

„Bilateralizing“ multilateral aid?

Aid allocation by World Bank trust funds

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Abstract: Over the last decade, donors of foreign aid quadrupled their annual contributions to trust funds at the World Bank. Concerns have been raised that trust fund aid may undermine the incentives associated with IDA's performance-oriented aid allocation. Moreover, the earmarking of contributions to donors' preferred recipient countries might "bilateralize" multilateral aid, potentially to the detriment of aid effectiveness. Using new data on World Bank trust fund disbursements for the 2002-2012 period, we test whether trust fund aid substitutes for IDA inflows, and, as official narratives suggest, for other aid inflows. We also investigate the "bilateralization" hypothesis by comparing multilateral "core" aid to trust fund disbursements. Trust fund aid is generally not allocated according to World Bank's Country Policy and Institutional Assessment (CPIA) index, which could undermine the incentives generated of the IDA allocation mechanism. This result is confirmed when we consider the health, education, and environment sector separately using sector-specific CPIA scores and IDA aid. We do not find systematic evidence that trust funds are to a larger degree motivated by political and economic motives.

Keywords: foreign aid, World Bank, trust funds, aid allocation, political economy

JEL codes: F55, O19, P45

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1. Introduction

Multilateral trust funds at the World Bank and at other international organizations are increasingly popular with donors of foreign aid. These new funding modalities allow donor governments to cooperate with like-minded donors only and target their aid to specific countries, only and development objectives while using the financial and, by and large, the implementation infrastructure of the multilateral organization which hosts them.¹ In the foreword to an evaluation by the World Bank's Independent Evaluation Group (IEG) of its trust fund portfolio, the Director General of IEG writes that "trust funds have emerged as a significant pillar of the global aid architecture, used to address limitations in bilateral aid and fill perceived gaps in the operations of existing multilateral institutions" (IEG 2011: v, emphasis added). Relative to multilateral "core" aid, earmarking is likely to increase donor influence about aid allocation, thereby leading to a "bilateralization" of multilateral aid (e.g., OECD 2011: 4, World Bank CFGP (2013): 5, Kindornay and Besada 2011: 12). What multilateral organizations see as bilateralization, donors consider as a "multilateralization" of their bilateral aid aimed at supporting, among others, fragile countries, and non-sovereign territories. While the counterfactual aid delivery will remain unsettled, we test the claim that trust fund aid is more influenced by political and economic considerations than multilateral core aid.

Over the last decade, trust funds at the World Bank have proliferated. In the fiscal year 2012, the number of active trust funds exceeded one thousand, excluding the largely independent financial intermediary funds² (FIFs).³ These funds disbursed more than 4.6 billion USD, net of FIFs (World Bank 2013:7). To put this number into perspective: the concessional arm of the World Bank, net disbursements by the International Development Association (IDA) amounted to 6.8 billion in the 2012 fiscal year. Figure 1 shows the significant increase in trust fund disbursements over the last decade and how its volume compares to the IDA funds. Most disbursements were made to specific countries while a small share is allocated to a region or used for global goods. Donors are very heterogeneous in their use of trust funds to deliver their foreign aid. In the 2002-2012 sample period, the largest contributors to World Bank funds excluding FIFs, were provided the United States, the United Kingdom, the European Commission, Japan and the Netherlands.

¹ Because trust fund contributions are earmarked, they are officially classified by the OECD DAC as bilateral aid, although multilaterals are the implanting agencies.

² Programs funded from FIFs are typically implemented by separate agencies, such as GAVI or the Global Fund, and not by World Bank staff.

³ The fiscal year at the World Bank runs from July 1 to June 30.

Figure 1 approximately here.

Academic evaluations of this recent trend towards trust funds are still largely missing. In particular, the allocation of trust funds across recipient countries remains largely unexplored, with a mostly descriptive working paper published by the resource mobilization department of the World Bank being the only exception (Huq, 2010). We investigate the characteristics of recipient countries that benefit from this new source of aid, and study other factors determining the amounts received. Controlling for the main official motives given in donor and Bank rhetoric about trust funds, we explore whether donors aim to circumvent the World Bank's system for the allocation of resources, particularly of IDA resources. IDA resources are allocated according to an explicit rule taking into account need and institutional capacity, where the latter is assumed to increase aid effectiveness. If trust fund aid is not allocated according to institutional performance, this might diminish the reform incentives for recipient countries. The hypothesis is also inspired by a strand of literature on geopolitically influenced decisions of international organizations in general, and the World Bank in particular (e.g., Dreher, Sturm and Vreeland 2009; Kilby 2009) as well as qualitative evidence (IEG 2011).

The Internal Evaluation Group of the World Bank (IEG 2011) conducted structured interviews with fifty-five officials of eight donor countries and finds that six out of eight donor countries use trust funds to target priority issues or countries. According to donor statements, core contributions to the World Bank and other MDBs cannot achieve these aims because they cannot be earmarked, and are mainly allocated on the basis of country performance, income and size. The IEG (2011: 6) concludes that "trust funds are a way to circumvent the allocation system of the MDBs' [multilateral development banks] country-based business model."⁴ However, if donors seek to avoid IDA's allocation systems, they could simply resort to their own bilateral aid programs, instead of using trust funds administered by multilaterals. In many cases, bilateral donors use trust funds to complement their bilateral programming when their aid agencies do not have sufficient presence or expertise in countries to implement programs effectively (OECD 2010: 40, 2011: 29). The IEG evaluation (2011:6f) also suggests that donors appreciate the World Bank as a trustee because of its capacity, expertise and strong working relations with governments, and reports that five out of eight donors acknowledged using trust funds to influence the World Bank. We thus test the hypothesis suggested by the IEG statement above, namely that donors use trust funds to go around IDA's allocation system.

Officials from all of the eight donor countries interviewed also reported using trust funds to fill gaps in the multilateral aid system, such as reacting to "emergencies such as natural disasters, disease outbreaks, and the end of armed conflict, where donors want to coordinate their bilateral aid and where the MDBs do not grant resources to engage on a sufficient scale"

⁴ The IEG (2011) also found that six out of eight donors direct aid resources through trust funds "to issues or countries of national policy or public interest" and that five out of eight donors use trust funds to influence the World Bank. A UK official stated that his government supports large global funds in climate change, health and education because of "impatience with the existing multilateral system" (IEG 2011: 6).

(IEG 2011: 5). Additionally, trust funds can be used to support non-sovereign national entities (e.g., West Bank and Gaza) that are legally ineligible to borrow from multilaterals (IEG 2011). Donors also aim to support global public goods, which is impossible to achieve through the multilaterals' country-based lending model. Using data on World Bank trust funds for the 2002-2012 period, we test whether these official motives explain which developing countries receive trust fund aid, whether multilateral aid is "bilateralized" or IDA's incentive-compatible allocation undermined. We use trust fund contributions and disbursements to understand who contributes, who benefits and how trust fund aid fits in the larger aid architecture. We use ordinary least square regressions with year-, country- and region-fixed effects, consider country-specific, single-donor and multi-donor trust funds separately, and look at specific sectors. The remainder of the paper is structured as follows: the next section provides a literature review, section three describes the main hypotheses and the data, and section four presents and discusses the methods and main results of the analysis for contributions, disbursements, and sector-specific disbursements in three subsections. Section five concludes.

2. Literature

Donor governments use trust funds to target their foreign aid to specific countries and development priorities, while, and in contrast to bilateral aid, delegating responsibility for its management and implementation to the multilateral organizations. Eichenauer and Hug (2014) propose a principal-agent model to better understand the tradeoffs donors face when choosing bilateral, multilateral or trust fund aid. They find that the possibility of trust fund contributions decreases bilateral and unearmarked multilateral aid given a fixed aid budget. Reinsberg, Michaelowa and Knack (2014) use the same dataset as we do in this paper to explore which donors contribute to which World Bank trust funds, but do not look at allocations across recipient countries. Accepting trust funds is attractive for a multilateral organization, allowing it to expand its global role and operations, increase its staff and assets under management (IEG 2011: 9). According to public choice theory, this is the typical behavior of bureaucracies (Niskanen, 1971).

From a recipient country perspective, trust funds may have several positive implications. For middle-income countries seeking technical assistance but reluctant to borrow for this purpose, trust funds make technical assistance available at grant terms (IEG 2011:7). Trust funds have also supported post-conflict and post-disaster countries and territories that are ineligible to borrow from the IDA or the IBRD (e.g., Timor-Leste or Aceh in Indonesia). Moreover, trust funds have encouraged the provision of global public goods (IEG 2011: viii). It has further been suggested that trust funds lead to more donor coordination prior to implementation, reducing excessive and harmful donor fragmentation in the field (Huq 2010, IEG 2011: ix). However, effects on donor harmonization seem to be ambiguous (IEG 2011: 43, Barakat, Rzeszut and Martin 2012: 34f.) as trust funds usually do not replace existing bi- and multilateral projects (Barakat 2009: 112).

For individual low-income countries, trust funds may increase total aid inflows, particularly for countries in arrears or non-sovereign entities, where the IDA is legally forbidden to borrow and where bilateral donors prefer not to engage alone (IEG 2011: 7). Looking at aggregate official aid flows, however, it is still unclear whether, and in what sectors or countries trust fund aid substitutes or complements for multilateral or bilateral aid, or if it is additional to traditional aid. Using data on donors organized in the OECD's Development Assistance Committee (DAC), Reinsberg et al. (2014) find some evidence that multi-bi aid is additional to multilateral aid, although they face problems of reverse causality and simultaneity. For the World Bank, Reinsberg (2014) provides descriptive evidence for differences in regional and country focus between IBRD/IDA trust funds and IDA allocation, using the same dataset as we do. Also for the World Bank but based on data only through 2009, Huq (2010) finds that the sectorial allocation of recipient-executed trust funds (RETFs), a class of trust funds, is complementary to IDA disbursements but not to the IBRD's. He also describes a positive but not very strong correlation between RETF commitments per capita and the World Bank's Country Policy and Institutional Assessment (CPIA) index. The CPIA measures recipients' policy performance and institutional capacity. The index is the main determinant of countries' IDA allocations, reflecting the view of IDA donors that resources are more likely to be used productively in high-scoring countries (e.g., Burnside and Dollar 2000, 2004).

