FOLLOW THE LEADER: HOW DUTCH DEVELOPMENT NGOs ALLOCATE THEIR RESOURCES – THE CONTRADICTORY INFLUENCE OF DONOR DEPENDENCY

BART LOMAN, IOANA POP and RUERD RUBEN*

Centre for International Development Issues (CIDIN), Radboud University Nijmegen, Nijmegen, The Netherlands

Abstract: Public funding to non-governmental development organisations (NGDOs) influences their allocation choices regarding preferred recipient countries for development aid. Instead of strict poverty-orientation criteria for aid allocation, NGDO country choice becomes increasingly aligned with bilateral priorities. Based on original data on Dutch aid delivery to developing countries, combined with detailed information on NGDOs financial structure and country characteristics, we analyse whether and how donor dependency and public subsidies influence NGDO country choice. Independent NGDOs appear strongly inclined to follow public aid priorities. This is attributed to risk-avoidance and complementarity-seeking of independent NGDOs and deliberate non-alignment for identity-seeking of dependent NGDOs. Copyright © 2010 John Wiley & Sons, Ltd.

Keywords: non-governmental development organisations; country choice; donor dependency; financial structure; risk avoidance; identity-seeking

JEL Classification: F35, DO2, C31, G11

1 INTRODUCTION

Foreign aid to development countries has increased significantly in recent years. The world’s major donor countries of the OECD Development Assistance Committee (DAC) disbursed globally US$ 104 billion in Official Development Assistance (ODA) in 2008, an increase of more than 60% compared a decade earlier. Given this large increase, much
attention has been devoted to the underlying determinants for the geographical aid distribution of aid expenditures between countries and regions. While earlier research has been primarily focused on bilateral and multilateral donor behaviour (e.g. Rowlands and Ketcheson, 2002; Mascharenhas and Sandlers, 2006), there has been a recent surge of attention on explaining the expenditure pattern of non-governmental development organisations (NGDOs) (see Masud and Yontcheva, 2005; Dreher et al., 2007; Koch, 2009).

Most of this NGDO research selected determinants based on juxtaposing a needs-based model with a donor-interest based model. According to the needs-based model, donors would focus primarily on the poorest (Riddell and Robinson, 1995) and poorly governed countries (Fowler and Biekart 1996). Following a donor interest model, NGDOs would have less altruistic motives and especially allocate their funds to countries according to political and economic interests of their back donor. This model is inspired by Edward and Hulme’s (1997) proposition that official funding from governmental back donor weakens NGDO’s independency.

Available verification of these two models for NGDOs points foremost to the latter one. With the exception of NGDOs funded by the European Union (Nancy and Yontcheva, 2006), country-specific studies of Swedish, Swiss and Dutch NGDOs conclude that especially bilateral aid is a primary determinant for NGDO country allocations (Dreher et al., 2007; Nunnenkamp et al., 2008; Koch and Loman, 2009). This was also confirmed in a cross-country study on major NGDOs from 15 OECD countries (Koch et al., 2008). Arguably, the most in-depth study on determinants for NGDO aid expenditures concluded that geographical choices were ‘rather governmental, that is influenced by the preference of the back donor’ (Koch, 2009: 163).

Interestingly, little or no research has been conducted on the effect of NGDO funding structures on their aid allocation decisions, while this could be of significant importance for country choice. For instance, Koch (2009: 1155) mentions that many Northern NGDOs are struggling for greater ‘room to manoeuvre’ from their back donors in their aid allocation decisions. This implies that NGDOs would make other geographical choices in the absence of such back donor’s pressure. Moreover, it raises the question whether financially more autonomous NGDOs would in fact provide more poverty-targeted aid than their counterparts (Nunnenkamp et al., 2008: 21). NGDOs might actually prefer to allocate their funds according to the needs-based model, but are restricted by political and economic interest of their back donor.

