not very surprising. The high ratio of MICs (it is even a little above 1) is due to the trailing off of new commitments to these countries, while the lower ratio of DPCs is probably due to the volatile environment in these countries caused by either conflict or political upheaval. Nevertheless, it is an interesting indicator of donor behavior.

Figure B.2. Ratio of Disbursements to Commitments (population-weighted group averages; 1992-2002)



### Appendix C. Netting Out Emergency Aid and Debt Forgiveness Grants

To test whether the difference between LICs and DPCs can be eliminated when we net out emergency aid and debt forgiveness grants, we break down total gross ODA into three components: emergency aid, debt relief, and developmental aid (which is the residual ODA after taking out emergency aid and debt relief).

Emergency Aid. An emergency, in DAC Statistical Reporting Directives, is defined as:

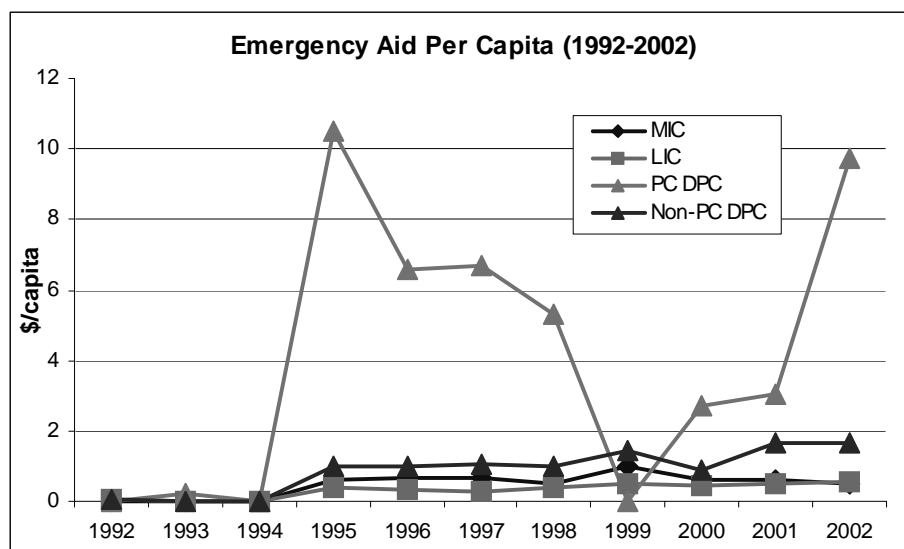
an urgent situation created by an abnormal event which a government cannot meet out of its own resources and which results in human suffering and/or loss of crops or livestock. Such an emergency can result from i) sudden natural or man-made disasters, including wars or severe civil unrest; or ii) food scarcity conditions arising from crop failure owing to drought, pests and diseases. This item also includes support for disaster preparedness (DAC 2000).

Thus, emergency aid includes such items as relief food aid, and aid to refugees (in both recipient and donor countries). Figure C.1 presents the distribution of emergency aid between our recipient groups, in per capita terms. As expected, post-conflict DPCs receive the bulk of emergency aid, as they should, based on the above DAC definition.<sup>25</sup> However, non-post-conflict DPC do not appear to receive much greater levels of emergency assistance than LICs or MICs.

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<sup>25</sup> The drop of emergency aid for the post-conflict DPC group in 1999 is due to only one country being in that group that year (Central African Republic), which received no emergency aid.

Figure C.1. Emergency Aid Per Capita (population-weighted group averages; 1992-2002)<sup>26</sup>

