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# A Spatial Analysis of Foreign Aid and Civil Society \*

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## Abstract

We use a Spatial Durbin Model to examine the relationship between civil society aid projects and measures of civil society including membership and participation in community groups and satisfaction with democracy in Nigeria and Uganda. We then study the effect of civil society aid programs on corruption, a proxy for elite capture. The spatial model allows us to estimate the effects of project spillovers that may indirectly impact non project areas. We find that civil society aid projects are associated with a decrease in the creation of community groups and attendance at community meetings in Nigeria. In Uganda, we find that civil society aid projects have a negative effect on the membership of community groups in neighboring areas. We also find that civil society projects have a positive effect on satisfaction with democracy, but they reduce satisfaction in neighbouring areas in both Nigeria and Uganda. Our corruption measures reveal that corruption has a positive direct correlation with civil society aid projects in Uganda. A number of robustness measures are used to account for selection.

**JEL Codes:** F35, D72, D73, O10.

**Keywords:** Foreign Aid, civil society, corruption, Africa, development.

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# 1 Introduction

Aid programs that encourage local civic development through local participatory action are a relatively new form of foreign aid. Between 2002 and 2012, for example, the World Bank allocated over \$85 billion to local participatory development programs (Mansuri and Rao, 2013). More recently, aid organisations such as USAID have taken additional steps to engage and strengthen civil capacity in developing countries (House, 2014). Civil society - a broad term that encompasses civic capacity building through community engagement - has the potential to strengthen government accountability and democratic institutions by encouraging more groups to participate in the decision making process (see, for example, (Arrow, 1972; Fukuyama, 1995; Knack and Keefer, 1997; Glaeser et al., 2000; Grandvoinnet and Raha, 2015)). Development practitioners have argued that engaging the community in development projects and generating the capacity for open criticism and debate will create a closer connection between those who distribute aid and its intended beneficiaries. A stronger civil society may also strengthen dialogue between different social groups thereby improving social cohesion, community trust and cooperation (Mansuri and Rao, 2013). As a result of these channels aid programs targeting civil society are seen as a means to improve civic capacity and democratic institutions.

However, as with markets and governments, civil society is not without its weaknesses. Civil society failure can occur when a subgroup of the community, is able to mobilise to further their self-interest, to the detriment of the rest of the community. These subgroups often have greater information and power over decision-making, leading to potential theft in resources, encouraging corruption. This appropriation is often termed elite capture. Recent results on the impacts of elite capture are mixed. Alatas et al. (2012) examine the welfare effects of elite capture in Indonesia and find that targeted community welfare programs are more likely to be distributed to elites. Although, the overall effect of elite capture on welfare is marginal. On the other hand, Acemoglu et al.

(2014) find that the number of ruling families in a chieftaincy, is associated with lower village outcomes. Villages with a smaller number of ruling families have lower rates of educational attainment, child health, non-agricultural employment and asset ownership. These results suggest that the existence of elite capture has the potential to decrease the efficiency of aid programs that target civic capacity and community participation.

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In this paper we examine the effect of civil society aid projects on the strength of civil society and corruption in Nigeria and Uganda. In particular, we ask four questions: 1) Do foreign aid projects that target civil society affect civil society? 2) What are the effects of civil society foreign aid programs on perceptions of corruption, our metric for civil society failure? 3) Are the effects of civil society aid projects constant over time?

To answer these questions, we merge recently available geocoded foreign aid data provided by AidData, which includes information on project location, project type and year of project completion with the Afrobarometer, a high quality nationally representative attitudes survey. We use 2 survey waves and identify the density of both civil society aid projects and aid projects in general in a 25km radius of each Afrobarometer survey cluster. We then estimate a spatial Durbin model (SDM) to examine the correlation between civil society aid projects and three measures of civil society: 1) membership in a voluntary or community group; 2) attendance at community meetings; 3) satisfaction with democracy. We argue that these measures provide a proxy for the strength of