This article contributes to the discussion on NGDO aid expenditures in two ways. First, we will test determinants for geographical aid allocation of Dutch NGDOs and their alignment with bilateral funding priorities using a new and expanded dataset. Previous research on Dutch NGDOs only focused on the expenditures of four major Dutch organisations (Koch and Loman, 2009). However, the Dutch NGDO sector is characterised by a multitude of organisations, which together channel about 40% of bilateral aid. We compiled a detailed dataset of 73 major Dutch NGDOs and their country-wise and sector-wise expenditures to ODA recipients in 2007, covering an estimated 70% of expenditures of the Dutch NGDO sector. This detailed database allows us to test the determinants for Dutch NGDO aid allocations. Second, we analyse whether and how the internal financial structure of Dutch NGDOs influences their aid allocation decisions, compiling an independency and subsidy index for the NGDOs. We use these two indexes as interaction variables with commonly used determinants for aid allocation to verify whether back-donors interests modify NGDO country choice.
Development aid is assumed to be strongly oriented towards poverty alleviation, and therefore geographical distribution of aid is likely to focus on the poorest countries, regions and population segments. On the other hand, aid relationships are subject to certain path dependency and thus replicate historical allocation patterns. Moreover, political motives regarding good governance are increasingly influencing the choice of preferred recipient countries for delivering development aid.

Academic research on aid channels often distinguishes between two models for explaining aid allocations: the ‘recipient needs’ and the ‘donor-interest’ model (Dudley and Montmarquette, 1976; McKinley and Little, 1977). The former model assumes that development aid is likely to focus on the poorest countries and regions, whereas the latter model explains NGDO aid allocation from the priorities of lead funding agencies. Empirical evidence has been somewhat contradictory. Nancy and Yontcheva (2006) find that most EU-funded NGDOs favour poverty motives in their country choice, but other studies focussing on (inter)national NGDOs (e.g. Dreher et al., 2007; Nunnenkamp et al., 2008; Koch, 2009; Koch and Loman, 2009) do not confirm this and instead reveal that aid relationships are subject to donor dominance.

Development aid delivered through NGDOs might either follow the priorities of lead bilateral funding agencies or could search for a more independent allocation profile. The latter decisions are commonly assumed to depend on their internal financial structure, e.g. the degree of funding received from back donors (Koch, 2009). Recently, some new empirical studies on the determinants for NGDO aid allocation (Nancy and Yontcheva, 2006; Dreher et al., 2007; Nunnenkamp et al., 2008) confirm the importance of bilateral aid for NGDO country choice. These studies seem to suggest that Northern NGDOs closely follow the policy priorities of their public counterparts.

Another reason for closely looking at the underlying determinants of NGDO country choice refers to the variability within the non-governmental development sector regarding their internal funding structure. Earlier studies assumed that all NGDOs are donor-dependent, while in fact there are many organisations that are capable of raising substantial private donations through campaigning, charitable giving and membership fees. The philanthropy literature indicates that fundraising income of Dutch NGDOs has more than doubled during the last decade (Beckers, 2003), while maintaining reasonable cost ratios.

There are two competing hypotheses regarding the potential impact of donor funding on NGDO country choice. The standard idea is that NGDOs that largely depend on public subsidies will feel obliged to spend their resources in the same countries where their back-donors are operating. This is further reinforced by the fact that bilateral donors increasingly demand complementarities between public and private aid allocations, as part of the Paris agenda for aid harmonisation (Rogerson, 2005). The alternative hypothesis pays more attention to the importance of identity-seeking and the result-orientation for NGDOs, that requires them to deliver tangible output to guarantee public support and societal legitimacy (Clegg et al., 2007). This implies that even ‘dependent’ NGDOs that are less capable of raising substantial own resources feel obliged to develop a recognisable profile to maintain themselves eligible for public funding. Instead of free-riding on ongoing projects funded by other agencies in the same country, they might prefer to engage in more innovative, albeit risky, projects in settings where less donor presence is recorded.

Further testing of both hypotheses requires detailed insight in the aid allocation pattern and the financial structure of NGDOs. Available data from Dutch NGDOs permit us to
scrutinise the relationships between donor dependency and country allocation of aid. This provides opportunities for deepening the debates on the possibilities and likelihood of back donor-influenced aid patterns and on the frequently contested relationship between donor funding and (in)dependent decision-making within the NGDO community. Whereas some European bilateral donor agencies tend to reinforce their influence over non-governmental development aid operations, the funding instrument might be insufficient. Instead, understanding the internal logic of NGDO aid allocations could offer new insights into the trade-offs that reign the priority-setting agenda of mixed public–private agencies, where risk-avoidance and identity-seeking arguments simultaneously ask for attention (Yescombe, 2007).