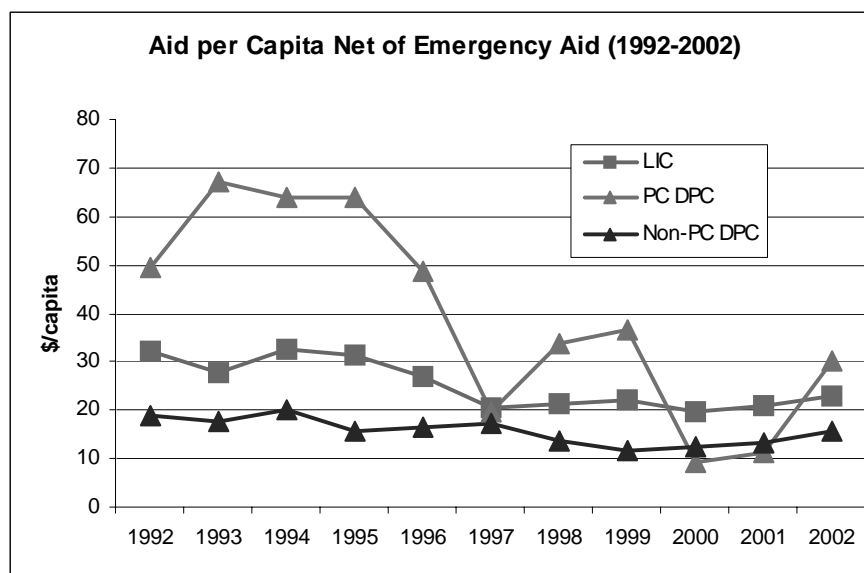


Since decisions for allocation of emergency aid consider the severity of a natural disaster and/or a humanitarian crisis besides the recipient's poverty level and institutional and policy environment, and since our analysis focuses specifically on aid effectiveness in DPCs as opposed to LICs and MICs, we take emergency aid out of the comparative analysis. Hence, Figure C.2 provides a comparison of aid per capita in LICs and DPCs, using gross ODA flows net of emergency aid. As in Figure 6 in the main text, we see that donors respond to post-conflict situations, in most instances, by providing aid per capita levels much higher than that received by LICs, although netting out emergency aid does decrease the aid per capita levels received by this group by, on average, \$5/capita between 1995 and 2002. However, non-post-conflict DPCs still receive consistently lower aid per capita levels than do LICs.

<sup>26</sup> Although the graph shows all the year under study (1992-2002) for presentation consistency, the definition of emergency aid was modified in the mid-1990s. Relief food aid, included in developmental food aid up to and including 1995, from 1996 onwards was included in emergency aid. Furthermore, reporting data on emergency aid by recipient country was only introduced in our data collection as of 1995. We would like to thank Yasmin Ahmad in OECD/DAC for her explanation on this issue.

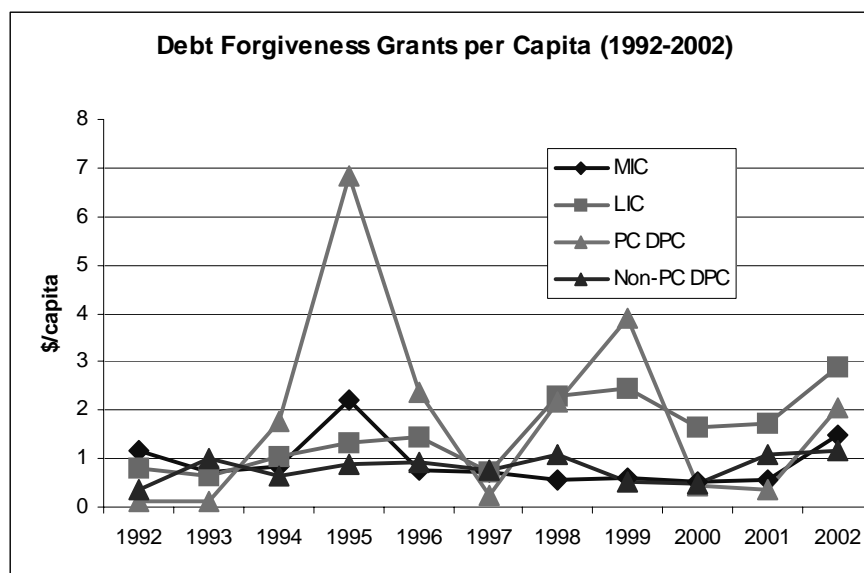


Figure C.2. Aid Per Capita Net of Emergency Aid (population-weighted group averages; 1992-2002)



