

Koch, Dirk-Jan; Dreher, Axel; Nunnenkamp, Peter; Thiele, Rainer

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Keeping a low profile: What determines the allocation of aid by non-governmental organizations?

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Keeping a Low Profile: What Determines the Allocation of Aid by Non-Governmental Organizations?*

Dirk-Jan Koch, Axel Dreher, Peter Nunnenkamp and Rainer Thiele

Abstract:

NGOs play an important role in international development cooperation, but the allocation of NGO aid has rarely been mapped, let alone explained. Based on a representative dataset for 61 important NGOs from various OECD countries, we analyze the targeting of NGO aid across a large number of recipient countries by jointly considering major determinants of NGO aid in a multivariate regression framework. While our results show that NGOs are more active in the neediest countries, we reject the hypothesis that NGOs complement official aid through engaging in so-called difficult institutional environments. Rather, they tend to replicate the location choices of official "backdonors." Moreover, NGOs follow other NGOs so that aid gets clustered. Finally, NGOs select recipient countries with common traits related to religion or colonial history. Taken together, our findings suggest that NGOs keep a low profile rather than distinguishing themselves from other donors and trying to excel under risky conditions.

Key words: aid allocation, aid agencies, non-governmental organizations, poverty

JEL classification: F35

Dirk-Jan Koch

Centre for International Development Issues
in Nijmegen of the Radboud University
P.O. Box 9104, 6500 HE, Nijmegen
Telephone: +31-243611169
Fax: +31-243615957
E-mail: d.koch@maw.ru.nl

Axel Dreher

ETH Zurich
KOF Swiss Economic Institute
Weinbergstrasse 35
CH-8092 Zuerich
Switzerland
E-mail: mail@axel-dreher.de

Peter Nunnenkamp

Kiel Institute for the World Economy
Duesternbrooker Weg 120, D-24105 Kiel
Tel: +49 431 8814-209
Fax: +49 431 8814-500
E-mail: peter.nunnenkamp@ifw-kiel.de

Rainer Thiele

Kiel Institute for the World Economy
Duesternbrooker Weg 120, D-24105 Kiel
Tel: +49 431 8814-215
Fax: +49 431 8814-502
E-mail: rainer.thiele@ifw-kiel.de

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1. Introduction

It has traditionally been an article of faith (Tendler 1982) that non-governmental organizations (NGOs) provide better targeted aid as they are closer to the poor than official aid agencies. Furthermore, the allocation of NGO aid should arguably be less distorted by commercial and political interests such as export promotion or the formation of political alliances, as compared to aid given by state agencies. Donor governments appear to share the view that NGOs have an important role to play for aid to reach the poor and render it more effective. The share of bilateral official development assistance (ODA) channeled to or through NGOs exceeded ten percent in 2005-2006 for various OECD countries, notably the Netherlands (19.5 percent), Switzerland (17.2), and Spain (15.9).¹ Overall, grants by NGOs based in the member countries of the OECD's Development Assistance Committee (DAC) amounted to almost US\$ 15 billion annually in 2005 and 2006,² thus exceeding bilateral ODA from every individual DAC country except for the United States.

The quantitative significance of NGO aid notwithstanding, little is known about where NGO aid is spent and how well targeted it actually is (Section 2). If at all, NGO aid is analyzed in country-specific studies, with Bangladesh having received particular attention (e.g., Fruttero and Gauri 2005; Gauri and Galef 2006). The literature is largely confined to ODA when it comes to aid allocation across countries. Data constraints typically prevented performing similar analyses for NGO aid. For instance OECD/DAC data are seriously deficient with respect to NGO aid at the level of individual recipient countries (OECD 2007).³ We contribute to closing this empirical gap by using a new dataset on aid allocation, collected for 61 NGOs based in 13 donor countries (Section 3), and thus unique in its coverage.

We employ several econometric models, including a Heckman approach, to gain deeper insights into the targeting of NGO aid across a large number of recipient countries. Five major hypotheses on the geographical choices of NGOs are addressed in a multivariate regression framework; three of these hypotheses have not yet been formally tested. We find, first, that poverty plays a role in the geographical choices of NGOs, with poorer countries

¹ <http://www.oecd.org/dataoecd/52/11/1893159.xls>.

² This OECD figure does not include donor government grants and subsidies to national NGOs; <http://www.oecd.org/dataoecd/52/9/1893143.xls>; table 2.

³ <http://www.oecd.org/dataoecd/50/17/5037721.htm>.

receiving more aid from NGOs. Second, we reject the view that NGOs prefer working in “difficult” environments as reflected by the governance situation in developing countries. To the contrary, we even obtain some evidence suggesting that NGOs are more likely to become active in more democratic countries. Third, it turns out that NGOs behave less autonomously than widely believed. Rather, the preferences of backdonors permeate in the geographical choices of NGOs, even though the economic interests that often shape the choices of bilateral donors do not affect the NGOs. Fourth, NGO aid is clustered in the sense that NGOs prefer to locate where other NGOs are already present. Lastly, NGOs prefer countries that share certain characteristics with them, such as common religion, when deciding on where to engage.

2. Hypotheses

The literature on the determinants of foreign aid mainly focuses on ODA granted by OECD governments. Several studies argue that the targeting of ODA to needy recipient countries with reasonably good local conditions (in terms of basic institutions and economic policies) is far from perfect (Burnside and Dollar 2000; Collier and Dollar 2002).⁴ Furthermore, economic and political self-interest of donors appears to have had an important say on the allocation of bilateral ODA across recipient countries (e.g., Alesina and Dollar 2000; Berthélemy 2006). The effectiveness of ODA in promoting economic and social development in the recipient countries tends to be compromised in these ways.

On several counts, NGOs may provide more effective aid than official donors. Earlier analytical reasoning and tentative empirical findings suggest five major hypotheses which we will address below for a set of 61 NGOs based in several OECD countries. Especially the first three hypotheses reflect the widely held view that NGO aid may be superior to ODA (e.g. Nancy and Yontcheva 2006). However, the recent literature also suggests various qualifications or even counter-hypotheses so that expected signs of the determinants of NGO aid often remain ambiguous a priori.

The popularity of NGO aid is at least partly due to the widely perceived “failure of official aid programs to reach down and assist the poor” (Riddell and Robinson 1995: 2). NGOs often circumvent governments in the recipient country and deal directly with target groups organized by local NGOs (Riddell, Bebbington and Peck 1995: 25). This may reduce

⁴ According to McGillivray (2003) as well as Dollar and Levin (2006), the poverty and policy orientation of several official donors has improved recently, but targeting by some major bilateral donors (e.g., France and the United States) still leaves much to be desired.

leakage and result in better alignment with recipient needs (UN Millennium Project 2005: 18). This is why we would expect NGO aid to be strongly related to indicators of need such as the per-capita income of recipient countries or their economic and social development as measured by the Human Development Index. We could also expect that NGOs would spend more of their resources in unequal countries, as indicated by the Gini coefficient, since many NGOs have their roots in the social justice movement, which focuses more on relative than on absolute poverty (Schulpen 1997).

However, the view that NGOs have a clear focus on the poor has come under attack.⁵ The poverty orientation of NGO aid may be undermined by increasing pressure from co-financing governments to demonstrate project-related poverty impacts. This may appear counter-intuitive at first sight, but there is casual evidence to this effect. According to Bebbington (2004), increased intervention of the Dutch government into co-financed NGO projects in the Andes raised concerns with the NGOs that they might lose funding unless being able to demonstrate immediate project-related poverty impacts. Visible results are easier to achieve when projects address less entrenched forms of poverty, which may induce NGOs to shift attention away from the neediest recipients.