The literature finds that multilateral and bilateral donors' aid allocations have become more selective with respect to the quality of the institutional environment in recipient countries after the end of the cold war (Dollar and Levine 2006, Claessens et al. 2009). Moreover, the literature on the allocation of multilateral aid and loan receipts indeed finds that recipient country characteristics of need such as low per capita income and population are important determinants of multilateral aid and loans receipts (e.g., Frey and Schneider 1986, Kuziemko and Werker 2006, Dreher et al. 2009, Morrison 2013). However, coalitions of member states or influential individual members of the multilateral organization may bias this need-based aid allocation according to their economic and political interests (Kuziemko and Werker 2006, Dreher et al. 2009). Bilateral aid is targeted even more according to political and economic interests (e.g., Alesina and Dollar 2000). Biases such as these may create aid orphans, developing countries which receive significantly less aid than comparable countries (OECD 2013). Trust funds might aggravate the problem of aid orphans if donors can use trust funds to target economically and politically important countries as with their bilateral aid while benefiting more the World Bank's implementation capacity, and if multilateral core aid is indeed more altruistic and efficient than bilateral aid.

3. Hypotheses and data

Concerns have been expressed that the proliferation of trust fund aid leads to an increased "bilateralization" of multilateral aid (e.g., OECD 2011: 5, Mahn 2012: 3, Thalwitz 2013: 3). If one considers multilateral aid more effective than bilateral aid (e.g., Powell and Bobba 2006, Headey

2008, Easterly and Pfutze 2008, Birsdall and Kharas 2010, Knack, Rogers, and Eubank 2011), the consequence of increased multi-bi aid would be lower aid effectiveness than under the counterfactual of some of these aid flows being provided as core multilateral aid. It is often suggested that bilateral aid is less effective because donor interests prevail over project selection according to quality, resulting in lower marginal aid effectiveness (e.g., Kilby 2013, Dreher et al. 2014). While donors might attempt to influence the multilateral organizations as well, individual donor interests are less pronounced in multilateral organization with heterogeneous interests of principals (Copelovitch 2010).

Ideally, we would like to merge trust fund contributions and disbursements and analyze the two stages simultaneously to study donor-specific allocation determinants and investigate whether trust funds donor interests are diffused. For example, we would like to test whether strategic aid giving might be decreasing in the number of co-donors in a multi-donor trust fund, or whether Bank staff influence increases with the time length they have trust funds under management. Unfortunately, it is not possible to merge trust fund contributions and disbursements. This seems to be due to a number of reasons. One reason is contributions to trust funds are disbursed with substantial lags with an average disbursement lag of several years, according to information from World Bank staff. During this time, a number of trust fund reforms were undertaken, which has resulted in a consolidation of trust . Therefore, the focus of our analysis is on trust fund disbursements but we provide some evidence about the main donors to these funds. The contributions data include information on the recipient country for less than a quarter of the observations but an important share of total flows (Figure 2). In the disbursements data, recipient countries are almost all aid indicated (see Figure 1).

Given the increasing importance of trust funds aid and their availability outside IDA's performance-oriented allocation scheme, we are interested in whether trust fund allocations follow the donors' view that resources are more likely to be used productively in countries with a high CPIA score (e.g., Burnside and Dollar 2000, 2004). Morrison (2013) did not find any evidence that CPIA scores are influenced by the Bank's shareholders and we interpret them thus as indicators of institutional quality. Among IDA-eligible countries, allocations are mainly based on the CPIA index that measures recipients' policy performance and institutional capacity.⁵ The effect of the overall CPIA rating on the probability and amounts of trust fund aid could be positive or negative. Donors might want to direct more trust funds to higher-performing countries for the same reasons as with IDA funds. Alternatively, trust funds might be a way for some donors to compensate partially for IDA's performance-based country allocations, if they perceive some lower-performing countries as under-aided. Aggregated and partially disaggregated CPIA scores for IDA-eligible countries are publicly available from the World Development Indicators (WDI) since 2005, and range between 1 (low) and 6 (high). For non-IDA countries and prior years, scores are not publicly available, but were obtained with the

⁵ Lack of creditworthiness according to Bank research and portfolio performance at the Bank are additional criteria for IDA resource allocation. However, these are relatively minor factors (World Bank 2014c), and they are more challenging to control for empirically because this Bank data is not available.

necessary permissions by one of the authors from internal World Bank databases. CPIA scores are not assigned in some cases after countries fall into arrears with the World Bank and are no longer classified as active borrowers. This typically is the case when the quality of policies and governance are poor, as indicated by their CPIA scores for years when they were active borrowers.⁶ In these cases, we replace the missing score with the lowest score received by any other country in this year.

Another main variable of interest is the interaction of the CPIA index with an IDA recipient dummy. This dummy equals one for country-year observations where there are positive IDA flows or if the country is on the list of eligible IDA recipients for that year.⁷ IDA eligibility might influence the probability and size of trust fund resources with a sign that could go in either direction. On the one hand, IDA recipients might be less likely than IBRD countries and non-member states and territories to receive trust fund aid because they already benefit from IDA resources. On the other hand, bilateral donors might view IDA countries as those countries in particular need of additional resources (Knack, Xu and Zhu 2014) and where the Bank has an advantage in expertise, and thus channel more of their “bilateral” aid to those countries through the Bank in the form of trust funds. Any impact of CPIA ratings – whether positive or negative – should apply more to IDA-eligible recipients than to other countries, because the CPIA ratings are used by the Bank only for IDA allocations. If donors want to identify and target higher-performing countries among non-IDA countries, CPIA ratings are not (publicly) available to use for this purpose. Because the CPIA does not affect Bank aid to non-IDA countries, donors have no reason to compensate for any under-provision of aid to low-rated recipients. We test this hypothesis by including an interaction term between IDA eligibility and demeaned CPIA scores, where demeaning allows us to interpret the IDA eligibility regression coefficient as the effect of IDA eligibility conditional on the mean value of the CPIA.⁸

According to donor rhetoric, the proliferation of trust fund aid is associated with a need for a new type of aid, that is complementary to multilateral and bilateral aid, also in terms of its cross-country allocation. We test this hypothesis by controlling for (logged) IDA aid and (logged) other official aid.⁹ The motive of compensating or reinforcing IDA aid could be captured by a measure of IDA flows, or by the IDA eligibility dummy. We also test for complementarity with official development assistance received from sources other than trust funds and the IDA. Donors might provide funding through the Bank rather than directly in circumstances where they do not want to be present in recipient countries themselves. For example, donors might want to delegate project implementation to the Bank in fragile countries

⁶ These countries are Somalia, Afghanistan, and Iraq.

⁷ We apply these two criteria which are not perfectly congruent. Some countries might not want to borrow from IDA while some countries still borrow because they are just above the eligibility cutoff. Note that according to Huq (2010, footnote 9), normal financial support from IDA is not available to Sudan because of outstanding arrears. Therefore, we set the IDA eligibility dummy for Sudan to zero.

⁸ Without demeaning, the coefficient on IDA eligibility represents the effects for CPIA=0, which is lower than the minimum possible rating.

⁹ We will consider the sectoral complementarity between different aid types in extensions.

because it allows diffusing accountability about aid effectiveness, because sending bilateral staff is politically sensitive or because donors want to be present as a unitary actor to avoid harmful fragmentation in aid activities. We use OECD/DAC data (2014c) to control for official development aid received from official donors through channels other than trust funds and World Bank (2015) data for IDA flows.

Rhetoric by donors and the World Bank suggests that trust fund aid is a particularly attractive instrument in fragile contexts. We would thus like to control for fragile country status. However, the World Bank did not maintain an official list of fragile and conflict situations prior to 2006 which we assume to imply that the concept has not had effects on allocation before that. We thus provide results for the sample starting in the fiscal year 2006 where the dummy equals one in those country-years in which a country was on the official lists of fragile situations. We expect fragile countries to be more likely to receive aid from trust funds rather than from the IDA. On the one hand, the IDA might be restricted by its legal mandate when governments in fragile contexts change repeatedly, making it virtually impossible to negotiate programs. Fragile states also have low CPIA scores by definition, limiting the IDA resources available for this country mechanically due to the allocation rule.¹⁰ On the other hand, some bilateral donors may view the IDA performance-based allocation system as under-aiding fragile countries confronted with challenging situations. Moreover, some bilateral donors might be affected more or concerned more than other donors with security, refugee and other problems associated with specific fragile- and conflict-affected states. Such donors might be geographically proximate to the fragile situation, and have high reputation or economic stakes in the fragile country, such as former colonial powers. We identify the relevant colonial power as the most recent one, where a country had more than one, using information from the CIA Factbook and other sources. .

Since Maizels and Nissanke (1984), aid allocation studies tend to include both recipient need and donor interest variables. Commonly used need proxies are population, GDP per capita (PPP, constant USD) or GNI per capita (Atlas method, constant USD) from the World Development Indicators. We also include variables to capture commercial and political interests.¹¹ The importance of geopolitical interests is measured mainly by the alignment of votes between recipient and donors in the United Nations General Assembly (UNGA). We generate annual measures of voting alignment that range from 0 to 1 with higher values implying higher similarity. Our alignment measure is constructed following Kilby (2012) using raw data provided by Strezhnev and Voeten (2015). In the main analysis, we focus on UNGA votes that were considered important by the US State Department, but future versions will comment on the robustness of these results when using all votes. Previous studies have shown that the United States and other large donors influence multilateral aid allocation (e.g., Kuziemko and Werker 2006). The largest contributors to World Bank trust funds (excluding FIFs) are the United Kingdom, the Netherlands, the European Commission, and the United

¹⁰ A small number of post-conflict countries receive supplemental IDA funding for a limited number of years.