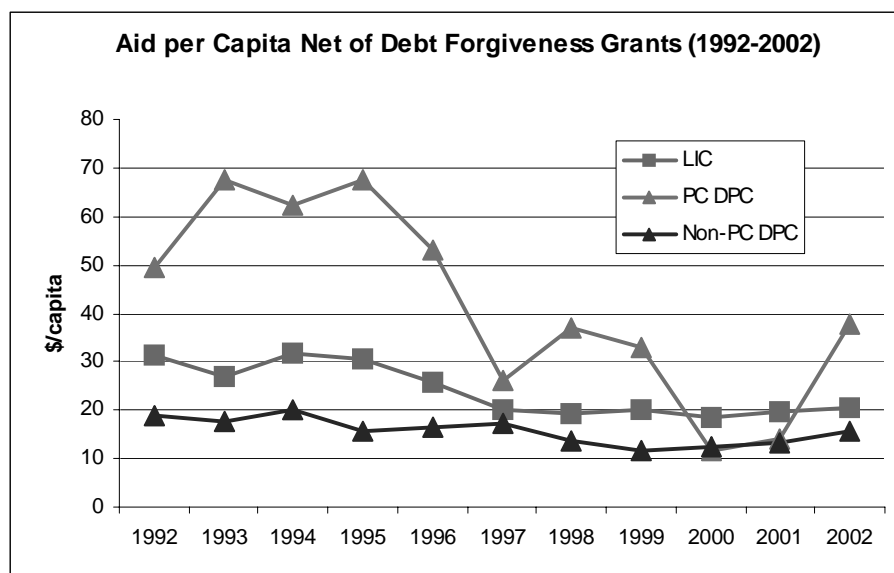
Debt Relief. Another type of assistance provided by donors to developing countries based on other criteria in addition to recipients' poverty and institutions is debt relief. Our treatment of debt relief here is constrained by the data available in the OECD/DAC database, which does not include debt relief provided by non-OECD donors or by multilateral agencies other than World Bank's IDA facility. We also constrain this exercise to looking at debt forgiveness grants. Figure C.3 shows the levels of debt forgiveness grants per capita and their allocation among our recipient groups. It appears that since the late 1990s, debt relief has been targeted mostly towards LICs, with debt relief to non-post-conflict DPCs remaining at the level similar to MICs.

Figure C.3. Debt Forgiveness Grants Per Capita (population-weighted group averages; 1992-2002).



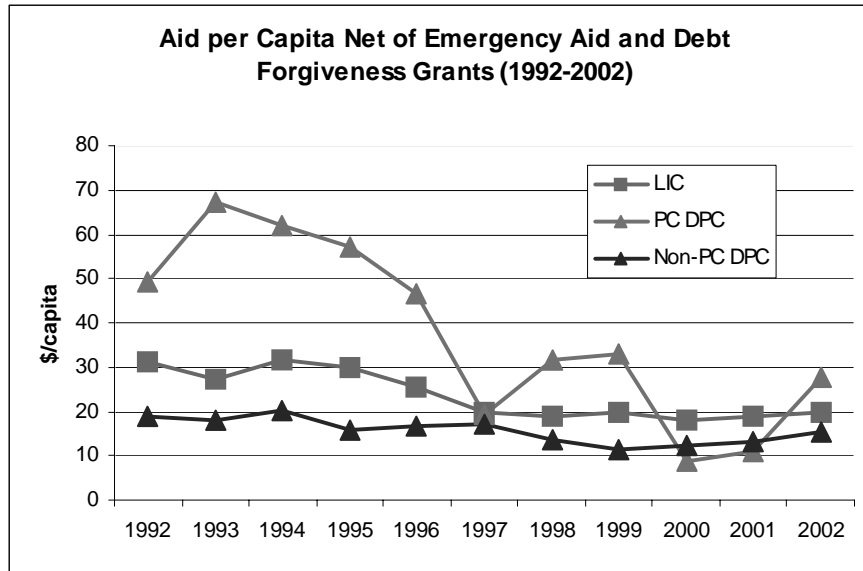
As debt forgiveness is more related to donors' expectations of a recipients' ability (or lack thereof) to repay the loans and it aims to reduce the recipient's debt burden, these funds are not directly utilized in poverty reduction programs, if we abstract from aid fungibility issues. To focus on aid that does fund poverty reduction programs and projects, we want to net out debt relief from gross ODA flows. Figure C.4 does just that, comparing aid per capita levels net of debt forgiveness grants in our recipient groups. Since, as we saw above, debt relief has recently favored LICs, once we take debt forgiveness grants out, the difference between LICs and non-post-conflict DPCs in 2002 has narrowed by about \$3/capita from what we had seen in Figure 6 in the main text (although the average difference for the whole period decreased only by \$1.5/capita). However, we still observe that LICs get more aid in per capita terms than do non-post-conflict DPCs. Since post-conflict DPCs did not appear to receive much debt relief, their aid per capita levels remain similar to what we had seen in Figure 6.