The resulting aid allocation pattern is thus likely to be influenced by two opposing forces: (a) risk-avoidance for NGDOs that are drawing mostly on private fundraising, and (b) identity-seeking for NGDOs that compete for public funding. This may result in a rather unexpected pattern of country choice for aid allocation, where the former type of (more independent) NGDOs seek to align their activities with major bilateral priorities, whereas the activities of the latter category of (subsidy-dependent) NGDOs are more difficult to get dovetailed with backdonor interests. The contradictory role of donor dependency becomes visible at the interface between public objectives of aid harmonisation and private objectives for identity-seeking. Strangely enough, reducing the donor dependency in NGDO funding might thus result in greater prospects for public–private alliances in international development cooperation.

3 DATA AND APPROACH

We composed an unique data set that permits to analyse the determinants for the geographical allocation of development aid by Dutch NDGO’s to developing countries. Our dataset includes 73 NGDO’s with a total expenditure of 840 million euro in the year 2007. This is considered representative for about 70% of all development NGDO’s operating from the Netherlands. The data set thus contains a total of 7211 combinations of Dutch NGDO expenditures in 99 so-called OECD-DAC countries. We combined the aid allocation data with information on the financial structure from the Dutch Central Fundraising Bureau (CBF). On average, Dutch NGDOs depend for 36% on government subsidies and are capable of raising private funding up to 53% of their budget (see Table 1). The Dutch civic aid landscape includes a small number of large traditional NGDOs that are strongly dependent on state support and fundraising campaigns, alongside a large number of medium-size and smaller agencies that rely on mixed funding from public and private sources. Public funding for NGDOs used to be based on their supposed strong poverty orientation through direct linkages with local civil society structures. However, the rules applied in the competitive tendering system for NGDO aid also include criteria related to streamlining with official aid priorities in terms of country and sector choice (Ruben and Schulpen, 2009).

1All expenditures in the initial dataset are split up by sectors based on the OECD Creditor Reporting System (CRS) codification. This allowed to exclude humanitarian aid which is strongly correlated with emergency situations.

2We selected all official DAC recipients in 2007 excluding the category ‘small development islands’.

3Note that this is an unweighted average for all 73 NGDOs. Especially for the larger Dutch NGDOs, the subsidy dependence from public sources is substantially higher.
We used several variables to assess the validity of the need-based or donor-interest aid allocation model. For the need-based model, we relied on GDP per capita – measured in US dollars – as an indicator of poverty corresponding to year 2006. The governance level is measured by the Polity IV index, which uses a composite index accounting for combinations of monarchies, anocracies and democracies. The continuous variable ranges from $-10$ to $+10$, where $-10$ signifies a country that is a full autocracy while $+10$ signifies a country that is a full democracy. In the probit regression we used the continuous variable (since there are no assumptions on the normality of the variables) while in the OLS regression we categorised the variable using country information.

The donor-interest model was tested by assessing the bilateral aid sent to a specific country, as sum of public and private aid, measured in US dollars (OECD-DAC, 2008), corresponding to year 2006. This measures whether NGDOs follow their back donor in aid allocation. Second, we included the export level between The Netherlands and a specific country from the dataset, corresponding to year 2006 to test for economic interests from the back donor. Both variables were transformed in natural logarithms to guarantee normality.

To test the effect of the funding structure of a NGDO, we first calculated an independency index. We used data for 2006 from the CBF to assess the internal financial...
structure of Dutch NGDOs, taking into account the percentage of the own funding derived from (1) private fundraising, (2) joint campaigns and (3) profits from stocks. The higher the share of own funding, the higher the assumed independency from the back-donors. In the second place, we also tested the effect of the funding structure in a separate model using the subsidy index. It takes the share of public funding raised from ‘subsidies from governments and others public agencies’ in the overall NGDO budget. In this respect, the subsidy index is a measure of dependency on Dutch government support: a higher subsidy index indicates more reliance on public funding. Both the independency index and the subsidy index are measures for the influence of back donor’s interests. We cannot use, however, both measures in the same statistical model since they are highly correlated. Therefore, we included both indexes in two separate models to test their effect.