The few studies addressing the allocation of aid across recipient countries come to opposing results with respect to the poverty orientation of NGO aid. Nancy and Yontcheva (2006) present panel regression results on aid allocation by European NGOs (co-financed by the EU) in the 1990s. Poverty in recipient countries appears to be the major determinant. Koch (2007) reports bivariate correlations between aid from Dutch NGOs and various indicators of need. NGO decisions of whether or not to engage in a particular country appear to be correlated with some (absolute) poverty measures, though not with other indicators of need such as per capita income, literacy, mortality and school enrolment. Conversely, the allocation of aid amounts by Dutch NGO does not seem to be based on need in the recipient countries. In a regression analysis of aid given by Swedish NGOs, Dreher, Mölders and Nunnenkamp (2007) corroborate Koch's finding concerning the second stage of the aid allocation process, i.e., distributing aid amounts among countries having passed the eligibility stage. Based on simple aid concentration curves, Koch, Westeneng and Ruben (2007) classify

⁵ See the references given in Riddell and Robinson (1995: 35-42) as well as Edwards and Hulme (1996); more recent examples include Amin, Rai and Topa (2003) as well as Rahman and Razzaque (2000). Bebbington (2005: 937) notes that earlier "celebrations meant that inevitably disillusion would follow, and indeed it did." Epstein and Gang (2006: 295) even conclude that NGOs might "deliberately allocate funds away from the poorest so as not to better their position."

American and Norwegian NGO aid as progressive and German NGO aid as regressive when measuring recipient need by means of the share of people living on less than one dollar a day. Based on this discussion we derive our first testable hypothesis:

Hypothesis 1: NGO aid is focused on the needy, i.e., recipient countries with low per-capita income.

Concerning governance in recipient countries, it is frequently argued that NGOs have a comparative advantage of working in difficult environments (e.g., Fowler and Biekart 1996; Edwards and Hulme 1996). We therefore expect more NGO aid to go where institutional conditions are weak. The view underlying this hypothesis is expressed most prominently in the well-known World Bank study “Assessing Aid.” The study argues that government-to-government transfers do not work when governance is particularly bad in the recipient country and explicitly calls for engaging the civil society in order to render aid more effective in highly distorted environments (World Bank 1998: 104). The UN Millennium Project (2005) shares this opinion; it states that there are “countries that rank consistently low on civil liberties, political freedoms and human rights, while rating high on corruption, with little demonstrable will to achieve broad-based poverty reduction. In these cases, the international community can play a role in humanitarian assistance and deliver aid through NGOs.”⁶

However, NGOs may be unwilling to accept the role assigned to them by official donors, arguing against a scenario in which NGOs were to focus on the ‘left-over’ countries of bilateral aid (Borren 2007), or in which “NGOs are seen as subcontractors who can be hired at will to clean up the institutional mess, after which Big Aid can move in and achieve nice results under conditions of good governance” (Monteiro 2007).

NGOs may also be reluctant to work in difficult environments for reasons similar to those working against a stronger poverty focus of NGO aid. According to the principal-agent model of Fruttero and Gauri (2005), the dependence of NGOs (the agents) on external funding (from official backdonors as principals) tends to drive a wedge between organizational imperatives related to future funding and charitable objectives in locations

⁶ The policy documents of various bilateral donors echo this view. For example, the Netherlands Ministry of Foreign Affairs (2001) notes: “In cases of bad governance bilateral aid relationships are often underdeveloped; cooperation from civil society to civil society is the only way.” Likewise, the Department for International Development (2006) in the UK states: “... NGOs will need to play a more active role in providing public services in fragile states where governments are weak and direct support to governments is not yet possible.”

where NGOs engage. This is even if principals and agents share altruistic aid motivations. Principals have incomplete information on NGO projects, while future funding of agents depends on perceived success or failure of current projects. To demonstrate success, NGOs are inclined to minimize risk which weakens their incentive to operate in difficult environments where failure may jeopardize future funding.

Likewise, the so-called marketization of aid is supposed to have unfavorable side effects which bias the allocation of NGO aid towards recipient countries offering easier environments (Cooley and Ron 2002; Fowler 2000; Lewis and Wallace 2000). The notion of marketization includes that NGOs increasingly have to compete for government and private funding. According to Adelman (2003), NGOs having to pass this “market test” should become more efficient in delivering poverty alleviating services. With the renewal of funding becoming less secure, however, NGOs may turn more risk averse and allocate aid strategically, by targeting recipients where success is easier to achieve (Bebbington 2004).

Empirical evidence is largely lacking so far. Koch, Westeneng and Ruben (2007) find aid by Norwegian and American NGOs to be in line with the perceived comparative advantage of NGOs of engaging with poorly governed countries, while aid by German NGOs is not.⁷ According to Dreher, Mölders and Nunnenkamp (2007), Swedish NGOs did not take into account whether recipients are more or less democratic when giving aid. Still, we hypothesize:

Hypothesis 2: NGOs are relatively strongly engaged in countries with weak institutions in order to exploit their comparative advantage of working in “difficult” environments.

As noted before, the targeting of ODA is likely to be affected by donor interests. Previous research has shown that some official donors tend to use aid to promote exports to recipient countries (e.g., Berthélemy and Tichit 2004; Nunnenkamp and Thiele 2006); others “buy” political support by granting ODA (e.g., Kuziemko and Werker 2006; Dreher, Nunnenkamp and Thiele 2008; Fleck and Kilby 2006, Kilby 2006, Dreher, Sturm, Vreeland 2007); and still others favor former colonies which may be at least partly because of political considerations, rather than a comparative advantage of working there.

⁷ Note also that German NGOs do not appear to have taken more risk (by allocating more aid to poorer and badly governed countries) than NGOs from the United States, even though the marketization of aid was much more advanced in the United States (Koch, Westeneng and Ruben 2007).

By contrast, the mission of NGOs engaged in international development cooperation is widely perceived to be independent of commercial and political interests of governments (e.g., Nancy and Yontcheva 2006). Consequently, the allocation of NGO aid should be unaffected by trade-related variables such as bilateral exports as well as political variables such as the voting behavior of recipient countries in the UN General Assembly.

Nevertheless, the allocation of NGO aid is likely to be shaped by the geographical choices of official donors in the country in which the NGO is based. Recent literature increasingly questions the autonomy of NGOs, especially for those NGOs that strongly depend on government financing. Edwards and Hulme (1996), for example, criticize the dependence of development NGOs on official donors as potentially ‘too close for comfort’, and Fisher (1997) argues that “while the moniker ‘nongovernment organization’ suggests autonomy from government organizations, NGOs are often intimately connected with their home governments in relationships that are both ambivalent and dynamic, sometimes cooperative, sometimes contentious, sometimes both simultaneously.” As a consequence, NGOs might rather be expected to follow their backdonors than to decide autonomously on where to locate their activities. Various critics suspect that government funding may have as a result that NGOs become “the implementer of the policy agendas” of governments (Edwards and Hulme 1996: 970).⁸

The limited empirical evidence available on this hypothesis is inconclusive. Koch, Westeneng and Ruben (2007) find NGO and official aid to be correlated for Germany and Norway, but not for the United States. Since US-based organizations depend considerably less on their government than their German and Norwegian counterparts, this result is consistent with the view that officially funded NGOs tend to follow the country-wise distribution of their backdonors. But Nancy and Yontcheva (2006) find aid by co-financed European NGOs to be independent of official EU aid, indicating that the NGOs have some degree of autonomy and do not merely implement EU aid policies. Based on this discussion we hypothesize:

Hypothesis 3: The preferences of official backdonors affect the allocation of NGO aid.

⁸ For similar concerns, see Smillie (2000: 127) and Robinson (1997: 61). However, as for the effects of government funding on private contributions to NGOs, Ribar and Wilhelm (2002) find little evidence of crowding-out for US-based organizations engaged in international relief and development activities.

The aforementioned principal-agent model of Fruttero and Gauri (2005) not only implies that charitable objectives tend to be compromised by NGOs' financial dependence. The model also suggests that NGOs face an incentive to locate where other NGOs are engaged as well. Conformity of location choices is supposed to render it more difficult for principals to assess the performance of individual agents, and may thus help preventing financial sanctions. This is particularly relevant for NGOs with an established reputation. They have a lot to lose from failure, whereas less established NGOs may have more of an incentive to distinguish themselves by engaging in countries where backdonors can identify their specific contribution more easily. The NGOs in our sample are all more likely to belong to those with an established reputation, with budgets exceeding 10 million dollars, being active in on average 44 countries and having existed for decades.