Figure C.4. Aid Per Capita Net of Debt Forgiveness Grants (population-weighted group averages; 1992-2002)



Finally, we want to see how this picture would look if we take both emergency aid and debt relief out of gross ODA comparison. Figure C.5 graphs the aid per capita trends net of both emergency aid and debt forgiveness grants. Here we see the combination of factors already described above. Netting out emergency aid has decreased the per capita levels of aid received by post-conflict DPCs, since it is that group of countries that gets the bulk of emergency assistance. Netting out debt relief has somewhat narrowed the gap between LICs and non-post-conflict DPCs, since LICs have been successful at obtaining much of the debt forgiveness grants disbursed in recent years. The final point to make is that netting out emergency aid and debt relief has not eliminated the gap between LICs and non-post-conflict DPCs.

Figure C.5. Aid Per Capita Net of Emergency Aid and Debt Forgiveness Grants (population-weighted group averages; 1992-2002)



Appendix D. Regression Analysis with Post-Conflict Dummy and with Low-Income Countries (LICs and DPCs) Only

To check the robustness of our regression results, we estimated several other regressions, changing either the RHS variables or the regression sample.

First, as discussed in the introduction section of the paper, there is reason to believe that donors respond to post-conflict opportunities by providing additional aid to countries emerging from conflict. In Table D.1 below, we add a dummy variable that captures the post-conflict aid allocation. As we can see, all of the results reported in Table 1 in the main text are also reflected in this table. Particularly, the DPC group receives, on average, more than 40% less in aid than predicted by its income level, policies and population. It is also interesting to note that the post-conflict dummy, although positive, is not statistically different from zero.<sup>27</sup>

Table D.1 Aid Allocations to Developing Countries, Net of Emergency Aid and Debt Relief (1992-2002)

	<i>Log Total Aid</i> (1)	<i>Log Bilateral Aid</i> (3)	<i>Log Multilateral Aid</i> (5)
Log GDP/capita	-0.430 (17.79)***	-0.352 (12.73)***	-0.798 (18.98)***
Log CPIA	0.809 (6.36)***	0.464 (3.26)***	1.131 (6.57)***
Log Population	0.498 (50.35)***	0.546 (44.77)***	0.369 (24.07)***
DPC	-0.435 (7.47)***	-0.582 (8.32)***	-0.341 (4.22)***
Post-conflict	0.158 (1.18)	0.092 (0.62)	0.123 (0.73)
Constant	0.266 (0.94)	-1.120 (3.55)***	3.266 (5.99)***
Observations	1212	1212	1212
R-squared	0.71	0.67	0.50

Notes: Robust (heteroskedasticity-adjusted) t statistics in parentheses (\* significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%)

<sup>27</sup> Since we defined the post-conflict period as lasting 4 years after emergence from conflict, and since different experts disagree about end of conflict dates for many of the conflicts during the period, the insignificance of the post-conflict term could be due to this imprecise definition of the post-conflict period.

Year dummies suppressed for presentation purposes.

The regression sample consists of 651 MIC country-year observations, 306 LIC country-year observations, and 255 DPC country-year observations (24 of which are post-conflict DPC).

To check whether our results in Table 1 in the main text are driven by a specific functional form, which rewards agencies, such as IDA, for allocating aid only among low-income countries, we repeat the regression analysis, constraining our sample to low-income world, and thus analyzing aid allocation between LICs and DPCs. The results for this analysis are presented in Table D.2. As expected, poverty elasticities within low-income country sample are lower than those in the regressions with middle-income countries included (Table 1 in the main text), because of the absorptive capacity constraints of low-income countries (Dollar and Levin 2004). Policy elasticities remain significant, with multilateral aid more selective than bilateral.

Looking at the DPC dummy, it appears that even in this sample of low-income countries, DPCs receive, on average, 16% less aid than predicted by other independent variables. Finally, it appears that in this low-income sample, it is multilateral aid that drives the coefficient on DPC dummy to be negative; as far as bilateral donors are concerned, DPCs appear to receive around the aid levels predicted by their population, poverty and policies (since the coefficient on DPC in column (2) is not statistically different from zero). Comparing these results with Table 1 in the main text, we can hypothesize that since multilateral aid is generally more targeted to low-income countries, the negative coefficient on DPC dummy in column (3) of Table 1 is driven by different allocations between LICs and DPCs evidenced in Table D.2, whereas for bilateral donors, which provide much more aid to middle-income countries, the negative coefficient on DPC in column (2) of Table 1 is driven by allocation decisions between

MICs and DPCs. Nevertheless, the main point of Table D.2 below is that total aid to DPCs is significantly less than predicted by the independent variables of this regression constrained to low-income countries.