Other control variables that were included refer to structural parameters of donor and recipient countries. First, Dutch NGDOs aid lagged for year 2006 measured in constant US dollars (as reported by OECD-DAC) is used to test for path dependency. We thus assume that historical aid patterns may influence current aid allocations. Second, the distance between the donor country and the receiving country is used as control variable, indicating that geographical distance might influence country choice. Third, we tested for the similarity between the main religion in receiving countries with the dominant religion in The Netherlands, looking at the proportion of the population belonging to particular denominations (Christian, Muslim and other religions), using the Christian religion majority as reference. The total population (World Bank, 2006) is introduced to control for size differences between the countries. Finally, we control for differences in size between NGDOs, measured by the total budget reported for year 2007 (CBF, 2008). Table 1 provides the descriptive statistics for the 7211 combinations of NGDO donor aid with recipient countries.

3.1 Analytical Methods

We based our analyses on a two-stage Heckman approach which assumes that there is a difference between the selection of a country as aid recipient and the actual amount sent to a specific country. We therefore computed two dependent variables: (a) a selection model for the determinant of country choice, and (b) an allocation model that explains the amount of NGDO aid allocated in a specific country. The selection variable has values of 0 or 1 to show whether or not a Dutch NGDO delivers development aid to a country. The allocation variable contains the actual amount of development aid that was sent to a particular country. The distribution of the aid allocation variable is rather skewed, since many NGDO – country combinations do not actually deliver development aid.

The structure of the dataset exhibits several major characteristic that warrant due attention. First, the cases of NGDO-country combinations are not fully independent from each other, since some countries receive development aid consistently from a consortium of several NGDOs. Moreover, some countries are especially targeted for bilateral aid and thus are also likely to receive more NGDO aid. This implies that the internal structure of the database is such that any ordinary one-level analysis might deliver biased results. In order to correct for the non-independence of observations, we clustered the standard errors at country level in all our analyses.
A second concern refers to the most appropriate way for analysing the data. In line with the available literature we disaggregated that the decision for allocation is a two stage process, involving (1) the selection of the recipient countries, followed by (2) the decision regarding the amount of aid sent. Following this approach, selection and allocation can be: determined by different sets of variables, and the same predictors can have different effects in the each of the two stages of the process. Even while we acknowledge that in the literature direct estimates for selection are used in a one stage Tobit procedure (Nunnenkamp et al., 2008), we consider a two stage approach more appropriate for separately analysing both decisions.

The statistical procedures used to estimate the selection and the allocation of aid to certain country rely on probit regression (for the selection stage) and an OLS regression employed for the subsample of countries that receive aid from Dutch NGDOs. However, these procedures still have to address the problem of selection bias that results from the fact that country selection is a non-random process. If we do not take this issue into account our analysis might lead to biased estimates in the OLS models. In our case, the necessity to address this selection bias is even more stringent because of the high proportion of countries that do not receive any aid from Dutch NGDOs or that only receive aid from a small number of NGDOs. An appropriate response to this problem requires using the Heckman procedure, that relies on computation of the Inverse Mill ratio as an estimator that corrects for inherent selection bias.

The models were estimated in STATA 10 software that has incorporated both required data correction routines: the Heckman selection model and the clustering of standard errors. Because of the requirement of not using the same variables in the selection and in the allocation model, we used common religion only in the selection equation. We thus argue that common religion might be considered more important in the primary selection process then for the allocation of funds. Shared value attributes between the donor and receiver (such as colonial history or religion) were also found to be important for establishing the relation between donors and receivers (Koch et al., 2008), however for deciding how much funds should be allocated towards selected NGDOs, other factors are likely to be more relevant.