¹¹ A dummy for a colonial past could be an additional control variable.

States. We thus control for the mean alignment of the G3 trust fund donors, excluding the European Commission because preference aggregation of this sui generis organization is very complex (Reinsberg, Michaelowa, and Schneider 2014).¹² Commercial interests are measured by the sum of the G3 exports, using data from the OECD (2014b). We assume that missing values in the export data imply no trade and replace them by zero. As is common in the literature, we also introduce an indicator variable equaling one in those countries that were colonized in the past. Moreover, we generate an indicator variable for those country-years following a Western military intervention.¹³ Donor governments might provide aid through a country-specific trust fund when they have geopolitical interests in the country but might not wish to openly to do so with bilateral aid because it would signal official approval of a recipient country government and its activities. This signaling might not be desired for reasons of domestic or international politics, or because of public opinion in the recipient country. An example for this arguments is the Afghanistan Reconstruction Trust Fund, one of the largest country-specific trust funds, although other motives certainly mattered.

Data for trust fund contributions and disbursements come from the financial accounting of these trust funds. The World Bank distinguishes among three types of trust funds, the largely independent financial intermediary funds (FIFs) to which the Bank provides financial intermediary services only, IBRD/IDA trust funds, and IFC trust funds (World Bank 2013: 6), managed by the respective arm of the World Bank. The bulk of trust funds are managed by the International Bank for Reconstruction and Development (IBRD) and the International Development Association (IDA). IBRD/IDA trust funds are classified further in recipient executed trust funds (RETFs), which are implemented by a third party but supervised by the Bank, and Bank executed trust funds (BETFs), which support the Bank's work directly. While RETFs are similar to the IDA or IBRD in terms of being disbursed to recipient countries, BETFs are more similar to Bank administrative expenses, and often finance Bank activities that are not country-specific and thus not relevant for our research question. Our dataset does not contain the information on country allocation by FIFs, which have their own governance and disbursement systems. We might add this information from other sources at a later stage. The number of trust funds at the International Finance Corporation (IFC) is relatively minor (World Bank 2013) and about seven percent of our contribution sample. We thus focus on IBRD/IDA trust funds in the contribution and disbursement analysis.

Figures 2 and 3 approximately here.

¹² Membership on the United Nations Security Council (UNSC) has been shown to come with many benefits (e.g., Kuziemko and Werker 2006, Dreher et al. 2009), potentially also with trust fund aid. However, a dummy for temporary two-year membership on the UNSC, for which data are provided by Dreher et al. (2009) up to 2011 and extended by us is highly significant in the contribution stage (Table 3, Column 4) if it is introduced contemporaneously, a year lag or one year lead. As expected for the two-year non-extendable membership, a two-year lag and a two-year lead are insignificant.

¹³ Specifically, this indicator equals one for Afghanistan (2001-), Iraq (2003-), Haiti (2010-), Lybia (2011-), Ivory Coast (2011-), Central African Republic (2013-), and Mali (2013-).

Figure 2 displays the upward sloping trend in contributions to World Bank trust funds. The black line shows the general trend in aggregated trust fund contributions whereas the dashed line depicts the trend in contributions to trust funds that are country-specific. This is the sample we use for the contribution part of our empirical analyses. The data also contain information about donor types. As figure 3 shows, DAC countries are by far the most important donor type in terms of volume, accounting for eighty percent of contributions.¹⁴ Non-DAC donor countries, private companies, NGOs and multilateral organizations are minor contributors. While the motives for channeling aid through trust funds might differ between donor types, the aid literature mainly looks at DAC donors, mostly because of data restrictions. To keep this analysis comparable to the existing literature, future versions of this paper will show results for the contribution stage considering all donors and focusing on bilateral DAC donors only, i.e. excluding the European Union, non-DAC donor countries, private donors, and multilateral organizations. Our data structure implies however that the main results present relationships based on all country-specific contributions, and does not discriminate between the source of funds.

4. Estimation Method and main results

This section tests the “bilateralization”-hypothesis and the complementarity between trust fund aid with IDA and other official aid. The correct estimation procedure is unclear a priori because the the researcher cannot observed whether the decision about the selection and allocation of aid is taken as one and the same decision in the donor country’s administration, or, alternatively, as two separate and sequential decisions selection. Thus, the choice of the estimation model implies an implicit assumption about the donors’ decision procedure. This version looks only at a one-stage model but future versions will show results for both types of models for the contribution data.¹⁵ Because almost all country-years receive positive trust fund disbursements, we only consider a one-stage model. Our full sample is based on those countries that the OECD considered developing countries in a given year. Table 1 lists the countries with complete control variables for the main analysis using the disbursement data.

¹⁴ Current OECD-Development Assistance Committee (DAC) members are: Australia, Austria, Belgium, Canada, Czech Republic, Denmark, European Union, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Japan, Korea, Luxembourg, The Netherlands, New Zealand, Norway, Poland, Portugal, Slovak Republic, Slovenia, Spain, Sweden, Switzerland, United Kingdom, and the United States. However, several of these countries only joined in recent year. We treat them as DAC donors in our data because these countries started following DAC rules prior to joining DAC as full members (OECD 2014a).

¹⁵ When we focus on the allocation stage in the two-stage decision model, we will use a sample b that includes only those countries which received country-specific aid from trust funds at least once in the 2002-2012 period.

Table 2 displays descriptive statistics for our sample. Average GDP per capita is 6686 USD. The average GNI per capita for countries in the sample is at 6920 USD, which is slightly higher than GDP per capita. Such a country would be considered an upper middle income country in the fiscal year 2012. The World Bank income classification is based on GNI per capita for which we will present robustness checks in future versions of the paper. The table further shows that IDA-eligible countries or countries that have loans outstanding from IDA make up sixty-six percent of country-year observations. A comparison of trust fund aid with other aid inflows shows that for the average recipient, trust fund aid is relatively minor. With regard to the political and economic variables, the data shows that average voting affinity with the largest donors is low for all developing countries. The sum of exports from the G3 donors (UK, USA, and the Netherlands) is substantially smaller than of the G7 donors (G3 plus Japan, Germany, France, and Canada). We now turn to analysis of the determinants for providing trust fund aid using data on contributions to country-specific trust funds. This first part of the analysis serves to support arguments about the allocation of trust fund disbursements.

a. The contribution stage

The contributions data include information on the amounts, the donor, the trust fund type, the trust fund name, and for country-specific trust funds also the recipient country. We focus on country-specific trust funds in this section, which made up sixty-five percent of total contributions in the fiscal year 2012 (Figure 2). The largest sovereign contributors to country-specific trust funds are the United Kingdom, the United States, and the Netherlands. We thus construct the political and economic interest measures for the G3 donors in the regression with all donors and provide results for the three donors separately.¹⁶ As figures 1 and 2 show, trust fund contributions have increased massively over the sample period and we thus include year fixed effects in all regressions. Because we are interested mainly in the cross-country variation that influences the allocation of trust fund aid, we do not control for recipient country fixed effects in the main regressions, but provide and discuss results with two-way fixed effects below. All models are estimated using cluster-robust standard errors (clustering on recipient countries unless stated otherwise) to avoid overestimation of significance. This version of the paper only provides results for one-stage models using Ordinary Least Squares estimation. The baseline regression model for the allocation specifications in Table 3 then looks as follows:

$$\ln(\text{country-specific contributions})_{it} = \alpha + \beta \text{CPIA}_{it-1} + \gamma \text{IDA}_{it} + \delta \text{IDA}_{it} * [\text{CPIA}_{it-1} - \text{mean}(\text{CPIA})_{t-1}] + \zeta \text{Other aid}_{it} + \theta \text{IDA aid}_{it} + \eta' Z_{it} + \lambda' X_{it} + \sigma_t + \varepsilon_{it}$$

The dependent variable is the natural log of trust fund aid with zero, negative, and missing values set to 1 before taking logs. The World Bank's CPIA index measures bureaucratic quality.

¹⁶ In the fiscal years 2002-2012, these donors contributed 4.08, 2.47, and 2.04 billion constant USD respectively.

The CPIA score ranges between 1 (low) and 6 (high).¹⁷ As noted above, we demean the CPIA score in order to interpret the main effect of the IDA dummy at the mean value of the CPIA rather than at CPIA equaling zero, which is never the case. Z_{it} refers to the political economy controls introduced above and X_{it} includes proxies for need, both included contemporaneously. σ_i are year-fixed effects and ε_{it} is the cluster-robust error term.

Regarding the controls X_{it} , we include the standard variables used in the aid allocation literature because our main interest is to test whether they also have explanatory power in the context of trust fund aid. We control for recipient need and merit using GDP per capita (constant PPP) and population. Following common practice in the aid allocation literature, we take the natural log transformations of GDP per capita, population and, for the allocation stage, of trust fund aid. Logging these variables reduces the influence of outliers and facilitates the interpretation of coefficients. In a robustness check, we exchange PPP GDP per capita with GNI per capita (Atlas) since this is used for the resource allocation of the IDA, and a country's income status according to the Bank's income classification. Note that we use the World Bank's fiscal years as the time dimension for our panel data because several of our variables of interest, namely CPIA scores, IDA eligibility, IDA aid and fragile situation status, are based on the fiscal year. However, other data such as the WDI or aid disbursements from the OECD are based on the calendar year. If the fiscal year is defined as the calendar year plus one, contemporaneously included calendar-year-based indicators are by construction lagged by at least 6 months in the regressions, mitigating endogeneity concerns somewhat.