Table D.2. Aid Allocations to Low-Income Countries Only, Net Emergency Aid and Debt Forgiveness Grants (1992-2002)

	<i>Log Total Aid</i> (1)	<i>Log Bilateral Aid</i> (2)	<i>Log Multilateral Aid</i> (3)
Log GDP/capita	-0.032 (0.66)	0.099 (1.63)	-0.286 (4.72)***
Log CPIA	1.195 (5.78)***	1.139 (4.97)***	1.309 (6.69)***
Log Population	0.531 (26.12)***	0.563 (21.49)***	0.472 (19.35)***
DPC	-0.162 (2.11)**	-0.124 (1.39)	-0.256 (3.20)***
Constant	-3.473 (6.60)***	-5.474 (8.41)***	-1.639 (2.33)**
Observations	561	561	561
R-squared	0.67	0.59	0.59

Notes: Robust (heteroskedasticity-adjusted) t statistics in parentheses (\* significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%)

Year dummies suppressed for presentation purposes.

The regression sample here contains 306 LIC country-years, and 255 DPC country-years (24 of which are post-conflict DPC).

### Appendix E. Actual and Predicted Aid per Capita Levels

To analyze the variance within the DPC group with respect to aid per capita levels, we have estimated the following two regressions, both variations on the original model, presented in Dollar and Levin (2004).

$$(E.1.1) \text{Log (aid/capita}_{ij}) = b_0 + b_1 \text{Log (per capita GDP}_j) + b_3 \text{Log (CPIA}_j) ,$$

$$(E.1.2) \text{Log (aid/capita}_{ij}) = b_0 + b_1 \text{Log (per capita GDP}_j) + b_3 \text{Log (CPIA}_j) + b_4 \text{Small State}_j + b_5 \text{Post-conflict}_j$$

Table E.1 below presents the regression output for both the original model (1.1) in the main text and the two regression models above. The original results do not change significantly when we switch to the new regression models with an ideal relationship of aid with respect to population. Although the policy and poverty elasticities do diminish when we constrain the relationship between aid and population to be one-to-one, they still remain significant. The dummy for small states, defined by membership in the 2004 Small States Forum, picks up some of the effect of the original population variable, as it reveals that small states get 160% more aid per capita than predicted by the other independent variables in the model. Finally, we see that post-conflict countries receive additional aid per capita levels, which is consistent with the literature.



Table E.1 Comparison of Regression Models

	<i>Original</i>	<i>Log Aid/Capita</i>	
	<i>Log Total Aid</i> (1.1)	(E.1.1)	(E.1.2)
Log GDP/capita	-0.362 (14.91)***	-0.145 (3.59)***	-0.342 (10.18)***
Log CPIA	1.118 (10.20)***	0.959 (5.93)***	1.108 (8.17)***
Log Population	0.497 (48.12)***		
Small State			1.591 (25.25)***
Post-conflict			0.373 (2.38)**
Constant	-0.658 (2.49)**	3.806 (13.00)***	4.794 (18.87)***
Observations	1212	1212	1212
R-squared	0.70	0.06	0.38

Notes: Robust (heteroskedasticity-adjusted) t statistics in parentheses (\* significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%)

Year dummies suppressed for presentation purposes.

The regression sample consists of 651 MIC country-year observations, 306 LIC country-year observations, and 255 DPC country-year observations (24 of which are post-conflict DPC).