4 RESULTS

We first present the general results concerning determinants influencing NGDO selection of target countries to get insight into driving forces for the spatial allocation of development aid resources by Dutch NGDOs. This analysis reveals to what extent need-based or donor-driven interests are most critical for NGDO engagement with particular developing countries. Hereafter, we include specific parameters regarding their (in)dependency on fundraising and the public subsidies to detect the relative importance of the NGDO financial structure on country choices. In each case, we distinguish two (related) decisions: the factor influencing country selection (coefficients of probit model) and the factors determining the allocation of the amount of resources devoted to particular countries (using an OLS regression models with correction for selection bias).5

---
5The coefficients for the Inverse Mill ratio were fully significant in all models, thus warranting the use of the Heckman approach to correct for selection bias.
Table 2. Determinants of Dutch NGDO country choice (probit regression)

<table>
<thead>
<tr>
<th>Model</th>
<th>1A With independence index</th>
<th>1B With subsidy index and interaction effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Selection stage</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GDP per capita (ln)</td>
<td>$-0.095^*$</td>
<td>0.049</td>
</tr>
<tr>
<td>Bilateral aid (ln)</td>
<td>0.014**</td>
<td>0.006</td>
</tr>
<tr>
<td>Exports from NL (ln)</td>
<td>$-0.005$</td>
<td>0.039</td>
</tr>
<tr>
<td>Political regime (polity index)</td>
<td>0.015**</td>
<td>0.007</td>
</tr>
<tr>
<td>vDutch NGDO aid 2006 (ln)</td>
<td>0.075***</td>
<td>0.014</td>
</tr>
<tr>
<td>Religion (Christian ref)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Muslim</td>
<td>$-0.119$</td>
<td>0.074</td>
</tr>
<tr>
<td>Other religion</td>
<td>$-0.028$</td>
<td>0.078</td>
</tr>
<tr>
<td>Budget NGDO 2006 (000 USS)</td>
<td>0.001***</td>
<td>0.000</td>
</tr>
<tr>
<td>Population (ln)</td>
<td>0.143***</td>
<td>0.042</td>
</tr>
<tr>
<td>Distance (km)</td>
<td>0.000**</td>
<td>0.000</td>
</tr>
<tr>
<td>Independence index</td>
<td>0.060</td>
<td>0.061</td>
</tr>
<tr>
<td>Subsidy index</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interaction independency Index × bilateral aid</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interaction subsidy index × bilateral aid</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>$-2.599^{***}$</td>
<td>0.363</td>
</tr>
<tr>
<td>Log pseudo likelihood</td>
<td>$-4002.708$</td>
<td></td>
</tr>
</tbody>
</table>

Significance at 10%.
Significance at 5%.
Significance at 1%.


B. Loman et al.
4.1 Country Needs versus Donor Interests?

Looking at the effects of the predictors in the selection model (Table 2, 1A) compared with the corresponding allocation model (Table 3, 2A) reveals that different independent variables explain both types of decisions. It appears that the Dutch NGDOs rely on a wide range of criteria for deciding where the money will go, but when deciding how much money will be devoted to a specific country things are much simpler: the amount sent in the previous year is the main criterion that guides the financial allocations in the current year.

The poverty incidence reflecting the needs of a country is consistently not significant, neither for the country selection nor for allocation of development aid. In the selection models, the GDP per capita is only significant at 10%, but it loses significance in the allocation model. Otherwise, the political regime is far more important for country selection; it seems that most Dutch NGDOs tend to avoid too difficult political environments and often select countries with a more democratic regime.

The size of NGDOs – as measured by its yearly budget – is important in all selection models. As expected, larger NGDO are active in more different countries. However, resource allocation towards selected countries does not depend any more on NGDO size. Whereas larger NGDOs increase the number of countries targeted as recipients, they split up their funds among the recipients, resulting in comparable smaller allocations. The country size as reflected by the population also influences the selection as recipient: larger countries have more chance to be selected. Moreover, distance between the donor country and the recipient country appears significant in the selection model. It appears that Dutch NGDOs have preference for more distant countries when selecting recipients for their funding. Finally, sharing a common (Christian) religion does not influence the probability of a country to be selected.

The back donor’s interest (e.g. bilateral aid) turns out to be highly significant only in the selection models, whereas other indicators of economic interest measured through the amount of exports do not show to have any influence on NGDO aid allocations. Interestingly enough, the more bilateral aid a country receives the higher its chances to be selected as recipient for development aid by Dutch NGDOs. This point towards close coordination between NGDO and public aid operations.