We now compare the performance of a one-stage model with the allocation stage of a two-stage model. Column 1 in Table 3 is based on all developing countries (sample *a*). Other aid and voting alignment with the G3 donors are significant at conventional levels while the other covariates are insignificant. The highly significant "Other aid" variable may be capturing part of the effects of need and donor interest covariates because these flows are potentially determined by the same factors as trust fund aid. Indeed, the previous literature and our replication in columns 2 and 3 show that IDA aid and other aid are influenced by variables of donor interest and need, and, for low-income countries, also by their institutional quality. Note that the IDA dummy is a need variable. Because trust fund aid, other aid and IDA are influenced by the same variables, we use the OLS residuals of regressions 2 and 3, which contain the variation in aid receipts unexplained by the covariates.¹⁸ By using the residual, controlling for "other aid" should not capture any political, economic or need motives of trust fund donors and bias the coefficients on those variables. The estimated regression then becomes:

$$\ln(\text{country-specific contributions})_{it} = \alpha + \beta \text{CPIA}_{it-1} + \gamma \text{IDA}_{it} + \delta \text{IDA}_{it} * [\text{CPIA}_{it-1} - \text{mean}(\text{CPIA})_{t-1}] + \zeta \text{Residual}(\text{Other aid})_{it} + \theta \text{Residual}(\text{IDA aid})_{it} + \eta' Z_{it} + \lambda' X_{it} + \sigma_i + \varepsilon_{it}$$

¹⁷ The CPIA index rates countries against 16 criteria in four clusters: economic management, structural policies, policies for social inclusion and equity, and public sector management and institutions (World Bank 2014b).

¹⁸ Whenever we add covariates, we recalculate the residuals using a regression that includes the additional covariates.

Column 4 includes the respective residuals from a regression on (logged) IDA aid and (logged) other aid inflows. Several variables, which were insignificant in column 1 becomes significant in columns 4 after adjusting for joint determinants. Note that by using residuals we estimate, by construction of OLS, the same coefficient on other aid and IDA aid in column 1 and 4.

Table 3 offers our main results for the contribution stage.¹⁹ Previous studies on bilateral and multilateral allocation consistently found that poorer countries are more likely to receive aid (e.g., Claessens et al. 2009) and that smaller countries receive more aid per capita (e.g., Fleck and Kilby 2010). Column 4 confirms that smaller countries receive more aid while need is probably captured in the IDA eligibility dummy which has highly significant and large coefficients. Column 6 shows that trust fund aid and GDP per capita are indeed negatively correlated when the IDA dummy and, consequently, its interaction with the CPIA are excluded. Among trust fund recipients, poorer countries and poor countries with relatively good institutions receive more aid (column 4). Figure 4 shows the marginal effect of the demeaned CPIA score. According to IDA's allocation rules, need and quality of governance should be the main determinants of aid (Column 3). Indeed, the IDA eligibility and its interaction with the demeaned CPIA score are highly significant. Column 5 considers actual trust fund recipients only (sample *b*). The coefficient on the interaction turns insignificant while the IDA dummy remains significant and increases in magnitude.

Figure 4 approximately here.

Other aid flows are positively correlated with trust fund aid while IDA aid is insignificant. According to the estimates in columns 4, 6, and 7, trust fund aid is increasing in voting alignment with the three largest trust fund donors (G3) in the UN General Assembly while the results for total G3 exports are inconsistent. Column 6 introduces two indicator variables. Colony equals one if the recipient country has been colonized in the past. If there has been a recent military operation by Western donors in the recipient country, the military variable equals one. Both coefficients are positive and highly significant. Column 7 introduces the indicator for fragile country that is determined only since 2005 and thus shortens the sample period. Contrary to our expectations, the coefficient is negative and highly significant.²⁰ This suggests that fragile countries do not receive more trust fund aid in average. Column 6 is our preferred specification and the baseline regression to which we compare the disbursement results and alternative estimation procedures.

¹⁹ Future versions will consider estimations at the donor-recipient level (as have earlier versions).

²⁰ The CPIA score and its interaction are excluded because fragile status is closely associated with a low CPIA score. When we include these variables, the coefficient on the fragile indicator turns positive (.13). Low-income countries are often simultaneously IDA recipients and fragile countries. When the IDA eligibility dummy, the CPIA score and their interaction are excluded, the fragile dummy turns negative positive (-2.1), significant at the one percent level. An interaction between IDA eligibility and fragile countries is omitted but the fragile dummy has a negative coefficient significant at the one percent level (-2.3).

Table 4 shows regressions with country-fixed effects. Columns 1, 2, and 3 in Table 4 are analogous to columns 2, 3 and 4 of Table 3 except that the colony indicator is dropped due to time invariance. According to Columns 1-3, IDA eligible recipient countries with institutions above mean quality are more likely to receive any aid type. For IDA aid, the eligibility dummy is an important predictor by itself. Note also that the CPIA score is positive and significant in the interaction and as main effect. In column 3, trust fund aid is significantly related to the other aid residual. Column 4 includes region-fixed effects instead of country-fixed effects, using the region classification of the Bank. We choose the Middle East and North Africa (MENA) region as our baseline region. All coefficients turn significant except G3 exports and the CPIA score, where the latter might reflect that CPIA scores are relatively similar within regions. UNGA alignment with the G3 donors increases trust fund with a region. All region dummies are economically and statistically significant and positive except for the Sub-Saharan Africa region, which is negative and significant.

Replication results for the specifications in Table 3 for the three largest trust fund donors, the United Kingdom, the Netherlands, and the United States, suggest that the United Kingdom and the Netherlands allocate more aid to poorer countries with good institutions. There is no evidence that the United States takes these factors into account in its allocations to country-specific trust funds. The United Kingdom provides funding to trust funds supporting recipient countries, which are already supported bilaterally. These results are highly significant. According to the fixed-effect results, the United Kingdom allocates significantly more trust fund aid to countries that vote in line with the UK in the UN General Assembly. However, the coefficient on this variable is significant in the regression on their bilateral aid. The UK also provides more trust fund aid to countries that receive aid bilaterally. Moreover, the South Asia region receives most UK trust fund aid. It also is the only region with a significant coefficient. The Netherlands provide most aid to the Europe and Central Asia region and, within regions, provide more trust fund aid to IDA countries, in particular those with good policies. Dutch bilateral aid is not significantly related to any of the regression variables. The United States provides less trust fund aid to IDA eligible countries. Bilateral US aid is positively and significantly related to US exports, IDA eligibility but negatively to the interaction with the CPIA score. Otherwise, results for the Netherlands and the US are inconclusive.

In the contribution stage, we find thus consistent evidence that small, poor countries with an institutional quality above the mean CPIA rating, a colonial past and with a recent military operation receive more aid from trust funds. Moreover, it seems that the United Kingdom, the contributor to trust funds and to country-specific trust funds, allocates its aid more strategically but also performance-oriented than the other two large donors.

b. The disbursement stage

The disbursement data includes information about recipients for all trust funds, not only country-specific trust funds. Our main results use the full dataset but we provide robustness

checks for country-specific trust funds. The disbursement data allows us also to disaggregate the data into sectors for which we can have sector-specific CPIA scores. Tables 5 and 6 are set-up in the same way as Tables 3 and 4 above, which allows straight-forward comparisons between the disbursement and the contribution stage. Because almost all countries receive some trust fund aid during the period, we do not show results for the reduced sample *b* (Column 5 in Table 3).

According to Column 4 in Table 5, IDA eligibility strongly increases the amount of trust fund aid received and trust fund disbursements are correlated with IDA aid. We interpret this as evidence that trust fund aid co-finances IDA projects, e.g., providing support for mitigation of environmental impacts, or by financing additional technical assistance. The main effect of the CPIA score and its interaction with the IDA dummy are both insignificant. This means that trust fund disbursements does not follow IDA's performance-oriented allocation. When we add the indicators for colonial past and recent military operation, the CPIA score is omitted. The significance of other variables does not change. The coefficient on the fragile indicator in the last column that looks at the post-2005 period is insignificant.²¹

Table 6 shows results with country-fixed effects in Columns 1-3. While no variables are significant in the regression on other aid (Column 1), coefficients on IDA and its interaction with CPIA are positive and significant as expected in the regression on IDA aid (Column 2). Notably, the CPIA score is positive even for IBRD countries. In column 3, the dependent variable are (log) trust fund disbursements. The CPIA score is omitted, the interaction is negative and insignificant, and the IDA dummy is insignificant but positive. Column 4 replaces country- with region-fixed effects with the MENA as the baseline region. The IDA dummy, the CPIA score and the IDA residual are positive and significant but the interaction is insignificant. This suggests that within poor countries in a region, performance is not a criterion. Unlike in the contribution stage, all region dummies are negative. As before, Sub-Sahara Africa receives significantly less than the MENA region.

For better comparison with the contribution stage, we re-run the OLS regressions with year-fixed effects for the sample limited to disbursements by country-specific trust funds. As in the contribution stage, we use alignment, total exports, and colonial past with the G3 donors. Overall, results are very similar. There are two notable differences however: in the specifications corresponding to Column 4 and 5 of Table 5, the interaction turns significant and in Column 6 the coefficient on fragile turns significant at the ten percent level while staying negative. We also re-run regressions for multi-donor trust funds (MDTFs), which receive contributions from more than one donor, and single-donor trust funds (SDTFs). Figure 6 shows that in the early sample years SDTFs were the dominant form of trust funds but total annual contributions to MDTFs surpassed SDTFs contributions in the fiscal year 2005. Contribution to

²¹ When we include CPIA score and its interaction, the coefficient on the fragile indicators turns positive (1.39) and significant at the ten percent level. When the IDA eligibility dummy, the CPIA score and their interaction are excluded, the fragile dummy turns negative (-.20). An interaction between IDA eligibility and fragile countries is omitted but the fragile dummy has a insignificant negative coefficient (-.28).