Further support for this hypothesis comes from the field of nonprofit location theory, which suggests various factors that may lead NGOs to cluster activities (Bielefeld and Murdoch 2004). When one international NGO, for instance, has invested time and money in the skills of local partners, it is attractive for other international NGOs to also work with these partners, instead of going to another country where partners still need to be trained.

There is some initial evidence based on Lorenz curves suggesting that NGOs tend to cluster activities in certain countries rather than spreading their resources equally among recipients (Koch 2007). Also, at the sub-national level in Bangladesh, Fruttero and Gauri (2005) have found clustering of NGOs, especially micro-credit NGOs. According to Barr and Fafchamps (2005), NGOs are clustered in Uganda, too. Our consequent hypothesis is:

Hypothesis 4: NGOs locate where other NGOs are active, leading to geographical clustering of NGO aid.

As argued before, the allocation of NGO aid should be unaffected by commercial interests of governments and political variables such as the voting behavior in the United Nations. Yet official donors and NGOs are likely to resemble each other in one respect often subsumed under political considerations, i.e., former colonial ties. Similar to official donors, NGOs may have reason to prefer working in former colonies because of cultural factors such as common language and common religious beliefs.

NGOs may even have more discretion than state agencies to allocate aid according to cultural factors and common traits with selected recipient countries. As argued by Lipsky and

Smith (1990), service delivery by state agencies requires not only unambiguous eligibility criteria, but also unambiguous indicators showing whether and to what extent beneficiaries meet those criteria. As a result, the selection of official aid recipients is rules-based; favoring one group of countries over another requires “elaborate rationales” (ibid: 631). By contrast, NGOs can afford to be more selective in their choice of aid recipients. To pick and choose particular recipients according to religion, language, location or similar factors may violate the universalistic criteria underlying official development cooperation, but NGOs may well allocate their aid according to such factors without being criticized for doing so. Indeed, the focused mission, flexible approach and responsiveness are widely considered the *raison d’être* of NGOs (e.g., Williams 1990).

Bebbington (2005: 940) provides anecdotal evidence with respect to NGO activities in Peru: It appears that the department of Cusco enjoyed the particular attention of Catholic funding agencies and parishes in Europe since the 1970s and 1980s when “a liberation theological bishop committed to social justice and development work with the poor” was active in the department. While empirical cross sectional evidence is scarce, we hypothesize:

Hypothesis 5: NGOs are more strongly engaged in countries characterized by similarities with their own organization.

In summary, we attempt to gain deeper insights into the targeting of NGO aid across recipient countries by jointly considering the major potential determinants of NGO aid allocation identified above in a multivariate regression framework. Some hypotheses, notably the clustering of NGOs in specific recipient countries, have received scant attention in previous empirical work. While other hypotheses have previously been tested, the evidence has remained inconclusive and limited to specific donor countries. The present analysis makes use of a unique dataset covering aid allocations of 61 NGOs from a number of OECD countries, allowing us to investigate the determinants of NGO aid in a cross-section of countries, making the econometric estimations more representative. The dataset and the method of estimation are described in some detail in the next section.

3. Data and method

3.1. Data

As noted in the introduction, the data situation on NGO aid is extremely poor with respect to its distribution across recipient countries. Information on aid allocation published by NGOs in

Annual Reports is often confined to regions or major recipient countries. In order to assess the allocation behavior appropriately, however, it is equally important to know which countries got minor amounts of aid or none at all. Therefore, we contacted all NGOs that met two criteria (98 in total): (i) the annual aid budget exceeded € 10 million in 2005 (about \$ 12.5 million at the average annual exchange rate in 2005); and (ii) they were not mainly humanitarian organizations.⁹ Humanitarian NGOs, such as the Red Cross and Médecins Sans Frontières, were not contacted as their aid allocations are highly dependent on exogenous shocks and emergencies, such as a Tsunami. A cross-sectional analysis of their country-wise expenditures is likely to be driven by a few outlying observations.

The response rate to our data request was surprisingly high. The sample of NGOs included in the subsequent analysis represents about two thirds of the total budget of all NGOs contacted (see Appendix B for the sample of NGOs). In most cases, aid data refer to the year 2005.¹⁰ Taken together, the sample of NGOs granted aid in the order of €4.6 billion (US\$ 5.7 billion). This amounts to almost 40 percent of overall grants by all NGOs as reported by the OECD for 2005,¹¹ and is nearly as much as the sum of bilateral ODA by the four Scandinavian countries taken together.

Our NGO sample also appears to be fairly representative with respect to donor country coverage. Apart from some minor DAC countries with a combined ODA share of about 8 percent, it is only for Japan that we lack any information on NGO aid (see Appendix C). However, the case of Japan is unlikely to involve a serious sample selection bias; aggregate OECD data suggest that NGO aid plays a marginal role for this otherwise important donor. Three quarters of NGO aid in our sample is from NGOs based in the United States, the United Kingdom, Germany, and the Netherlands. This share almost exactly resembles the combined share of these four countries in NGO aid as presented by the OECD (independent of whether

⁹ Organizations that spend more than 50 percent of their budget on humanitarian aid are considered to be humanitarian organizations.

¹⁰ For 21 NGOs the data refer to 2004; in addition, for a few NGOs the financial year deviates by some months from the calendar year 2005. It would obviously be advantageous to cover more than one year for all NGOs. However, insisting on data for several years would certainly have come at the cost of a significantly declining response rate, thus compromising the representativeness of the NGO sample.

¹¹ As noted in the introduction, the OECD figure of US\$ 14.7 billion does not include backdonor support to national NGOs. Adding ODA contributions to NGOs (US\$ 1.78 billion in 2005 according to OECD statistics) would only slightly reduce the share of our NGO sample to 35 percent, however.

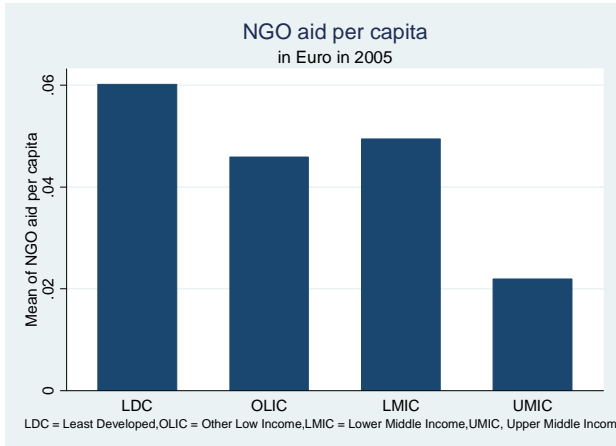
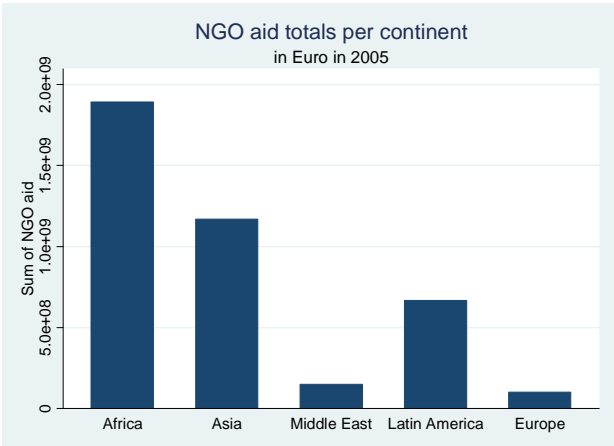
ODA contributions to NGOs are included or not).¹² Finally, our sample clearly reflects that the US share in NGO aid is considerably higher than its ODA share.

We included all countries in our regressions that were on the list of DAC aid recipients in 2005, and that are not small island states (e.g. Tonga and St. Lucia).¹³ The sample consists of 114 countries. Appendix A depicts the top recipients of NGO aid. The more populous countries dominate the list of top recipients when we consider absolute amounts. Conversely, small countries dominate when focusing on per capita expenditures. Approximately half of the top-recipients are considered to be Least Developed Countries by the OECD DAC.