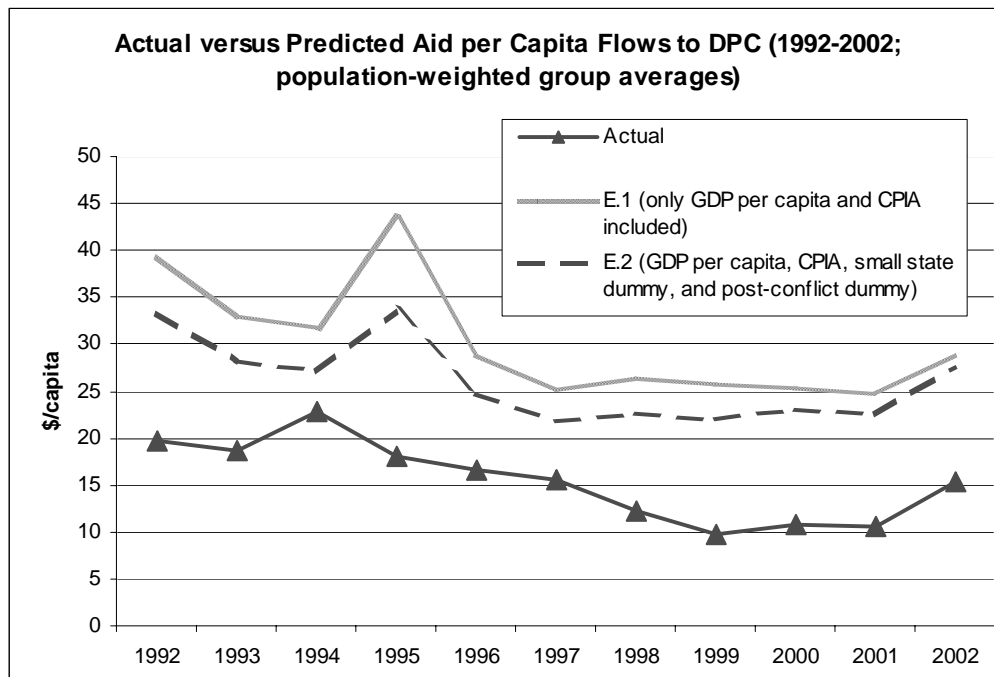
As described in the main text, we then used the coefficients from regressions (E.1.1) and (E.1.2) above to predict aid per capita levels for our DPCs in 2002. Table E.2 below presents the actual aid per capita, the two predicted aid per capita levels, and the differences between them.

Table E.2 Comparison of Actual and Predicted Aid per Capita Levels (2002)

<i>recipient</i>	<i>Actual Aid/Capita</i>	<i>(E.1.1)</i>		<i>(E.1.2)</i>	
		<i>Predicted Aid/Capita</i>	<i>Difference (P-A)</i>	<i>Predicted Aid/Capita</i>	<i>Difference (P-A)</i>
Angola	19.28	19.04	-0.24	13.48	-5.79
Burundi	18.58	32.35	13.77	30.73	12.14
Cambodia	39.12	30.18	-8.94	23.85	-15.27
Cameroon	29.80	30.02	0.22	23.55	-6.25
Central African Rep.	15.09	24.86	9.77	20.16	5.08
Chad	30.27	32.41	2.14	28.22	-2.05
Comoros	58.64	28.06	-30.58	107.69	49.05
Congo Dem.Rep. (Zaire)	23.50	31.58	8.08	43.49	19.99
Congo, Rep.	14.83	31.32	16.49	27.33	12.50
Guinea	33.62	30.68	-2.94	23.44	-10.17
Guinea-Bissau	45.73	30.19	-15.54	133.52	87.78
Haiti	19.96	18.80	-1.16	13.92	-6.04
Laos	53.71	26.78	-26.93	20.71	-32.99
Niger	26.56	34.19	7.64	31.45	4.89
Nigeria	2.53	29.28	26.75	25.86	23.33
Papua New Guinea	44.88	27.69	-17.19	20.63	-24.25
Sierra Leone	54.25	34.92	-19.33	50.36	-3.89
Solomon Islands	66.19	24.03	-42.16	91.28	25.09
Sudan	5.93	22.91	16.98	16.82	10.89
Tajikistan	24.27	30.01	5.74	26.26	1.99
Togo	12.31	25.63	13.32	20.18	7.87
Uzbekistan	7.40	25.50	18.10	19.71	12.32
Yemen	33.36	35.72	2.36	33.01	-0.35

Figure E.1 below represents graphically the comparison between actual aid per capita flows and those predicted by our two regression models for all the years under study (1992-2002).

Figure E.1. Comparison of Actual and Predicted Aid per Capita Flows to DPCs (1992-2002; population-weighted group averages)



## Appendix F. Aid Modality

Here we explore whether there are differences in aid modality between DPCs and other recipient groups. In this context, we discuss on-budget and off-budget assistance, as well as grant share of ODA.