MDTFs have grown steadily to reach almost three times the volume of SDTFs in the fiscal year 2012. Reinsberg, Michaelowa and Knack (2014) explore the choice of a trust fund type by donors. The most obvious reason is that aid SDTFs is simpler to use strategically because no consensus must be reached. According to the estimates, allocation by SDTFs and MDTFs are very similar. The main differences are that fragile countries are significantly less likely to receive aid from a single-donor trust fund and that aid from SDTFs correlates negatively with other aid. In contrast, other aid is related positively to aid from MDTFs. We interpret these findings as evidence that SDTF work as substitute for other aid while MDTFs seem to work as a complement to other aid. In the sample based on SDTF, colonial heritage has a negative and significant coefficient in the specification corresponding to Column 5 of Table 4.

In Table 7, we replace GDP per capita with GNI per capita since this is used for the resource allocation of the IDA, and the Bank's income classification. Note that GNI per capita has more missing values than GDP per capita so that the sample is reduced by almost four hundred observations. While the magnitude of the coefficient on our main variable of interests, IDA, CPIA and their interaction, changes slightly, the signs and significance levels remain the same. The two notable differences are that the colonial heritage indicator turns insignificant and the fragile country indicator becomes negative and significant at the ten percent level. In the country- and region-fixed effect regressions with GNI per capita, previous results largely hold. The two main changes are that the CPIA score turns insignificant in the regression corresponding to column 2 of Table 6 and that UNGA alignment turns insignificant in column 4.

Overall, the disbursement data provides little evidence that trust fund aid leads to a "bilateralization" of multilateral aid. The coefficients on the economic and political variables of interest are mostly insignificant and even change sign. Trust fund disbursements are positively associated with residual of IDA aid but trust fund aid is not allocated according to institutional performance as measured by the CPIA score. Therefore, trust fund aid might undermine the incentives for improving policy that are provided by IDA's allocation rule.

c. Trust fund disbursements by sector

We refine the disbursement analysis by exploiting the sectoral disaggregation of our data and combining it with data on IDA allocations by sector and the availability of sector-specific CPIA scores.²² Most projects contribute to more than one objective and have objectives in different sectors. While we have information about the respective sectoral shares for each project, we do not exploit this detailed information by assigning projects to the sector, which has the largest share. We focus on sectors for which we have a corresponding CPIA sub-score, namely education and health. For environment, we use the theme code and the CPIA score for the

²² We use the Bank's sector codes, available at http://siteresources.worldbank.org/PROJECTS/Resources/WBsectors_eff_OCT03.doc (February 3, 2015).

quality of environmental policy. For each sector we added relevant control variables, all taken from the World Development Indicators. The choice of control variables was severely restricted due to data availability. For each sector, Table 8 shows results for sector-specific IDA and trust fund aid.²³ In the education sector, results show that aid from IDA and trust funds is higher for IDA eligible recipients in average. For IDA aid in Column 1, the coefficient on the CPIA score for the quality of education policies is significant at the ten percent level and highly significant on the interaction. We interpret the negative and significant coefficient on the variable primary completion rate as evidence for a need orientation of IDA aid. In Column 2 considering trust fund aid for education, the CPIA score and its interaction with IDA are insignificant. There are two possible interpretations for this latter finding. One interpretation is that the CPIA rating is not systematically taken into account when the trust fund allocation is made. A second interpretation might be that there are two opposing effects that cancel out in average. On the one hand, education aid might be given to countries with good education policies because aid is more likely to be effective in those countries. On the other hand, aid is given to countries in need for support to improve their education policies. Education aid from trust funds correlates positively and significantly with the IDA residual. In the health sector, we find that IDA allocation to IDA countries is made according to the sector-specific CPIA score (Column 3). More IDA aid is provided to countries with a lower share of health expenditure relative to their GDP, suggesting that health aid is also allocated according to need. As education aid, health aid from trust funds is not allocated according to performance or need but positively and significantly related to IDA health aid (Column 4). Looking at projects in the environment theme in Column 5 and 6, we find again that environmental IDA aid is disbursed more to IDA countries, in particular to IDA countries with good environmental policies. Environmental trust fund aid also supports IDA countries and in particular those IDA countries with good policies systematically more. Need variables do not seem to matter according to these results but one could think for more adequate need indicators, e.g., measuring biodiversity. The positive and highly significant relationship between trust fund aid and the IDA residual suggests that co-financing takes place in the education and health sector but not in the environment sector.

These sector-specific results confirm that IDA aid is systematically allocated according to the relevant CPIA score while trust fund aid does not take into account these performance measures in average. Moreover, education and health IDA aid is allocated according to sector-specific need variables while trust fund aid is not. Results might be interpreted in the way that trust fund aid co-finances IDA projects.

5. Conclusion

²³ Unlike in previous tables, we do not include the residual for other aid because the disaggregated data from the OECD/DAC's Creditor reporting data is of limited quality for earlier years.

In this paper, we analyze how trust fund contributions and disbursements are allocated among developing countries. Using data for World Bank trust fund over the 2002-2012 period, we find no evidence that trust fund aid is allocated according to the quality of policies as measured by the Bank's CPIA index. Analyses for the education, the environment, and the health sector confirm this finding. This allocation neglects incentives and thus risks undermining IDA's performance oriented allocation. If aid is indeed more effective in good policy environments, the allocation of trust fund aid is thus less effective than it could be in other countries. Moreover, countries with relatively low quality of policies might possibly abandon their reform program because the incentives for policy improvements are lowered.

We do not find evidence that trust fund aid compensates for low IDA resources. Our results consistently suggest that trust fund aid is systematically and positively associated with IDA amounts received, probably in part due to co-financing schemes. Moreover, more trust fund aid is allocated to IDA recipients, which are the poorer countries in the sample. We find some evidence for the "bilateralization" hypothesis at the contribution stage for country-specific trust funds. Recipient governments that vote in line with the G3 donors (UK, US, and the Netherlands) are significantly more likely to receive trust fund aid. However, this finding is not confirmed at the disbursement stage, even if we focus on country-specific trust funds only. Economic interests are not associated positively with trust fund contributions or disbursements. General findings of the aid allocation literature are confirmed. Like bilateral and multilateral aid, trust fund aid goes to poorer countries with better institutions. Overall, we find that the determinants of trust fund allocations across countries are largely the same for contributions and disbursements.

Bibliography

- Alesina, Alberto and David Dollar (2000). Who gives foreign aid to whom and why? *Journal of Economic Growth* 5(1): 33-63.
- Burnside, Craig and David Dollar (2000). Aid, policies and growth. *American Economic Review* 90(4): 847-868.
- Burnside, Craig and David Dollar (2004). Aid, policies and growth: reply. *American Economic Review* 94(3): 781 – 784.
- Birdsall, Nancy, and Homi Kharas (2010). Quality of official development assistance assessment. Washington DC: Center for Global Development.
- Claessens Stijn, Danny Cassimon, and Bjorn Van Campenhout (2009). Evidence on changes in aid allocation criteria. *World Bank Economic Review* 23(2): 185-208.
- Copelovitch, Mark (2010). Master or Servant? Common Agency and the Political Economy of IMF Lending. *International Studies Quarterly* 54(1): 49-77.

- Dollar, David and Victoria Levin (2006). The increasing selectivity of foreign aid: 1984-2003. *World Development* 34(12): 2034-2046.
- Dreher, Axel, Vera Eichenauer and Kai Gehring (2014). Geopolitics, aid and growth. CEPR Working Paper 9904.
- Dreher, Axel and Jan-Egbert Sturm (2012). Do the IMF and the World Bank influence voting in the UN General Assembly? *Public Choice* 151: 363-397.
- Dreher, Axel, Jan-Egbert Sturm and James R.Vreeland (2009). Development aid and international politics: Does membership on the UN Security Council influence World Bank decisions? *Journal of Development Economics* 88(1): 1-18.
- Easterly, William and Tobias Pfutze (2008). Where does the money go? Best and worst practices in foreign aid. *Journal of Economic Perspectives* 22(2): 29-52.
- EM-DAT (2014). The International Disaster Database. Centre for Research on the Epidemiology of Disasters. Accessed on June 16, 2014: <http://www.emdat.be/database>Data on former colonization were provided by Andreas Fuchs (2014).
- Eichenauer, Vera Z. and Hug, Simon (2013). The Politics of Special Purpose Trust Funds. mimeo.
- Fleck, Robert K. and Christopher Kilby (2010). Changing aid regimes? U.S. foreign aid from the Cold war to the War on Terror. *Journal of Development Economics* 91: 185-197.
- Fuchs, Andreas, Axel Dreher, and Peter Nunnenkamp (2014). Determinants of Donor Generosity: A Survey of the Aid Budget Literature. *World Development* 56: 172-199.
- Frey, Bruno S. and Friederich Schneider (1986). Competing models of international lending activity. *Journal of Development Economics* 20: 225-245.
- GAIN (2014). Notre Dame Global Adaptation Index (ND-GAIN). Indiana: University of Notre Dame.
- Headey, Derek (2008). Geopolitics and the effect of foreign aid on economic growth: 1970-2001. *Journal of International Development* 20(2): 161-180.
- Huq, Wahida (2010). Analysis of Recipient Executed Trust Funds. CFP Working Paper Series 5.
- IEG (2011). An Evaluation of the World Bank's Trust Fund Portfolio: Trust Fund Support for Development. Washington DC: Independent Evaluation Group.
- Kilby, Christopher (2013). The political economy of project preparation: An empirical analysis of World Bank projects. *Journal of Development Economics*, 105:211-225.
- Kilby, Christopher (2009). The political economy of conditionality: An empirical analysis of World Bank loan disbursements. *Journal of Development Economics* 89, 1: 51-61.
- Kindornay, Shannon and Hany Besada (2011). Multilateral development cooperation: current trends and future prospects. In: The Canadian Development Report 2011: 11-26.