Path dependency plays a dual role in each of the two models. In the selection process it seems that the more funds a country received in past years, the higher the chance that it will continue receiving resources the next year. This might indicate a policy of capitalising on previous collaboration efforts and on-going multi-annual project commitments by the NGDOs. However, in the allocation model, the more funds a country received from Dutch NGDOs this will lead to fewer funds allocated in subsequent years. This points towards a policy of gradual reduction of aid relationships in order to avoid overly dependent relationships.

Introducing the subsidy index and the (in)dependency index into the selection and allocation models, we observe a significant effect of both indexes, but only for the decision to allocate funds to a particular country. The two indexes are strongly negative correlated, reflecting the fact that the two sources of funding – government and own sources – might be considered complementary for Dutch NGDOs. The effects of the two indexes in the models reflect this negative correlation between them: the independency index has a negative effect on the amount of funds a country receives, whereas the subsidy index has a positive
Table 3. Determinants of fund allocation by Dutch NGDOs (OLS regression)

<table>
<thead>
<tr>
<th>Model</th>
<th>2A With independence index</th>
<th></th>
<th>2B With subsidy index and interaction effects</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Coefficient</td>
<td>SE</td>
<td>Coefficient</td>
<td>SE</td>
</tr>
<tr>
<td>GDP per capita (ln)</td>
<td>0.085</td>
<td>0.131</td>
<td>0.075</td>
<td>0.135</td>
</tr>
<tr>
<td>Bilateral aid (ln)</td>
<td>-0.026</td>
<td>0.019</td>
<td>-0.027</td>
<td>0.021</td>
</tr>
<tr>
<td>Exports from NL (ln)</td>
<td>0.004</td>
<td>0.095</td>
<td>0.018</td>
<td>0.101</td>
</tr>
<tr>
<td>Political regime (autocracies ref)</td>
<td>0.385</td>
<td>0.213</td>
<td>0.034</td>
<td>0.239</td>
</tr>
<tr>
<td>Democracies</td>
<td>0.031</td>
<td>0.232</td>
<td>-0.009</td>
<td>0.014</td>
</tr>
<tr>
<td>Dutch NGDO aid 2006 (ln)</td>
<td>-0.091***</td>
<td>0.034</td>
<td>-0.104***</td>
<td>0.038</td>
</tr>
<tr>
<td>Budget NGDO 2006 (000 US$)</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.001</td>
</tr>
<tr>
<td>Population (ln)</td>
<td>-0.159</td>
<td>0.107</td>
<td>-0.187</td>
<td>0.114</td>
</tr>
<tr>
<td>Distance (km)</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
</tr>
<tr>
<td>Independence index</td>
<td>-1.103***</td>
<td>0.237</td>
<td>0.895***</td>
<td>0.267</td>
</tr>
<tr>
<td>Subsidy index</td>
<td></td>
<td></td>
<td>-2.006***</td>
<td>0.475</td>
</tr>
<tr>
<td>Interaction independence index × bilateral aid</td>
<td>0.076***</td>
<td>0.034</td>
<td>0.077</td>
<td>0.043</td>
</tr>
<tr>
<td>Interaction subsidy index × bilateral aid</td>
<td></td>
<td></td>
<td>-0.077</td>
<td>0.043</td>
</tr>
<tr>
<td>Constant</td>
<td>18.377***</td>
<td>1.008</td>
<td>17.873***</td>
<td>1.089</td>
</tr>
</tbody>
</table>

Sources: based on OECD-DAC and World Bank data.
Religion is the unique variable that differentiates between selection/allocation model.
Significance at 10%.
Significance at 5%.
Significance at 1%.
effect. We can interpret this as follows: the more an NGDO relies on its own sources of finance, lower amounts of aid will be allocated to particular countries that already receive bilateral aid. Otherwise, the more NGDOs rely on governmental funding, the higher their capacity to allocate larger amounts of development aid to a particular country.