The regional distribution of aid, as depicted in Graph 1a, shows that most NGO aid goes to Africa (47 percent), followed by Asia (29 percent) and Latin America (17 percent). When comparing per capita expenditures across income groups of recipients (according to the DAC classification), a somewhat surprising pattern emerges. The group of Least Developed Countries (category 1) receives only slightly more per capita aid than countries in the Other Low Income group (category 2) and Lower Middle Income group (category 3). Only Upper Middle Income countries receive significantly less aid on a per capita basis (Graph 1b).

Graph 1a: regional distribution of NGO aid

Graph 1b: NGO aid by income category



¹² The US share in NGO aid is lower in our sample compared to the OECD data series on grants by NGOs. But this difference (of about 10 percentage points) shrinks by half once it is taken into account that ODA contributions to NGOs are quantitatively important in some DAC countries (notably the Netherlands), though not in the United States. In addition, our sample covers donor countries such as Norway for which the OECD source does not offer any data, thus tending to overstate the US share.

¹³ Those were excluded since many data for these small island states are missing and the levels of NGO aid that these countries received were huge outliers when calculated on a per capita basis.

In our regression analysis, we take (logged) absolute amounts of aid rather than aid per capita as the dependent variable. This is to account for the fact that donors are more likely to allocate a fixed overall amount of money on a country basis than on a per capita basis (e.g., Neumayer 2003).

To measure poverty (hypothesis 1), we employ three indicators.¹⁴ In line with most previous studies, we choose (log) GDP per capita as our standard indicator of need. Alternatively, we use the Human Development Index, which provides a broader measure of need by including life expectancy at birth, literacy rates, and school enrolment rates, next to GDP per capita (United Nations Development Programme 2006). To capture whether NGOs are driven by relative rather than absolute levels of poverty, we include the Gini coefficient (Gillis et al. 1996).¹⁵

To account for institutional quality (hypothesis 2), we include the Polity IV index of democracy (Marshall and Jaggers 2004). The index ranges from –10 to 10, with higher values representing more democracy. Alternatively, we use the first principal component of the six ‘Governance Matters’ indicators from the World Bank (Kaufmann, Kraay and Mastruzzi 2005). Finally, we also use the sum of the Freedom House (2006) indicators of Political Rights and Civil Liberties, ranging from 2–14, with higher values indicating less democratic governance.

The preference of backdonors (hypothesis 3) is proxied by (log) bilateral aid that a country received (in 2004) from the home country in which the NGO is based as reported by the OECD/DAC (net official aid flows).¹⁶ To check whether donor interests also shape the choices of NGOs we include the share of the recipient country in total exports of the donor country. In addition we consider a variable that represents political interests of the donor country: conformity of voting of the recipient country with the home country of the NGOs in the United Nations General Assembly. These variables are standard in the allocation literature

¹⁴ See Appendix D for exact definitions, summary statistics and sources of all variables used.

¹⁵ We also tried to include the poverty headcount, taken from the World Bank (2006). However, we lose most of our observations, so we do not report the results below.

¹⁶ Few official donors report to the OECD a recipient country breakdown of aid to and through international NGOs. Hence, the risk is negligible that the OECD figures on aid from official donors, broken down per recipient country, comprise aid to and through international NGOs to any significant extent. Generally, the category sector ‘920 X support NGOs’ only includes support provided by embassies directly to (local) NGOs, often bypassing international NGOs.

on ODA (e.g., Alesina and Dollar, 2000; Fleck and Kilby 2006; Kilby 2006; Nunnenkamp and Thiele 2006).

To test for the effect of the presence of other NGOs – the so-called concentration effect, hypothesis 4 – we use (i) the number of other NGOs from our sample which are present in the same recipient country and (ii) the total amount of aid that all other NGOs spend in the same country.

The propensity to be active in those countries that share certain key characteristics (hypothesis 5) is examined by means of dummies for joint religious beliefs and former colonial status. The first dummy is one if the NGO has Christian foundations and the recipient country is predominantly Christian, and zero otherwise. The second dummy is one when a recipient country was a former colony of the home country of the donor NGO. Finally, in accordance with standard aid allocation regressions, we include a country's (log) population size.

Arguably, some of the explanatory variables may not be exogenous to the NGOs' decisions. For instance, effective aid may help in raising per capita income of recipient countries. Aid may also help stabilizing institutions. For several reasons, however, reverse causation is unlikely to distort our empirical results. Various aid items are unlikely to have *short-term* effects on economic outcomes (Clemens, Radelet and Bhavnani 2004). As concerns the impact on democratic institutions, in particular, short-term effects cannot be expected. According to Burnside and Dollar (2004: 4), "researchers coming from the left, the right, and the center have all concluded that aid as traditionally practiced has not had systematic, beneficial effects on institutions and policies." Nevertheless, all our explanatory variables are lagged by one year (i.e., refer to the year 2004).

3.2. Method

Throughout, the unit of observation is the individual NGO. Consequently, we analyze individual location decisions, some of which may be lost when aggregating data at the country level (e.g., Cheng and Stough 2006). For all our estimations, standard errors are clustered at the country level.

We employ various estimators to test our hypotheses. As Neumayer (2002) points out, there are basically two options for dealing with the bounded nature of the dependent variable,

based on different assumptions. According to the first assumption, donors decide – in the first step – whether to allocate aid to a country at all, while – in the second step – they decide on the amount of aid to be given once recipients are selected. For the first step of this model, Probit is the adequate technique of estimation. Ideally, the second step should take account of information derived from the first step. Employing OLS to the sample of selected countries and including the inverse Mills ratio derived from the first step to account for selection is the way forward here. The resulting Heckman selection model requires exclusion restrictions on the allocation equation.

In general, it is difficult to find variables which should be excluded from the allocation stage and could be argued to be important for selection exclusively. Therefore, Neumayer (2002) suggests OLS as alternative method of estimation, ignoring the selection bias that tends to result from not considering the inverse Mills ratio. The bias associated with OLS might be reasonable when the sample contains a limited number of zero observations. However, the number of zeros in our sample amounts to almost 50 percent. We therefore employ the Heckman estimator in addition to OLS. The case for employing the Heckman procedure is further strengthened by the fact that joint religion may be a reasonable choice as exclusion variable. There are several arguments to support this choice. Most importantly, NGOs having selected recipient countries on the basis of shared characteristics such as joint religion have often done so decades ago. Former decisions of this sort are fairly unlikely to shape current decisions on the amount of aid to spend in these countries. It fits into this reasoning that the religious match becomes completely insignificant when running OLS regressions for the countries selected as recipients of NGO aid, while it is significant in the Probit selection equation (as will be shown below). There is thus some justification for the assumption that the religious match affects selection rather than allocation, even though the OLS estimate has to be interpreted with caution as it may suffer from selection bias. To anticipate the results, estimates obtained by the Heckman estimator are fairly similar to those obtained by OLS.

The second option is based on the alternative assumption that the same set of variables determines both whether a country is selected as aid recipient and how much aid is being allocated to that country. Tobit would then be the preferred method. As argued above, there might be reason to doubt that selection and allocation are driven by the same set of variables, but we report the Tobit results for comparison.

4. Results

We start with the Probit model addressing the selection of recipient countries. The dependent variable takes the value of one if a country has been chosen as recipient of aid by a particular NGO, and is zero otherwise. In testing our hypotheses outlined in Section 2, one variable out of each group of variables relating to a particular hypothesis enters the basic specification, including variables that figure prominently in the ODA allocation literature (Alesina and Dollar 2000, Dollar and Levin 2006, Hout 2007): (log) GDP per capita, the Polity IV index of democracy, and (log) population. The basic specification also includes the dummy for joint religion, (log) bilateral per capita aid, and the number of other NGOs present in the same recipient country.

Column 1 of Table 1 shows the results. The estimation correctly predicts 73.4 percent of the observations. Most of our hypotheses receive strong support by the data. Countries are more likely to be selected with lower per capita GDP, though only at the ten percent level of significance. At the one percent level, NGOs are more likely to be active in countries (i) which receive higher bilateral official aid from the donor country in which the NGO is based, (ii) where more other NGOs are engaged, (iii) which share the same religion, and (iv) which have larger populations. Contrary to hypothesis 2, however, NGO aid increases with rising levels of democracy. It thus seems that international NGOs favor countries that are more democratic, rather than working in difficult environments.