- Knack, Stephen, Colin Xu and Ben Zou (2014). Interactions Among Donors' Aid Allocations: Evidence from an Exogenous World Bank Income Threshold. World Bank Policy Research Working Paper No. 7039.
- Knack, Stephen and Aminur Rahman (2007). Donor Fragmentation and Bureaucratic Quality in Aid Recipients. *Journal of Development Economics* 83, 1: 176-197.
- Maizels, Alfred and Machiko K. Nissanke (1984). Motivations for aid to developing countries. *World Development* 12(9): 879-900.
- Morrison, Kevin M. (2013). Membership no longer has its privileges: The declining informal influence of Board members on IDA lending. *The Review of International Organizations* 8(2): 291-312.
- Niskanen, William A. (1971). *Bureaucracy and Representative Government*. Chicago & New York: Aldine-Atherton, Inc.
- OECD (2014a). Joining the Development Assistance Committee (DAC). Accessed September 30, 2014: <http://www.oecd.org/dac/dac-global-relations/joiningthedevelopmentassistancecommitteedac.htm#How>
- OECD (2014b). International Trade by Commodity Statistics (ITCS), Harmonised System 1988. Paris: Organisation for Economic Co-operation and Development. Downloaded on June 24, 2014.
- OECD (2014c). Query Wizard for International Development Statistics (QWIDS). Paris: Organisation for Economic Co-operation and Development. Download on August 19, 2014.
- OECD (2013). Identification and Monitoring of potentially under-aided countries. Report, updated for the conference "Fragmentation or Pluralism" hosted by the German Development Institute in October 2013. Paris: Organisation for Economic Co-operation and Development.
- OECD (2011). 2011 DAC Report on multilateral aid. Paris: Organisation for Economic Co-operation and Development.
- OECD (2010). 2010 DAC Report on multilateral aid. Paris: Organisation for Economic Co-operation and Development.
- Powell, Andrew and Matteo Bobba (2006). Multilateral intermediation of foreign aid: What is the trade-off for donor countries? IBRD Research Department Working Paper No. 594. Washington DC: Inter-American Development Bank.
- Reinsberg, Bernhard (2014). The implications of multi-bi financing on international development organizations: the example of the World Bank. Mimeo. Zurich: University of Zurich, Center for Comparative and International Studies (CIS).

- Reinsberg, Bernhard, Katharina Michaelowa, and Vera Z. Eichenauer (forthcoming). The proliferation of trust funds and other multi-bi aid. *Handbook of Foreign Aid*. Edward Elgar.
- Reinsberg, Bernhard, Katharina Michaelowa and Stephen Knack (2014). Which donors, which funds? The choice of trust funds by bilateral donors at the World Bank. Paper presented the European Consortium for Political Research (ECPR), University of Glasgow, September 3 – 6, 2014.
- Strezhnev, Anton and Erik Voeten (2013). United Nations General Assembly Voting Data V7. Download on August 17, 2014 from: <http://hdl.handle.net/1902.1/12379>
- Trumbull, William N., and Howard J. Wall (1994). Estimating aid-allocation criteria with panel data. *Economic Journal* 104, 876-882.
- World Bank (2014a). Fragile situations lists. Washington DC: World Bank. Accessed on August 20, 2014: <http://go.worldbank.org/BNFOS8V3S0>
- World Bank (2014b). CPIA. Washington DC: World Bank. Accessed on September 22, 2014: <http://go.worldbank.org/7NMQ1P0W10>
- World Bank (2014c). How IDA resources are allocated. Washington DC: World Bank. Accessed on September 22, 2014: <http://www.worldbank.org/ida/how-ida-resources-allocated.html>
- World Bank (2013). Trust fund report 2012. Washington DC: World Bank.
- World Bank CFGP (2013). Trust fund reforms: progress to data and future directions. Concessional Finance and Global Partnerships. Washington DC: World Bank.

Figure 1

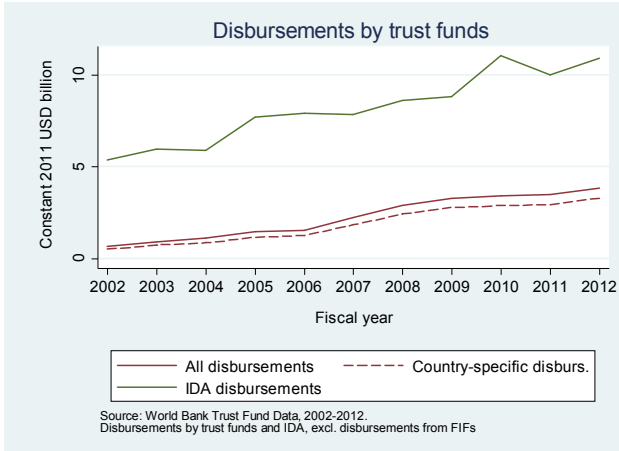


Figure 2

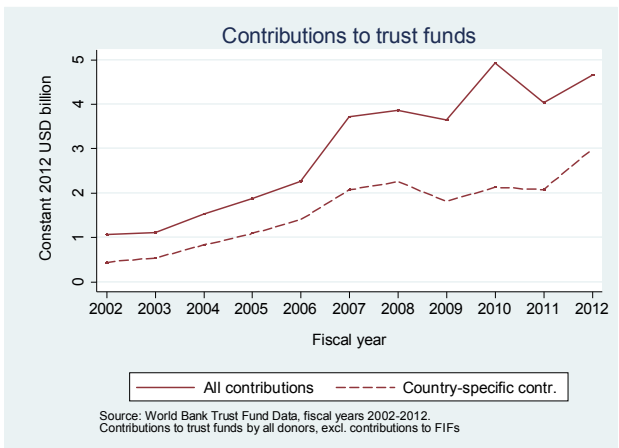


Figure 3

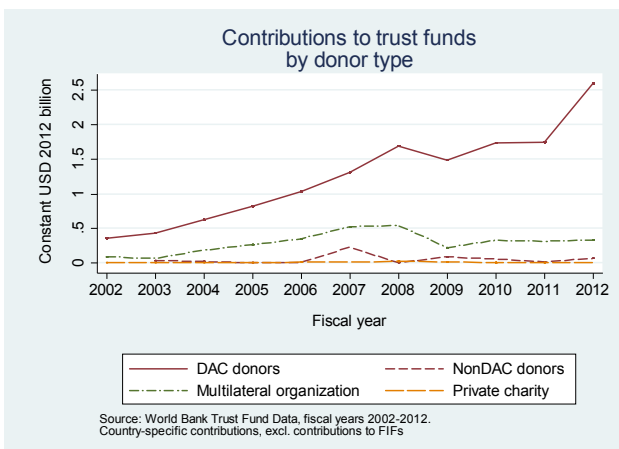


Figure 4: Marginal effect of the distance from the demeaned CPIA score on country-specific trust fund contributions, based on Table 3, Column 4. In green: distribution of the distance from the average CPIA score.

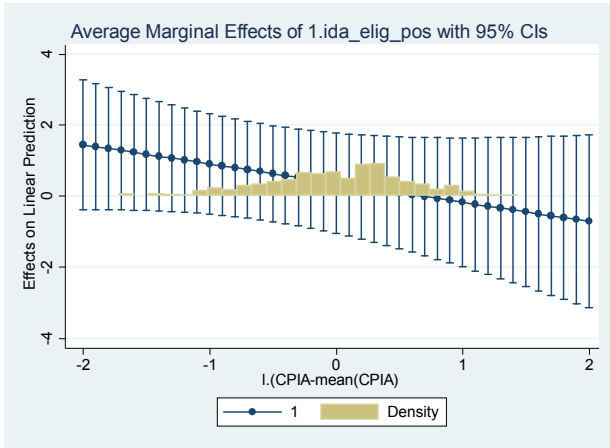


Figure 5: Marginal effect of the distance from the demeaned CPIA score on trust fund disbursements, based on Table 5, Column 4. In green: distribution of the distance from the average CPIA score.