4.2 Interdependencies Between Bilateral and NGDO Aid

We also wanted to test whether the NGDO status of being more or less (in)dependent in terms of the funding sources is important in conjunction with the variables that measure the interest of back donors. The results provide insights in the complex relation between the back donor country policies and the relative independence that NGDOs enjoy regarding their funding and allocation decisions. Tables 2 and 3 (1B and 2B) summarise the findings of the extended model that accounts for interactions between bilateral and NGDO aid.

The hypotheses that is subject of analysis refers to (1) whether NGDOs that are more independent from their back donor in terms of their sources of funding take their selection or allocation decisions based on different criteria, and (2) whether the condition of being less dependent on bilateral funds leads to different weight of back donor’s interests. We used an interaction term between the subsidy or independency index with bilateral aid expenditures, a variable that was found to be significant in the process of selection recipient countries. If the interaction term is significant it provides support for both our hypotheses. As before, we permit that this interaction might result in different effects between the selection and the allocation stages.

We first notice that the interaction effect between the subsidy-index and bilateral aid is not significant, and that the performance of the model resembles the outcomes without interaction term. It seems that the influence of receiving funding from the government does not differentiate between NGDOs with respect to their decisions regarding country choice and resource allocation.

However, when we analyse the effect of the independency index (i.e. the share of own funding in the total NGDO budget) we observe some different outcomes. While the selection stage is still consistent with the model without interaction terms, we do find changes in the parameters of the allocation stage. It appears that the more an NGDO depends on external funding, the country characteristics for fund allocation of the back donor become highly relevant. The interaction effect is, however, positive, indicating that when more bilateral aid is allocated in a specific recipient country, less development aid will be allocated by NGDOs from their own resources. In other terms, NGDOs that do not have own funding (thus relying on subsidies and donor funding) will select a country based on how much bilateral aid it receives. However, they will allocate more of their own funds towards countries that receive lower levels of bilateral aid. This can be interpreted as a policy of strategic NGDO aid allocation that tries to avoid too close relationships with bilateral donor activities.

Finally, addressing the situation of NGDOs that raise own funding (meaning that the independency index >0), the role of bilateral aid relationships tends to becomes gradually more important. NGDOs that depend more on their own resources are increasingly orienting their allocations in line with bilateral aid when deciding how much aid to allocate to a particular country. We can further analyse this relationship by writing the NGDO aid
allocation Equation in the following way in order to explain the effect of the interaction term:

\[
\text{AidAllocation}(\ln) = b_0 + b_1 \times \text{indep.index} + b_2 \times \text{bilat.aid}(\ln) + b_3 \\
\times \text{indep.index} \times \text{bilat.aid}(\ln) + b_n X_n + \epsilon
\]

where aid allocation and bilateral aid are measured in natural logarithms, \(X_n\) represents the other structural variables in the models with their corresponding \(b\) effects and \(\epsilon\) is the error term. When the independency index is 0, NGDOs have no own funding and thus the terms for \(b_1 \times \text{indep.index} \) and \(b_3 \times \text{indep.index} \times \text{bilat.aid}(\ln)\) become 0. In that case, we have a significant (negative) effect from bilateral aid on NGDO allocations, indicating that the more bilateral aid is delivered to a chosen recipient country, the less NGDO development aid will be allocated. However, when we address the situation of an NGDO with own funds, meaning that the independency index is higher than 0, the effect of the bilateral aid can be expressed mathematically in the following form:

\[
\text{AidAllocation}(\ln) = b_0 + b_1 \times \text{indep.index} + \text{bilat.aid}(\ln) \\
\times [b_2 \times + b_3 \times \text{indep.index}] + b_n X_n + \epsilon
\]

Using this equation, we can easily assess the effect of bilateral aid (the back donor’s interest) for various degrees of own funding of the NGDOs. Calculating the effect of the bilateral aid for various degrees of own funding results in the conclusion that the more an NGDO is depending on its own financial resources, the more the initial negative effect of the bilateral aid upon NGDO aid allocation decisions to particular country becomes reduced. This is illustrated in Figure 1, where the alignment with bilateral aid is reinforced when independence in funding increases. Note that for a value of 50% for the independency index, the effect of bilateral aid is 3.7 instead of \(-0.0658\) for the situation where the independency index equals to 0 (see Table 2, Model 2B), while for a value of the independency index of 100 the effect of the bilateral aid increases to 7.353. This indicates that the more an NGDO is own-funded the more it will be inclined to follow the bilateral back donor’s priorities in deciding how much development aid will be allocated to particular countries.\(^6\)