As concerns the size of the effects, a one percent increase in GDP per capita reduces the probability of receiving NGO aid by 1.3 percent. Improving democracy by one point on the polity index (ranging from -10 to +10) increases the probability of being selected by 0.2 percent. A one percent increase in bilateral aid and the presence of one more NGO from our sample in a recipient country increases the probability of being selected by 4.5 percent and 1 percent, respectively. The marginal effect for joint religion is 18.9 percent, which points to a remarkably strong influence of shared characteristics with recipient countries on NGOs' geographic choices.

In the following columns of Table 1, we (i) exchange or, respectively, add one variable for each hypothesis at the time and (ii) report one specification including all variables belonging to one particular hypothesis.

Replacing GDP per capita by the Gini coefficient (column 2) or, respectively, the Human Development Index (column 3) shows that these two alternative indicators of need are not significant at conventional levels. When we include them jointly with per capita GDP (column 4), the Human Development Index is marginally significant, with a positive coefficient, while the Gini coefficient remains statistically insignificant; GDP per capita becomes significant at the five percent level. This result runs counter to the claims of NGOs to focus on relative poverty or broader indicators of need rather than on GDP per capita.

Columns 5 and 6 substitute the index of democracy taken from Freedom House and, respectively, the World Bank's governance index for the Polity index of democracy. The two indicators are not significant at conventional levels. When we include them jointly with the Polity index, none of the three variables significantly affects aid, due to the high correlation between them (column 7). Bilateral exports in total donor country exports (column 8) are significant at the five percent level when included in the regression, showing that increased trade reduces NGO aid. While the negative coefficient may be somewhat surprising¹⁷, we can conclude that, as hypothesized, NGO aid is not affected by the economic interests of backdonors. Voting in the General Assembly (UNGA voting) is highly significant, with a positive coefficient (column 9), which suggests that, in addition to simply following backdonors, NGOs prefer to be engaged in countries with which their backdonor has friendly ties. These results remain when the variables are included jointly (in column 10).

Columns 11 and 12 include (log) expenditures of other NGOs instead of and, respectively, in addition to the number of other NGOs being present in a particular country. NGO aid is both rising with the amount of aid granted by other NGOs, and the number of other NGOs, at least at the five percent level of significance. The dummy for former colonies is significant at the one percent level, independent of whether joint religion is dropped (column 13) or enters together with the colonial dummy (column 14). Religion stays significant at the one percent level in column 14, with the expected positive coefficient.

Note that the coefficients of most variables are strikingly robust throughout the various specifications of the Probit model. Bilateral aid is significant at the one percent level in all specifications. The same is true regarding the number of other NGOs, religion, and population

¹⁷ Note, however, that the regressions also include bilateral aid, our preferred proxy for dependence on backdonors. Excluding bilateral aid from the regressions, the export share is no longer significant at conventional levels (not reported in the table).

(at the ten percent level at least). The index of democracy and GDP per capita, however, become insignificant in some specifications. The Probit model thus provides strong evidence in favor of hypotheses 3-5, while there is weak evidence in favor of hypothesis 1. Hypothesis 2 on the engagement of NGOs in comparatively difficult environments clearly finds no support by the data.

Table 2 reports OLS results on the allocation of aid for those countries that have passed the eligibility stage. Compared to the results regarding selection, there are some interesting similarities, but also striking differences. In line with the results reported above, NGO aid increases with bilateral aid, at the one percent level of significance throughout. Also at the one percent level, the number of other NGOs increases the amount of NGO aid. Turning to the differences, the impact of population is statistically weaker in the allocation equations as compared to selection as reported above. Most strikingly, the indices of democracy and institutional quality are completely insignificant according to all estimates, and the same is true for joint religion. GDP per capita, to the contrary, is highly significant according to all estimates, with the expected negative coefficient. Our results imply that NGO aid is clearly poverty-oriented regarding aid allocation (even if the impact of per capita GDP on the selection of countries cannot be considered as robust). The insignificance of religion in the allocation equation is in line with our a priori expectations: Today's recipients have been selected based on shared characteristics in the past, while such decisions do not shape current decisions on the amount of aid spent in these countries. The same line of reasoning applies to the insignificant coefficient of former colonies. The insignificant coefficient of democracy in the OLS estimations suggests that while NGOs are hesitant to engage in more undemocratic countries at all, they do no longer care about the recipient country's level of democracy after the decision to be active has been made.

As concerns the additional variables, some interesting differences to the Probit estimates emerge. When included instead of per capita GDP, the Human Development Index has the expected negative coefficient, at the one percent level of significance. In line with the claims of NGOs, countries scoring higher on the index thus receive less aid. UNGA voting is significant at the one percent level, with a negative coefficient. In contrast to the Probit model, the OLS estimation may thus indicate that official donors channel aid through NGOs to countries they might prefer not dealing with directly due to political differences.

Regarding the size of the effects, a one percent increase in GDP per capita leads to a 0.14 percent reduction in NGO aid. This is modest compared to studies on bilateral donors' aid allocation (e.g., Berthélemy 2006; Neumayer 2003), where estimated elasticities tend to lie above 0.5. A one percent increase in bilateral aid and the presence of one more NGO in the recipient country raises aid by 0.14 percent and 0.03 percent, respectively.

The OLS results might be biased due to the omission of the Inverse Mills Ratio in the allocation equation. Table 3 thus replicates the analysis, using the Heckman estimator instead of OLS (and omitting joint religion – and the colonial dummy – from the allocation equation). Throughout, the Inverse Mills Ratio is not significant at the five percent level, so the OLS results reported above are unbiased (as reported at the bottom of the table). Controlling for the determinants of being selected as aid recipient does not change the results. Throughout, the results reported in Table 3 mirror the OLS results shown in Table 2.

Given that the determinants of selection are to some extent different from those determining the amount of aid, the above noted assumptions underlying Tobit do not hold. The results employing the Tobit estimator are thus merely suggestive. Still we report them in Table 4. The Tobit results are closely in line with those obtained employing Probit (reported in Table 1), while they partly appear to contradict the OLS and Heckman estimates. In particular, joint religion is significant at the one percent level, with a positive coefficient. The positive effect of joint religion, however, mainly reflects the decision on aid eligibility, which points in the direction of the results of the two-step approach.¹⁸

Overall, our regressions provide strong support for hypotheses 3, 4, and 5. There is strong and robust evidence that the preferences of backdonors matter for both selection and allocation; the same is true for the clustering of NGOs. Concerning joint characteristics of NGOs and recipients, we find that these characteristics matter for the selection of recipients rather than the allocation of aid amounts. The evidence that NGOs take account of poverty and institutions (hypotheses 1 and 2) is less strong and depends on measurement, the choice of control variables, and the stage in the decision process. There is only limited evidence that poverty affects the NGOs' choice to be active in a country, whereas poverty is shown to have

¹⁸ The effects on aid eligibility and aid allocation can be compared by calculating the marginal effects on the probability of being selected as aid recipient separately from the marginal effects on the amount of aid. It turns out that the impact on selection is substantially stronger than on allocation (0.47 as compared to 0.19, respectively).

a strong impact on the amount of aid that is spent. Concerning hypothesis 2, it appears that international NGOs are more likely to work in democratic countries, but that they do not take account of the level of democracy when deciding on how much aid to give.

5. Conclusion

NGOs play an important role in international development cooperation, but the allocation of NGO aid has rarely been mapped, let alone explained. To the best of our knowledge, our paper provides the first comprehensive cross-country analysis of the driving forces of NGO aid, based on unpublished data that we collected for a representative group of some 60 of the largest NGOs from various OECD countries. We employ several econometric methods, including Heckman models, covering altruistic, strategic and other aid motivations. Taken together, our findings qualify the widely held view that NGOs provide better targeted aid than state aid agencies.