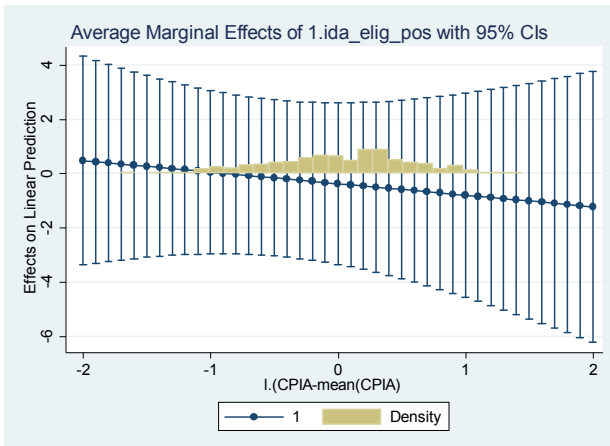


Figure 6

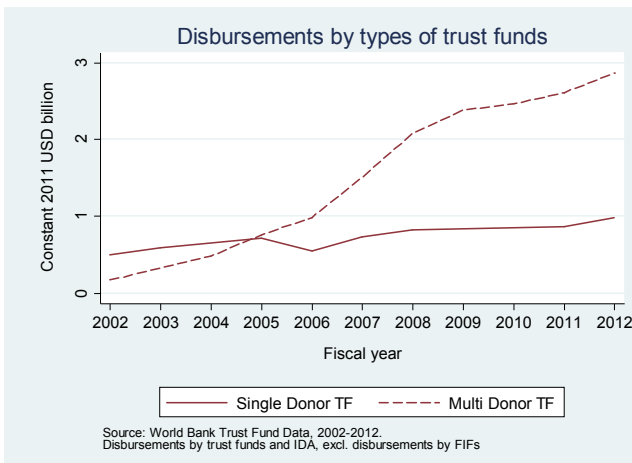


Table 1: Recipient countries in the regression sample

Afghanistan	Ghana	Papua New Guinea
Albania	Grenada	Paraguay
Algeria	Guatemala	Peru
Angola	Guinea	Philippines
Armenia	Guinea-Bissau	Romania
Azerbaijan	Guyana	Russian Federation
Bangladesh	Haiti	Rwanda
Belarus	Honduras	Samoa
Belize	India	Sao Tome and Principe
Benin	Indonesia	Senegal
Bhutan	Iran, Islamic Rep.	Serbia
Bolivia	Iraq	Seychelles
Bosnia and Herzegovina	Jamaica	Sierra Leone
Botswana	Jordan	Solomon Islands
Brazil	Kazakhstan	South Africa
Bulgaria	Kenya	Sri Lanka
Burkina Faso	Kiribati	St. Kitts and Nevis
Burundi	Kyrgyz Republic	St. Lucia
Cabo Verde	Lao PDR	St.
Cambodia	Lebanon	Sudan
Cameroon	Lesotho	Swaziland
Central African Republic	Liberia	Tajikistan
Chad	Macedonia, FYR	Tanzania
China	Madagascar	Thailand
Colombia	Malawi	Timor-Leste
Comoros	Malaysia	Togo
Congo, Dem. Rep.	Maldives	Tonga
Congo, Rep.	Mali	Trinidad and Tobago
Costa Rica	Marshall Islands	Tunisia
Cote d'Ivoire	Mauritania	Turkey
Croatia	Mauritius	Turkmenistan
Djibouti	Mexico	Uganda
Dominica	Micronesia, Fed. Sts.	Ukraine
Dominican Republic	Moldova	Uruguay
Ecuador	Mongolia	Uzbekistan
Egypt, Arab Rep.	Morocco	Vanuatu
El Salvador	Mozambique	Venezuela, RB
Equatorial Guinea	Namibia	Vietnam
Eritrea	Nepal	Yemen, Rep.
Ethiopia	Nicaragua	Zambia
Fiji	Niger	Zimbabwe
Gabon	Nigeria	
Gambia, The	Pakistan	
Georgia	Panama	

Table 2: Descriptive statistics

	Sample mean	Standard deviation	Minimum	Maximum
<i>Performance variables</i>				
Trust fund aid, USD million*	14.97	52.82	0.00	664.74
GDP per capita, USD	6687	5615	520	36795
Population in millions	42.34	157.41	0.05	1344.13
Agg. CPIA rating	3.46	0.57	1.40	4.91
<i>World Bank classifications</i>				
Fragile country	0.20	0.40	0.00	1.00
IDA eligible	0.66	0.48	0.00	1.00
<i>Other Aid variables</i>				
Other aid per capita, USD **	606	1236	0	26077
IDA aid per capita, USD	69	162	0	1289
<i>Political economy variables</i>				
G7 voting affinity in UNGA	0.16	0.09	0.05	0.53
G7 exports in USD millions	5851	17539	5	231335
G3 voting affinity in UNGA	0.16	0.09	0.04	0.53
G3 exports in USD millions	3706	14110	1	209299
Military Observations	0.02	0.13	0.00	1.00
<i>Outcome variables</i>				
TF recipient in any year	0.91	0.29	0.00	1.00
Observations	1133	1133	1133	1133

* This refers to all country-specific trust fund disbursements.

** All aid a recipient country receives in a given year from official sources other than IDA and World Bank trust funds.

Note: Amounts in constant 2011 USD.

Table 3: Contributions, OLS, alldonors

	1, TF aid	2, Other Aid	3, IDA aid	4, TF aid	5, TF aid	6, TF aid	7, TF aid
GDP p.c. (ln)	0.563 [0.417]	0.186 [1.099]	0.451 [0.408]	0.696* [0.406]	0.008 [0.529]	0.476 [0.407]	0.179 [0.308]
Population (ln)	0.338 [0.216]	2.030*** [0.397]	1.328*** [0.285]	1.801*** [0.159]	1.454*** [0.215]	1.888*** [0.150]	1.439*** [0.126]
CPIA score, (t-1)	0.431 [0.376]	-1.311 [1.467]	-0.452 [0.387]	-0.515 [0.388]	0.556 [0.739]	0 [.]	- -
IDA x I.(CPIA-mean(CPIA))	-0.541 [0.415]	4.845** [1.860]	4.429*** [1.179]	2.949*** [0.388]	0.983 [0.716]	3.545*** [0.339]	- -
IDA eligible	0.363 [0.720]	8.326*** [1.390]	15.975*** [0.536]	6.345*** [0.339]	4.663*** [0.504]	5.595*** [0.357]	6.685*** [0.300]
G3-Alignment UNGA	2.524* [1.462]	5.864 [5.630]	-5.667 [4.790]	6.769*** [1.467]	2.103 [2.049]	7.567*** [1.430]	7.627*** [1.406]
Total G3 exports, ln	-0.182 [0.177]	-0.003 [0.413]	-0.775*** [0.251]	-0.182 [0.166]	0.037 [0.244]	-0.375** [0.154]	-0.059 [0.129]
Other aid (ln)	0.722*** [0.018]	- -	- -	- -	- -	- -	- -
IDA aid (ln)	-0.002 [0.030]	- -	- -	- -	- -	- -	- -
Residual other aid	- -	- -	- -	0.722*** [0.018]	0.699*** [0.025]	0.720*** [0.017]	0.730*** [0.015]
Residual IDA aid	- -	- -	- -	-0.002 [0.030]	0.033 [0.037]	-0.02 [0.028]	0.005 [0.021]
Military Operation	- -	- -	- -	- -	- -	10.762*** [1.662]	7.630*** [1.674]
G3 colonial heritage	- -	- -	- -	- -	- -	1.368*** [0.272]	- -
Fragile situation	- -	- -	- -	- -	- -	- -	-2.345*** [0.271]
Sample?	a	a, Other aid	a, IDA aid	a	b	a	a, >2005
Year controls?	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Country controls?	No	No	No	No	No	No	No
Adj. R-Squared	0.902	0.287	0.862	0.902	0.858	0.903	0.915
Number of Cases	1098	1098	1098	1098	750	1098	909

* p<0.10, ** p<0.05, *** p<0.01

Table 4: Contributions, year-, country- and region-fixed effects, All donors

	1, Other Aid	2, IDA aid	3,TF aid	4, TF aid
GDP p.c. (ln)	-1.034 [5.240]	-2.487 [1.538]	-0.595 [0.695]	-0.582** [0.254]
Population (ln)	-5.146 [9.157]	3.722 [2.541]	5.539 [3.802]	1.692*** [0.096]
CPIA score, (t-1)	0.455 [1.735]	1.346** [0.594]	0 [.]	-0.629 [0.404]
IDA x I.(CPIA-mean(CPIA))	4.963*** [1.432]	1.260** [0.634]	4.097*** [0.848]	2.746*** [0.420]
IDA eligible	0.26 [1.021]	16.724*** [0.710]	1.224 [1.306]	4.929*** [0.362]
G3-Alignment UNGA	0.092 [3.751]	0.872 [1.952]	1.005 [0.757]	4.530*** [0.846]
Total G3 exports, ln	0.173 [0.582]	0.197 [0.294]	-0.219 [0.226]	-0.209 [0.126]
Residual Other aid	-	-	0.705*** [0.017]	0.708*** [0.019]
Residual IDA aid	-	-	-0.008 [0.014]	0.049** [0.021]
EAP	-	-	-	2.162*** [0.493]
ECA	-	-	-	3.292*** [0.915]
South Asia	-	-	-	2.985*** [0.554]
LCR	-	-	-	0.896*** [0.259]
SSA	-	-	-	-1.715*** [0.387]
Constant	93.45 [163.985]	-45.84 [39.514]	-71.664 [59.737]	-14.466*** [3.592]
Sample?	a, Other aid	a, IDA aid	a	a
Year controls?	Yes	Yes	Yes	Yes
Country controls?	Yes	Yes	Yes	No
Regional controls	No	No	No	Yes
Adj. R-Squared	0.028	0.309	0.888	0.911
Number of Cases	1098	1098	1098	1098

Note: EAP: East Asia and Pacific; ECA: Europe and Central Asia; SAR: South Asia Region; LCR: Latin America and Carribean Region; SSA: Sub-Sahara Africa.