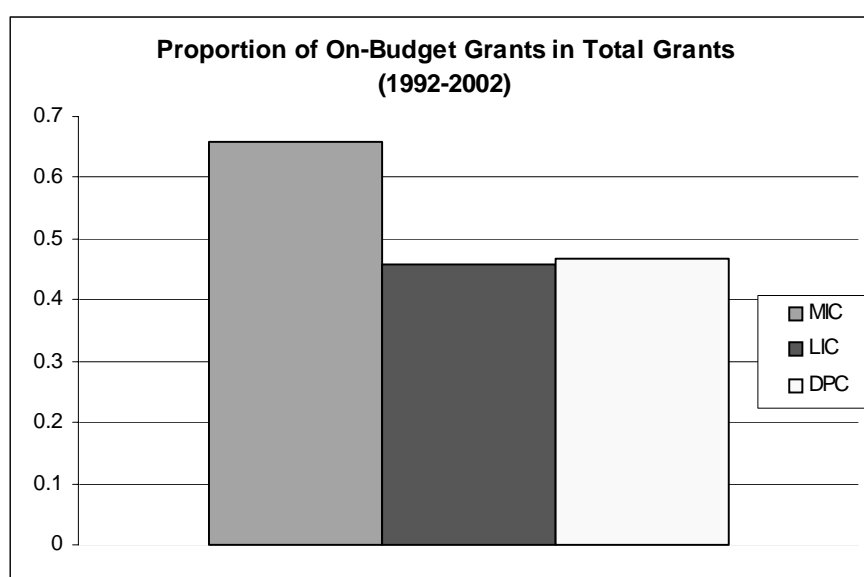
On-budget assistance. Donor support for developing countries comes in different forms – it could be budget support, program development, or technical assistance. The latter, for example, is not disbursed to the recipient government as funds – it is paid to consultants hired by donor country to implement a project in the recipient country. In a difficult institutional setting, donors might be more likely to use technical assistance and other off-budget assistance to avoid siphoning off of aid by corrupt government officials, and thus to spend the money more efficiently; or donors might want to strengthen the capacity of civil society organizations and local government institutions by targeting their funds directly to them and bypassing the central government. On the other hand, by delivering aid by circumventing government coffers donors miss an opportunity to build the capacity of governments' budgetary institutions and to demand transparency and accountability of expenditures. To take a look at whether donors do succumb to the temptation of providing more off-budget aid to DPCs, we compare total ODA grants as reported by OECD/DAC with the grants from abroad that go through the fiscal accounts, calculated from IMF's *Global Financial Statistics*, Country Desk Data, and Article IV Staff reports.<sup>28</sup> Figure F.1 presents the results of this exercise – it appears that on-budget

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<sup>28</sup> Please note that grants reported in fiscal accounts could include military assistance (not reported in OECD/DAC), and transfers between developing countries (OECD/DAC only reports assistance from major donors). There could also be a discrepancy between grants received at the general government versus central government levels. We would like to thank Peter Fallon and Amber Mahone for compiling this data and for providing helpful advice on this exercise.

grants as proportion of total grants is higher in MICs than in LICs and DPCs, which is expected, given the more developed budgetary institutions in middle-income countries. However, somewhat surprisingly, we see almost no difference between the ratio of on-budget aid in LICs and DPCs.

Figure F.1. Proportion of On-Budget Grants in Total Grants (simple group averages; 1992-2002)



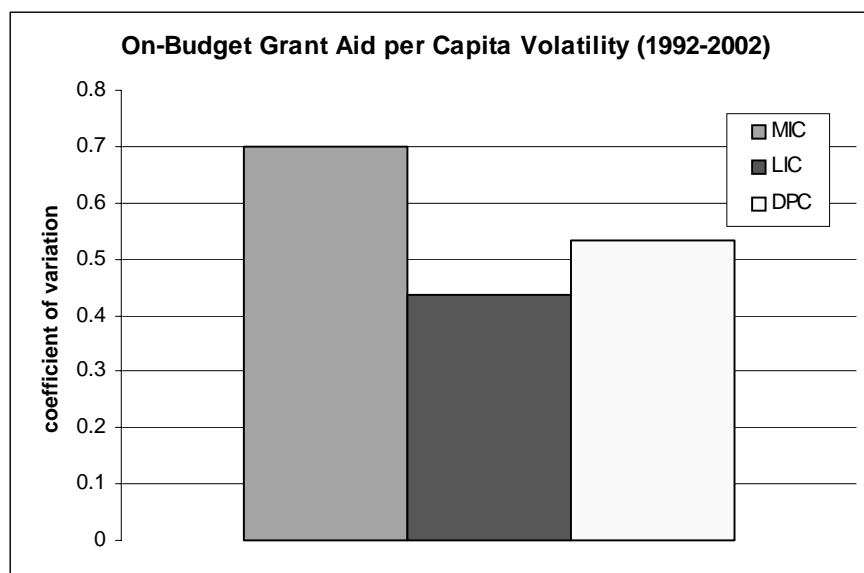
We could also use the on-budget assistance to check our findings on volatility.