This still predominant view is supported in two major respects. First of all, NGO aid is concentrated in the neediest countries. The evidence suggests that NGOs focus on the poor, in particular in the second stage of the allocation process, i.e., when deciding which amount of aid to grant to eligible countries. Second, commercial interests such as the promotion of exports, often supposed to shape the allocation of official aid, have not systematically affected the allocation of NGO aid.

On the other hand, we reject the hypothesis that NGOs complement official aid through engaging in so-called difficult institutional environments where state aid agencies find it difficult to reach needy citizens. Rather, NGOs tend to replicate the location choices of official “backdonors” from whom NGOs get part of their funding. This casts doubt on the notion of autonomous NGO behavior. Moreover, NGOs follow other NGOs so that aid gets clustered, further adding to the divide between so-called donor darlings and donor orphans. Finally, NGOs prefer recipient countries with common traits related to religion or colonial history.

Our findings invite further research in several respects. For instance, the location choices of NGOs may be analyzed at a finer geographical level. An extension to choices *within* recipient countries would be most important for large countries such as India or Rep. of Congo, but is highly likely to meet with serious data constraints. Likewise, it would be

desirable, though hardly feasible to cover non-financial links between NGOs and local organizations and the people in recipient countries. NGOs appear to be increasingly active in forming alliances with local organizations for joint lobbying activities, and the selection of local partners may well follow different rules as the allocation of financial support. Another line of future research shall dig deeper with respect to the reasons underlying the clustering of NGO aid. The question of why NGOs tend to replicate the location choices of other NGOs as well as official donors agencies clearly deserves more attention.

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Table 1: NGO activity, Probit

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
	base	Hypothesis 1			Hypothesis 2			Hypothesis 3			Hypothesis 4		Hypothesis 5	
(log) GDP p.c.	-0.03829 (1.79)*			-0.05369 (2.46)**	-0.02396 (1.03)	-0.01247 (0.62)	-0.03914 (1.68)*	-0.03223 (1.44)	-0.04049 (1.74)*	-0.03449 (1.43)	0.01043 (0.31)	-0.01087 (0.43)	-0.01021 (0.69)	-0.03731 (1.73)*
Polity	0.00816 (2.46)**	0.00386 (1.11)	0.00490 (1.53)	0.00505 (1.38)			0.00496 (0.76)	0.00736 (2.09)**	0.00686 (1.99)**	0.00618 (1.68)*	0.00970 (2.05)**	0.00665 (2.11)**	0.01144 (3.89)***	0.00825 (2.49)**
(log) bilateral aid	0.13118 (10.96)***	0.13996 (10.65)***	0.13374 (11.39)***	0.13790 (10.54)***	0.12794 (11.46)***	0.12653 (11.33)***	0.13255 (10.95)***	0.12786 (10.40)***	0.15486 (12.15)***	0.15240 (11.68)***	0.14048 (11.05)***	0.12934 (10.56)***	0.11827 (9.78)***	0.12325 (9.79)***
# of other NGOs	0.02977 (11.57)***	0.03048 (11.72)***	0.03126 (13.00)***	0.02942 (10.40)***	0.03007 (12.22)***	0.03133 (14.31)***	0.02923 (11.16)***	0.02982 (11.32)***	0.02830 (10.56)***	0.02817 (10.23)***		0.02338 (5.72)***	0.03179 (14.04)***	0.03011 (11.76)***
Religion	0.50630 (9.57)***	0.49362 (8.88)***	0.48834 (9.54)***	0.50496 (8.77)***	0.51797 (10.81)***	0.52694 (10.82)***	0.50319 (9.51)***	0.50229 (8.85)***	0.47959 (8.79)***	0.47345 (8.09)***	0.50529 (8.91)***	0.49944 (9.55)***		0.51131 (9.70)***
(log) population	0.04185 (2.74)***	0.03079 (2.24)**	0.03513 (2.31)**	0.02921 (1.79)*	0.04213 (2.64)***	0.03306 (2.46)**	0.04495 (2.73)***	0.05440 (2.70)***	0.04227 (2.63)***	0.06015 (2.81)***	0.05087 (2.29)**	0.03125 (2.14)**	0.03256 (2.47)**	0.04374 (2.86)***
Gini coefficient		0.00088 (0.48)		0.00138 (0.75)										
Human Development Index			0.02642 (0.22)	0.22277 (1.73)*										
Freedom House					-0.01086 (1.49)		-0.00805 (0.53)							
Governance						0.00884 (0.45)	-0.01059 (0.44)							
Recipients' share in total exports								-4.90196 (1.99)**		-5.90213 (2.19)**				
UNGA Voting									0.51872 (4.57)***	0.53952 (4.61)***				
(log) expenditures other NGOs											0.26542 (8.81)***	0.08505 (2.21)**		
Colony, dummy													0.31398 (3.80)***	0.33570 (4.18)***
Constant	-1.83131 (9.83)***	-1.95400 (8.44)***	-2.01617 (10.03)***	-1.70548 (7.40)***	-1.82602 (10.07)***	-1.86973 (9.87)***	-1.79176 (9.18)***	-2.05981 (7.89)***	-2.12606 (9.95)***	-2.45078 (8.57)***	-6.14707 (14.19)***	-3.12515 (4.80)***	-1.83417 (10.33)***	-1.87850 (9.91)***
Observations	5409	4653	5531	4533	5999	6059	5349	5118	5349	5058	5406	5406	5409	5409
Number of recipient countries	95	82	97	80	105	106	94	90	94	89	95	95	95	95
Pseudo R2	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.15	0.16
log likelihood	-2878.82	-2516.02	-2932.84	-2471.04	-3204.40	-3226.34	-2857.95	-2759.45	-2847.21	-2727.45	-2894.48	-2869.23	-2914.16	-2871.86

Note: * significant at 10 percent; ** significant at five percent; *** significant at one percent; standard errors clustered at the country level

Table 2: NGO aid total, OLS

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
	base	Hypothesis 1			Hypothesis 2			Hypothesis 3			Hypothesis 4		Hypothesis 5	
(log) GDP p.c.	-0.14146 (4.08)***			-0.11689 (2.98)***	-0.13658 (4.67)***	-0.10803 (3.58)***	-0.12828 (3.62)***	-0.13599 (3.79)***	-0.14431 (3.79)***	-0.13511 (3.46)***	-0.09285 (2.77)***	-0.13062 (3.15)***	-0.14436 (4.23)***	-0.14142 (4.02)***
Polity	0.00528 (0.70)	0.00353 (0.47)	0.00666 (0.89)	0.01100 (1.32)			-0.00958 (0.69)	0.00711 (0.92)	0.00737 (0.97)	0.00891 (1.15)	0.00668 (1.02)	0.00472 (0.65)	0.00493 (0.65)	0.00528 (0.70)
(log) bilateral aid	0.13610 (5.75)***	0.15299 (6.23)***	0.14477 (6.01)***	0.13947 (5.68)***	0.13805 (6.31)***	0.13803 (6.29)***	0.13833 (5.93)***	0.13815 (5.75)***	0.08784 (3.53)***	0.09064 (3.60)***	0.14208 (6.11)***	0.13516 (5.67)***	0.13710 (5.51)***	0.13604 (5.42)***
# of other NGOs	0.02782 (7.02)***	0.03085 (7.30)***	0.02860 (6.80)***	0.02720 (6.61)***	0.02757 (7.13)***	0.02837 (7.26)***	0.02753 (7.28)***	0.02707 (6.70)***	0.02974 (7.16)***	0.02862 (6.78)***		0.02490 (3.11)***	0.02775 (6.98)***	0.02782 (6.94)***
Religion	-0.04267 (0.50)	-0.02460 (0.33)	-0.05907 (0.66)	0.02169 (0.30)	-0.08024 (1.01)	-0.07021 (0.86)	-0.05259 (0.61)	-0.01901 (0.22)	0.03113 (0.35)	0.05162 (0.58)	-0.06258 (0.71)	-0.04702 (0.54)		-0.04266 (0.50)
(log) population	0.05749 (1.54)	0.03274 (0.87)	0.06567 (1.72)*	0.06251 (1.68)*	0.04741 (1.40)	0.03994 (1.15)	0.05920 (1.66)	0.10045 (2.38)**	0.05698 (1.50)	0.10290 (2.34)**	0.05827 (1.69)*	0.05259 (1.47)	0.05822 (1.56)	0.05749 (1.54)
Gini coefficient		-0.00393 (1.17)		-0.00248 (0.77)										
Human Development Index			-0.82146 (3.60)***	-0.19348 (0.75)										
Freedom House					-0.01365 (1.08)		-0.03988 (1.46)							
Governance						-0.03401 (0.84)	-0.08031 (1.60)							
Recipients' share in total exports								-9.02628 (1.37)		-10.80902 (1.72)*				
UNGA Voting									-1.28864 (5.25)***	-1.26807 (5.07)***				
(log) expenditures other NGOs											0.26768 (7.35)***	0.04052 (0.48)		
Colony, dummy													0.00199 (0.02)	0.00152 (0.01)
Constant	12.20049 (20.71)***	11.70926 (19.56)***	11.58288 (20.35)***	12.14117 (19.72)***	12.47980 (22.64)***	12.28639 (21.20)***	12.44691 (19.02)***	11.57661 (18.04)***	11.46199 (17.51)***	13.01987 (21.51)***	7.96300 (11.92)***	11.59283 (7.92)***	12.19930 (20.85)***	12.20030 (20.78)***
Observations	1789	1594	1816	1573	1983	1989	1783	1742	1783	1736	1788	1788	1789	1789
Number of recipient countries	95	81	96	80	105	106	94	90	94	89	94	94	95	95
R2	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.15	0.15	0.12	0.13	0.13	0.13