* p<0.10, ** p<0.05, *** p<0.01

Table 5: Disbursements, OLS with year fixed effects, GDPpc, All donors

	1, TF aid	2, Other Aid	3, IDA aid	4, TF aid	5, TF aid	6, TF aid
Population (ln)	1.023***	0.297*	0.683***	1.163***	1.065***	1.162***
	[0.144]	[0.158]	[0.185]	[0.146]	[0.136]	[0.153]
GDP p.c. (ln)	-0.347	-0.996**	-0.787**	-0.507*	-0.693***	-0.628*
	[0.287]	[0.401]	[0.389]	[0.279]	[0.261]	[0.343]
CPIA score, (t-1)	1.223*	-2.434**	-0.869**	1.05	0	-
	[0.720]	[1.139]	[0.438]	[0.713]	[.]	-
IDA x I.(CPIA-mean(CPIA))	-0.821	2.747**	5.305***	0.266	0.442	-
	[0.866]	[1.171]	[1.245]	[0.783]	[0.756]	-
IDA eligible	-0.593	1.254**	15.815***	2.667***	2.710***	2.937***
	[1.536]	[0.531]	[0.623]	[0.721]	[0.706]	[0.772]
G7-Alignment UNGA	1.624	-6.026**	-1.915	1.244	0.699	1.46
	[3.106]	[3.031]	[5.256]	[3.080]	[2.969]	[3.157]
Total G7 exports, ln	-0.072	-0.069**	0.15	-0.041	-0.038	-0.032
	[0.058]	[0.034]	[0.149]	[0.055]	[0.061]	[0.058]
Other aid (ln)	-0.003	-	-	-	-	-
	[0.050]	-	-	-	-	-
IDA aid (ln)	0.206**	-	-	-	-	-
	[0.080]	-	-	-	-	-
Residual other aid	-	-	-	-0.003	0.003	-0.057
	-	-	-	[0.050]	[0.046]	[0.054]
Residual IDA aid	-	-	-	0.206**	0.166**	0.160**
	-	-	-	[0.080]	[0.081]	[0.079]
Military Operation	-	-	-	-	5.160***	3.188***
	-	-	-	-	[0.925]	[0.464]
G7 colonial heritage	-	-	-	-	-1.186***	-
	-	-	-	-	[0.422]	-
Fragile situation	-	-	-	-	-	-0.28
	-	-	-	-	-	[0.479]
Constant	-3.438	32.656***	-2.822	-4.108	-1.046	-0.891
	[3.857]	[8.089]	[4.018]	[3.738]	[3.767]	[4.005]
Sample?	a	a, Other aid	a, IDA aid	a	a	a, >2005
Year fixed effects?	Yes	Yes	Yes	Yes	Yes	Yes
Country fixed effects?	No	No	No	No	No	No
Adj. R-Squared	0.43	0.207	0.833	0.43	0.453	0.438
Number of Cases	1133	1133	1133	1133	1133	934

* p<0.10, ** p<0.05, *** p<0.01

Table 6: Disbursements, year-, country- and region-fixed effects, GDPpc , All donors

	1, Other aid	2, IDA aid	3, TF aid	4, TF aid
GDP p.c. (ln)	-0.008 [1.316]	-2.363 [1.436]	-5.109** [2.191]	-0.880*** [0.316]
Population (ln)	-6.85 [4.698]	4.412* [2.591]	3.144 [4.421]	1.061*** [0.135]
CPIA score, (t-1)	-1.016 [1.089]	1.423** [0.631]	0 [.]	1.342* [0.706]
IDA x I.(CPIA-mean(CPIA))	1.053 [0.744]	1.128** [0.537]	-0.945 [1.616]	0.005 [0.785]
IDA eligible	0.537 [0.400]	16.437*** [0.440]	0.983 [1.542]	2.346*** [0.768]
G7-Alignment UNGA	0.417 [0.663]	0.862 [1.975]	0.584 [1.632]	0.553 [2.917]
Total G7 exports, ln	-0.023 [0.026]	0.008 [0.042]	-0.054* [0.031]	-0.053 [0.060]
Residual other aid	-	-	0.056 [0.064]	0.028 [0.046]
Residual IDA aid	-	-	0.154 [0.098]	0.224*** [0.081]
EAP	-	-	-	-1.694** [0.854]
ECA	-	-	-	-0.129 [0.804]
South Asia	-	-	-	-1.075 [0.979]
LCR	-	-	-	-1.955* [1.006]
SSA	-	-	-	-1.762** [0.730]
Constant	130.137* [69.405]	-54.412 [38.447]	-4.349 [75.715]	1.57 [4.231]
Sample?	a, Other aid	a, IDA aid	a	a
Year fixed effects?	Yes	Yes	Yes	Yes
Country fixed effects?	Yes	Yes	Yes	No
Region fixed effects?	No	No	No	Yes
Adj. R-Squared	0.026	0.379	0.157	0.45
Number of Cases	1133	1133	1133	1133

Note: EAP: East Asia and Pacific; ECA: Europe and Central Asia; SAR: South Asia Region; LCR: Latin America and Carribean Region; SSA: Sub-Sahara Africa.

* p<0.10, ** p<0.05, *** p<0.01

Table 7: Disbursements, OLS with year fixed effects, GNIpc, All donors						
	1, TF aid	2, Other Aid	3, IDA aid	4, TF aid	5, TF aid	6, TF aid
Population (ln)	0.771*** [0.161]	0.172 [0.324]	0.266*** [0.080]	0.849*** [0.150]	0.850*** [0.142]	0.876*** [0.110]
GNI p.c. (ln)	-0.25 [0.244]	-1.171** [0.501]	-0.474*** [0.165]	-0.355 [0.222]	-0.419* [0.223]	-0.580** [0.262]
CPIA score, (t-1)	1.118 [0.892]	-2.266 [1.558]	-0.311* [0.166]	1.108 [0.868]	0 [.]	- -
IDA x l.(CPIA-mean(CPIA))	-0.608 [1.058]	2.868* [1.524]	2.780*** [0.846]	0.169 [0.942]	0.203 [0.932]	- -
IDA eligible	-2.902 [3.037]	1.790** [0.790]	17.522*** [0.254]	2.642*** [0.684]	2.746*** [0.672]	2.441*** [0.636]
G7-Alignment UNGA	3.167 [2.245]	-13.761** [6.399]	0.777 [1.992]	3.963* [2.337]	2.997 [2.460]	3.658 [2.953]
Total G7 exports, ln	-0.058 [0.036]	-0.088 [0.054]	0.063* [0.034]	-0.034 [0.034]	-0.021 [0.040]	-0.012 [0.033]
Other aid (ln)	-0.04 [0.037]	- -	- -	- -	- -	- -
IDA aid (ln)	0.320* [0.170]	- -	- -	- -	- -	- -
Residual other aid	- -	- -	- -	-0.04 [0.037]	-0.032 [0.036]	-0.059 [0.042]
Residual IDA aid	- -	- -	- -	0.320* [0.170]	0.327** [0.164]	0.085 [0.072]
Military Operation	- -	- -	- -	- -	1.099*** [0.327]	2.047** [0.796]
G7 colonial heritage	- -	- -	- -	- -	-0.658 [0.532]	- -
Fragile situation	- -	- -	- -	- -	- -	-0.602* [0.334]
Constant	-1.604 [4.113]	35.774*** [9.885]	-0.46 [2.494]	-3.176 [4.187]	-2.239 [4.254]	2.268 [3.242]
Sample?	a	a, Other aid	a, IDA aid	a	a	a, >2005
Year fixed effects?	Yes	Yes	Yes	Yes	Yes	Yes
Country fixed effects?	No	No	No	No	No	No
Adj. R-Squared	0.365	0.196	0.966	0.365	0.37	0.33
Number of Cases	749	749	749	749	749	647

* p<0.10, ** p<0.05, *** p<0.01

Table 8: Disbursements by sectors, OLS with year dummies

	1, IDA, education	2, TF, education	3, IDA, health	4, TF, health	5, IDA, environment	6, TF, environment
GDP p.c. (ln)	0.857* [0.506]	-2.331** [0.901]	-1.148*** [0.434]	-0.775 [0.584]	0.052 [0.504]	0.464 [0.412]
Population (ln)	0.816*** [0.168]	1.099*** [0.233]	0.564*** [0.158]	1.492*** [0.186]	0.672*** [0.196]	1.481*** [0.130]
Sector-specific CPIA score	0.418* [0.242]	0.602 [0.474]	0.117 [0.292]	0.547 [0.379]	-0.211 [0.443]	0.506 [0.483]
IDA x l.(CPIA-mean(CPIA))	3.070*** [0.752]	1.187 [1.257]	3.872*** [0.874]	-0.318 [1.004]	1.466*** [0.461]	0.547** [0.249]
IDA eligible	16.878*** [0.391]	3.610*** [1.222]	16.792*** [0.514]	3.822*** [1.015]	13.139*** [1.341]	1.947* [1.093]
G7-Alignment UNGA	-4.874 [4.274]	4.232 [4.528]	-2.555 [4.991]	1.979 [3.207]	-2.056 [6.119]	2.905 [3.738]
Total G7 exports, ln	-0.317** [0.125]	0.06 [0.139]	0.153 [0.149]	-0.039 [0.065]	0.184 [0.196]	-0.024 [0.045]
Residual IDA aid	-	0.551*** [0.084]	-	0.334*** [0.071]	-	0.113 [0.078]
Residual Other aid	-	-	-	-	-	-
Primary completion rate, total (% of relevant age group)	-0.059*** [0.021]	0.028 [0.026]	-	-	-	-
DPT immunization rate	-	-	-0.014 [0.035]	0.019 [0.041]	-	-
Measles immunization rate	-	-	0.02 [0.043]	0.004 [0.038]	-	-
Health expend. per GDP	-	-	-0.317* [0.185]	0.095 [0.122]	-	-
CO2 Emissions per capita	-	-	-	-	-0.041 [0.088]	-0.071 [0.135]
Share of forest in total land area	-	-	-	-	-0.014 [0.016]	-0.002 [0.011]
Constant	-8.414** [3.392]	1.309 [8.798]	-1.326 [4.257]	-14.983* [7.573]	-11.492** [4.457]	-20.141*** [5.618]
Sample?	a	a	a	a	a	a
Year dummies?	Yes	Yes	Yes	Yes	Yes	Yes
Country dummies?	No	No	No	No	No	No
Adj. R-Squared	0.919	0.3	0.851	0.294	0.801	0.414
Number of Cases	679	679	1108	1108	987	987

* p<0.10, ** p<0.05, *** p<0.01