We use the same method of constraining our sample to countries, which remained in the same recipient group for the whole period of 1992-2002 and calculating the simple group average coefficient of variation of on-budget grant aid per capita.<sup>29</sup> Figure F.2 displays the result – it appears that, overall, on-budget grant aid to MICs and LICs is more volatile than gross ODA net of emergency aid and debt relief, although the aid volatility in DPCs appear to be about the same in both graphs (see Figure 8). However, the volatility of on-budget grant aid to DPCs is still higher than LICs.

<sup>29</sup> Due to data availability constraints, we cannot net out emergency assistance and debt relief from on-budget aid data, as we did in the previous section.



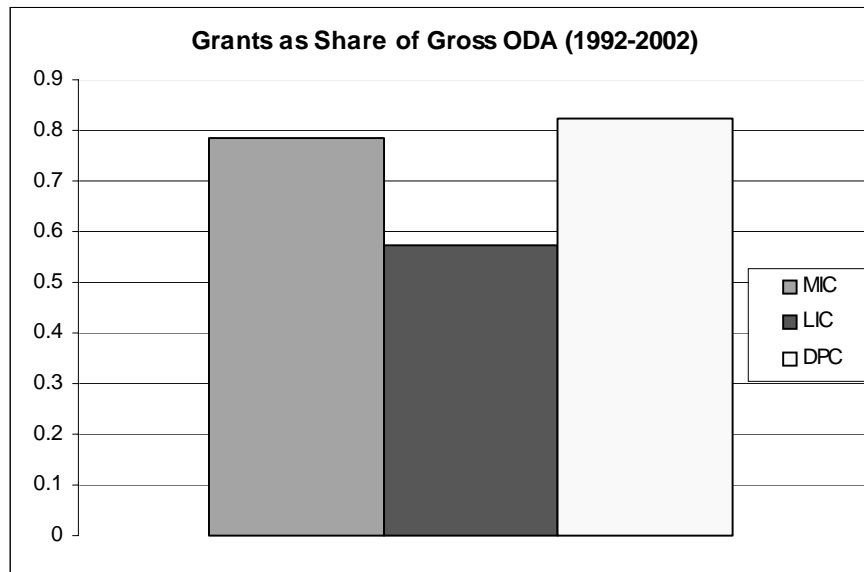
Figure F.2. On-Budget Grant Aid per Capita Volatility (simple group averages; 1992-2002)



Grant Share of ODA. Besides choosing whether to deliver assistance through the government budget or not, donors face another important decision – whether to disburse aid in grant form or as concessional loans. There are many arguments for either of the two instruments – grants do not carry with them additional debt burden, which could tie the hands of recipient governments in the future, while loans are supposed to encourage recipients to steer aid into productive uses, thus stimulating growth and enabling repayment. While not making any value judgments with respect to the relative worth of grants or loans, we simply look at donors’ revealed preference for either of the two instruments, when it comes to our recipient groups. Thus, we compare the grant share of ODA disbursements (i.e. total ODA grants as a share of total gross ODA) in Figure F.3. The figure below reveals that donors have a realistic outlook, when it comes to their expectations of DPC being able to repay concessional loans; we find that over 80% of gross ODA to DPCs is in grant form. Middle-income countries also receive very high

proportion of aid in grant form (78%), probably reflecting the small share of total official flows that middle-income countries receive as ODA.<sup>30</sup> LICs, on the other hand, only receive 57% of their ODA in grant form.

Figure F.3. Grants as Share of Gross ODA (simple group averages; 1992-2002)



<sup>30</sup> We would like to thank Simon Scott of DCD/DAC for providing a helpful explanation on this issue.