Note: * significant at 10 percent; ** significant at five percent; *** significant at one percent; standard errors clustered at the country level

Table 3: NGO aid total, Heckman

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	base	Hypothesis 1			Hypothesis 2			Hypothesis 3			Hypothesis 4	
(log) GDP p.c.	-0.14493 (4.32)***			-0.11284 (2.85)***	-0.13994 (5.05)***	-0.10946 (3.78)***	-0.13240 (3.90)***	-0.13880 (3.98)***	-0.14222 (3.77)***	-0.13090 (3.37)***	-0.10774 (3.11)***	-0.13385 (3.35)***
Polity	0.00614 (0.81)	0.00473 (0.59)	0.00308 (0.40)	0.01233 (1.46)			-0.00886 (0.65)	0.00789 (1.02)	0.00775 (1.02)	0.00903 (1.16)	0.00383 (0.55)	0.00558 (0.77)
(log) bilateral aid	0.14978 (6.14)***	0.16317 (6.88)***	0.15323 (6.15)***	0.14569 (6.12)***	0.15606 (6.77)***	0.15498 (6.71)***	0.15312 (6.26)***	0.14781 (5.95)***	0.08905 (3.31)***	0.08709 (3.08)***	0.11955 (3.98)***	0.14961 (6.14)***
# of other NGOs	0.03104 (6.15)***	0.03448 (6.14)***	0.03209 (5.96)***	0.02905 (5.54)***	0.03172 (6.66)***	0.03255 (6.73)***	0.03085 (6.62)***	0.02948 (5.64)***	0.03020 (5.25)***	0.02792 (4.47)***		0.02815 (3.42)***
(log) population	0.06103 (1.64)	0.04026 (1.06)	0.06802 (1.75)*	0.06422 (1.73)*	0.05234 (1.54)	0.04359 (1.25)	0.06337 (1.77)*	0.10512 (2.48)**	0.05679 (1.51)	0.10126 (2.30)**	0.05469 (1.55)	0.05617 (1.57)
Gini coefficient		-0.00356 (1.07)		-0.00239 (0.74)								
Human Development Index			-0.74594 (3.40)***	-0.19373 (0.75)								
Freedom House					-0.01470 (1.17)		-0.04028 (1.49)					
Governance						-0.03396 (0.85)	-0.08168 (1.62)					
Recipients' share in total exports								-9.10483 (1.40)		-10.90174 (1.73)*		
UNGA Voting									-1.27777 (5.23)***	-1.25781 (5.05)***		
(log) expenditures other NGOs											0.20690 (3.33)***	0.04265 (0.51)
Constant	11.88935 (19.26)***	11.27454 (18.25)***	11.24944 (17.63)***	11.93692 (19.29)***	12.06832 (20.44)***	11.88589 (19.29)***	12.11776 (17.49)***	11.20073 (15.65)***	12.97476 (19.72)***	12.27604 (15.42)***	9.48470 (6.28)***	11.23088 (7.47)***
Observations	5407	5191	5395	5191	5997	6057	5347	5360	5401	5354	5406	5406
Inverse Mills Ratio (Prob > chi2)	0.18	0.13	0.22	0.44	0.06	0.08	0.15	0.36	0.90	0.85	0.24	0.16
Number of recipient countries	95	80	94	80	105	106	94	90	94	89	95	95

Note: * significant at 10 percent; ** significant at five percent; *** significant at one percent; standard errors clustered at the country level

Table 4: NGO aid, Tobit

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
	base	Hypothesis 1			Hypothesis 2			Hypothesis 3			Hypothesis 4		Hypothesis 5	
(log) GDP p.c.	-0.61637 (2.39)**			-0.72918 (2.76)***	-0.41548 (1.51)	-0.20661 (0.83)	-0.57946 (2.07)**	-0.49578 (1.87)*	-0.63530 (2.32)**	-0.51476 (1.84)*	0.04229 (0.11)	-0.23033 (0.74)	-0.26682 (1.43)	-0.58871 (2.26)**
Polity	0.10261 (2.30)**	0.04145 (0.92)	0.05928 (1.35)	0.06121 (1.30)			0.06485 (0.81)	0.08860 (1.93)*	0.08912 (1.96)*	0.07651 (1.63)	0.11971 (2.03)**	0.08254 (2.01)**	0.14254 (3.50)***	0.10233 (2.30)**
(log) bilateral aid	1.61341 (10.33)***	1.70017 (10.04)***	1.64786 (10.68)***	1.65787 (9.90)***	1.59230 (10.87)***	1.58018 (10.76)***	1.62744 (10.33)***	1.55834 (9.93)***	1.85587 (11.31)***	1.80675 (11.03)***	1.72350 (10.33)***	1.57869 (9.93)***	1.47576 (9.21)***	1.51990 (9.29)***
# of other NGOs	0.37428 (11.99)***	0.37941 (12.03)***	0.39485 (13.17)***	0.36187 (10.72)***	0.37791 (12.91)***	0.39560 (15.13)***	0.36551 (11.80)***	0.37153 (11.66)***	0.35584 (11.13)***	0.35125 (10.80)***		0.27612 (5.10)***	0.40119 (14.24)***	0.37746 (12.28)***
Religion	5.88000 (8.65)***	5.54719 (8.00)***	5.59039 (8.54)***	5.71432 (7.90)***	5.89160 (9.49)***	6.00765 (9.45)***	5.80798 (8.66)***	5.71833 (8.12)***	5.54240 (8.01)***	5.36081 (7.50)***	5.83301 (8.25)***	5.74633 (8.68)***		5.91539 (8.70)***
(log) population	0.52618 (2.51)**	0.34891 (1.91)*	0.45427 (2.18)**	0.36369 (1.71)*	0.52081 (2.50)**	0.39740 (2.27)**	0.55920 (2.58)***	0.71256 (2.73)***	0.53859 (2.56)**	0.77558 (2.93)***	0.58219 (2.09)**	0.36862 (1.88)*	0.42089 (2.28)**	0.53247 (2.51)**
Gini coefficient		0.01155 (0.50)		0.01763 (0.78)										
Human Development Index			-0.45249 (0.30)	2.27992 (1.45)										
Freedom House					-0.13738 (1.51)		-0.11036 (0.59)							
Governance						-0.05171 (0.20)	-0.30809 (0.92)							
Recipients' share in total exports								-75.56028 (1.96)*		-84.86542 (2.17)**				
UNGA Voting									5.62038 (4.27)***	5.77267 (4.33)***				
(log) expenditures other NGOs											3.47779 (10.21)***	1.29032 (2.43)**		
Colony, dummy													3.06280 (4.01)***	3.25676 (4.47)***
Constant	-20.37052 (7.08)***	-21.86342 (6.76)***	-23.36528 (7.67)***	-18.45073 (5.80)***	-20.33484 (7.74)***	-21.24634 (7.85)***	-19.92356 (7.00)***	-23.73428 (6.52)***	-23.58660 (7.83)***	-27.83502 (7.42)***	-76.35518 (15.22)***	-39.78420 (4.47)***	-20.74450 (7.57)***	-20.70901 (7.06)***
Observations	5407	4651	5529	4531	5997	6057	5347	5116	5347	5056	5406	5406	5407	5407
Number of recipient countries	95	82	97	80	105	106	94	90.00	94.00	89	95	95	95	95
(Pseudo) R2	0,06	0,06	0,06	0,06	0,06	0,06	0,06	0,06	0,06	0,06	0,06	0,06	0,06	0,06
log likelihood	-9064.16	-8019.96	-9213.29	-7902.08	-10063.70	-10108.45	-9020.32	-8774.42	-9011.34	-8721.05	-9078.17	-9052.46	-9102.98	-9058.62