\(^6\)Another interesting outcome refers to the fact in the model with interaction term the parameters for the political regime of a country tend to be modified. Countries being ‘anocracy’ increase the allocation compared to countries that are ‘autocracies’. Taking into consideration the effect of political regime in the selection and allocation equations, we can conclude that the NGDOs prefer to be present in more democratic countries (thus avoiding autocratic regimes) but they allocate their funds mainly in the intermediary regimes (thus not directing most funding to the democratic countries).
Public agencies thus have more influence on the NGDO decisions for allocating aid to certain countries apart from their usual incidence through conditional co-funding. Even with growing NGDO independency from back-donors, their aid allocation priorities are likely to differ less.

5 CONCLUSIONS AND OUTLOOK

Funding structures of Dutch NGDOs show substantial diversity in terms of their dependency on public donor support and private fundraising. Most agencies rely on a mixture of public and private resources and thus have to respond in their operations towards different audiences. Consequently, aid allocation patterns are likely to exhibit similar variability with respect to country choice and the degree of alignment with back-donor priorities. Whereas poverty incidence is generally advocated as an important driver for country choice, the prevailing political regime and the bilateral aid flows appear as most important predictors for NGDO country choice. Moreover, path dependency is clearly confirmed in the sense that past NGDO aid allocations lead to higher current commitments. Finally, whereas Dutch NGDOs do engage more often with countries where substantial Dutch bilateral aid is allocated, there is a clear trend of diminishing the volume of allocations in these countries, thus avoiding full harmonisation of development aid activities and maintaining an independent profile.

Empirical analyses of the driving forces for aid allocation usually suffer from several methodological constraints related to selection bias of the sample and non-independence of observations. We therefore relied on a two stage approach for analysing the sequential decision process of the country selection and the aid allocation of NGDOs. This procedure provides new and detailed insights in the underlying determinants for country choice. While the initial selection process is relatively straightforward involving more or less objective political and socio-economic criteria that a country should meet in order to be selected as recipient for Dutch NGDO aid, for the determination of the aid resource allocation the role of the internal NGDO funding structure and its dependency on public donor support or private fundraising becomes far more important.

Using the independency index and the subsidy index as indicators for the reliance on, respectively, own fundraising and public donor support, we find strong and significant effects on NGDO fund allocation decisions. Against our expectations, NGDOs with higher independence from back-donors are likely to allocate less funding in bilaterally selected partner countries, whereas NGDOs that rely more on private fundraising select an aid allocation pattern that is better aligned with public aid agencies. This implies that complementarities between public and NGDO aid are easier reached with agencies that are less dependent on back-donor funding.

We explain this consistently registered inverse relationship between NGDO independence and bilateral aid priorities against the background of new theories regarding the complex motivation structure for public–private alliances. NGDOs relying on private fundraising and campaigning only have to show to the general audience some global indicators of development progress that are likely to be generated in countries where bilateral donors are widely present. On the other hand, publicly funded NGDOs are subject to far more stringent outcome monitoring and impact assessment and therefore tend to focus their activities in countries where they can more easily demonstrate their unique performance attributes.
In policy terms, our results seem to indicate that donors should not expect too much from their financial leverage in co-funding NGDO programmes for reinforcing the desired complementarities between public and private development efforts. For reaching the objectives of aid harmonisation, due attention should be given to the inherent objective structure of mixed-funded NGDOs where priorities of risk-avoidance and identity-seeking are carefully balanced against the background of their required performance indicators.

ACKNOWLEDGEMENTS

Data collection for this research has been conducted within the framework of the IS Academy programme ‘Civil Society organisations’ co-funded by the Dutch Ministry of Foreign Affairs. The NGDO database is publicly accessible at www.ngo-database.nl. Research assistance by Mrs. Ioana Pop is gratefully acknowledged.

REFERENCES


Contradictory Influence of Donor Dependency