Note: * significant at 10 percent; ** significant at five percent; *** significant at one percent; standard errors clustered at the country level

Appendix A: Top recipients of NGO aid

International NGO expenditures in Euro (2005)		International NGO expenditures in Euro per capita (2005)	
India	261,550,584	Palestine	12.3
Ethiopia*	174,638,922	Lesotho*	11.4
Sudan*	149,705,388	Zimbabwe	9.7
Indonesia	135,186,046	Nicaragua	9.1
Kenya	125,746,998	Haiti*	8.8
Zimbabwe	125,709,694	Swaziland	8.3
Bangladesh*	117,578,166	Zambia*	7.6
Uganda*	109,005,501	Malawi*	7.3
Sri Lanka	95,408,083	Honduras	6.7
Malawi*	92,567,876	El Salvador	6.6

* Indicates that a country was labeled a Least Developed Country by the OECD/DAC in 2005

Appendix B: Overview of the sample of NGOs

Action Aid International	South Africa (other)
ADRA	USA
Broederlijk delen	Belgium
Brot fur die Welt	Germany
CARE Canada	Canada
CARE France	France
CARE Norway	Norway
CARE USA	USA
Caritas Switzerland	Switzerland
Catholic Agency for Overseas Development (CAFOD)	United Kingdom
Christian Aid	United Kingdom
Christian Childrens Fund	USA
Church of Sweden Aid	Sweden
Concern Worldwide	Ireland
Cordaid	Netherlands
Diakonia	Sweden
Evangelischer Entwicklungsdienst)	Germany
Ford Foundation	USA
Friedrich Ebert Stiftung	Germany
German Agro Action / Deutsche Welthungerhilfe	Germany
Goal	Ireland
Handicap International	France
Hivos	Netherlands
ICCO	Netherlands
International Planned Parenthood Federation (IPPF)	United Kingdom
Kellogg Foundation	USA
Kindernothilfe	Germany
Konrad Adenauer Stiftung	Germany
KOORDINIERUNGSSTELLE	Austria
Mac Arthur Foundation	USA
Marie Stopes International	United Kingdom
Mercy Corps	USA
MISEREOR	Germany
Norwegian Church Aid	Norway
Norwegian Peoples Aid	Norway
OCCDP	Canada
Oxfam Australie	Australia
Oxfam Belgium	Belgium
Oxfam Novib	Netherlands
Oxfam USA	USA
PLAN International	United Kingdom
Population Services International (PSI)	USA
Redd Barna (Save the Children)	Norway
Rädda Barnen (Save the Children)	Sweden
Rockefeller Foundation	USA
Save the Children USA	USA
SNV	Netherlands
Soros International Foundations	USA
Swiss catholic lenten fund	Switzerland
Swissaid	Switzerland
Swisscontact	Switzerland
Terre des Hommes NL	Netherlands
Terre des Hommes Switzerland	Switzerland
TROCAIRE	Ireland
Voluntary Services Overseas	United Kingdom
Vredeseilanden	Belgium
WaterAid	United Kingdom
Woord en Daad	Netherlands
World Vision Australia	Australia
World Vision Canada	Canada
World Vision USA	USA

Appendix C: DAC Countries: Shares in ODA and NGO Aid, 2005

	Bilateral ODA share of World ODA (%)	Share of grants of NGOs in total NGO aid (OECD data, %)	Share of grants of NGOs in total NGO aid (our data, %)
Australia	1.8	5.6 (5.0)	3.1
Austria	1.5	0.9 (0.8)	1.3
Belgium	1.6	1.7 (1.6)	0.4
Canada	3.4	6.6 (6.1)	4.2
France	8.8	0.2	1.3
Germany	9.1	10.4 (9.2)	10
Ireland	0.6	2.1 (2.7)	4
Japan	12.7	1.7 (2.3)	--
Netherlands	4.5	2.9 (6.6)	8.1
Norway	2.5	-- (--)	3.9
Sweden	2.7	0.2 (1.0)	1.2
Switzerland	1.7	2.3 (2.3)	2.4
United Kingdom	9.9	4.9 (6.8)	10.4
United States	30.8	58.7 (52.3)	47.5
Other	8.4	2.0 (3.0)	2.3
All (\$ billion)	82.1	14.7 (16.5)	5.71

^a In parentheses: including ODA contributions to NGOs.

Source: OECD (2007); data provided by 61 NGOs

Appendix D: Sources of variables

NGO aid	NGO aid from an individual NGO to a recipient country in euros in 2005
GDP p.c.	GDP per capita in 2004 (constant 2000 US\$), source: World Bank (2006)
Human Development Index	Human Development Index 2004, source: Human Development Report (2006)
Gini	Gini coefficient, source: United Nations Development Program (2006)
Polity	Polity 2 indicator from the Polity IV project. Source: Marshall and Jaggers (2004)
Freedom House	Freedom House political rights and Freedom House political liberties in 2004, source: Freedom House (2006)
Governance	Factor score of six Kaufmann indicators, source: Kaufmann et al. (2005)
Bilateral aid	Net bilateral aid inflows from the home country of the NGO to the recipient country in 2004 in million USD, source: OECD (2007)
Other NGOs	The number of other NGOs in the sample that are active in the recipient country, source: see text
Expenditures of other NGOs	Total expenditures in 2005 of other NGOs to a recipient country in euros, source: see text
Population	Population in Millions in 2004, source: World Bank (2006)
Colony	Colonial status. Source: Correlates of War 2 Project, version 3.0
Religion	Dominant religion, sources: Alesina et al. (2003) and annual reports of NGOs.
Recipients' share in total exports	Bilateral exports to a recipient country as a share of total bilateral exports to countries in sample, source: Comtrade (2007)
UNGA voting	Conformity in voting in United Nations General Assembly in 2004. Source: Dreher, Nunnenkamp, Thiele (2008)

Appendix E: Descriptive Statistics

	observations	Min	Max	Mean	Standard dev.
NGO aid (euro)	6891	0	47700000	577435	2065290
GDP/capita (dollar)	6466	88	7483	1425	1522
HDI	6588	0.31	0.86	0.62	0.15
Gini	5368	19	74.3	43.1	10.7
Polity	6039	-9	10	1.87	7.17
Freedom	6771	2	14	8.2	3.35
Governance	6893	-2.68	2.97	-0.04	0.98
Bilateral aid (million dollar)	6893	-57.46	3021.99	31.52	142.34
Number of other NGOs	6893	0	49	19.92	12.32
Expenditures of other NGOs	6893	0	2.62e+08	3.46e+07	4.12e+07
Population (millions)	6893	0.28	1296.15	44.05	158.4
Colony	7005	0	1	0.04	0.21
Religion match	6893	0	1	0.13	0.33
Export share	6465	7.15e-06	0.049	0.002	0.006
UNGA voting	6660	0.132	0.903	0.577	0.192