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<sup>1</sup> The literature on elite capture is vast. In India, Bardhan and Mookherjee (2006) find little elite capture in the allocation of targeted credit and agricultural materials. While, Besley et al. (2012) find that elected officials are more likely to be beneficiaries of India's transfer program. Dasgupta and Beard (2007) use case studies in Indonesia and find that community development boards that were dominated by elites were often undemocratic and un-participatory, however they delivered more benefits to deserving beneficiaries, particularly the poor. Rao and Ibanez (2005) find similar results in their study on the performance of the Jamaican Social Investment Fund (JSIF). While, Acemoglu et al. (2014) find that the number of ruling families in a chieftaincy, is associated with worse village outcomes. Bayly (2004, 2008) argue that recent growth champions China and India benefited from educated elites who activated civic spheres within each society that encouraged peer education and community participation. Elite capture also has a theoretical foundation. Platteau and Gaspart (2004) used a theoretical model and comparative statics to examine how a mechanism relying on competition among rival leaders reduces elite capture. In their theoretical model, the authors found elite capture is reduced in a repeated game framework when NGO's refuse to deal with local leaders who have been found to embezzle money.

civil society within the community. Then to examine the effect of civil society projects on corruption we re-estimate the SDM examining the relationship between civil society aid projects on two measures of corruption: 1) The proportion of government officials perceived to be corrupt; 2) If a respondent had recently paid a bribe. These outcomes provide a proxy for elite capture and perceptions of corruption more broadly. Finally, to understand the effects of civil society projects over time we re-estimate the SDM accounting for time since project completion.

By incorporating spatial dependence in our analysis our empirical strategy adds to the aid and development debate. First, we argue that spatial dependence may arise because outcomes at different locations may be dependent. This may be a result of externalities. Aid projects not only influence those who participate in the project but through information exchange, it may also indirectly influence people in neighbouring areas. Standard regression models often ignore this indirect effect leading to omitted variable bias (LeSage and Pace, 2009) and an incorrect inference of the true effect. Our model includes a spatial lag of the dependent variable to account for changes in the outcome of an area effecting neighboring areas. The model also includes a spatial lag of the explanatory variables to account for aid projects in one area influencing neighboring areas. This allows us to estimate both the direct effect of civil society projects as well as the indirect effect of civil society projects on neighbouring areas.

Using this model we find that civil society aid projects are negatively associated with the creation of community groups and attendance at community meetings in Nigeria. The introduction of civil society projects are also correlated with a decrease in neighbouring areas membership in community organisations in Uganda. We also find that civil society projects are correlated with an increase in satisfaction with democracy in Uganda but, projects reduce satisfaction with democracy in neighbouring areas in both Uganda and Nigeria. Our corruption measures reveal that civil society projects have little influence on corruption in Nigeria, but in Uganda a greater density of civil society projects is positively associated with the belief that government officials are corrupt.

Several studies examine the relationship between civil society aid projects such as community driven development projects on development outcomes. Civil society projects have been found to increase community participation (Olken, 2010; Labonne and Chase, 2008; Arcand and Fafchamps., 2012), increase social cohesion (Fearon and Weinstein, 2009; Chase and Thongyou, 2006) improve social capital and the economic empowerment of women (Deininger and Liu., 2008). While Kumar (2007) finds that these programs improve targeting of public goods to the most disadvantaged. On the other hand, Casey and Miguel (2011) find no evidence that the program impacts the functioning of civil society including social cohesion or collective action.

This paper contributes to this vibrant literature on civil society. The majority of this literature focuses on single project civil society programs. This may be problematic as it is often difficult to generalise results as civil society project may be vastly different across and within countries. This is inherently an external validity issue. Our data set includes all aid projects recorded in Uganda's and Nigeria's Aid management platform, including World Bank and Development Assistance Committee (DAC) projects accumulating in over 1000 projects in over 4260 locations- 76% of official DAC aid projects in Uganda and 26% in Nigeria. As such, we examine a large sample of aid and civil society aid projects, allowing for broader conclusions. Second, unlike past studies that investigate the effects of aid projects, we examine whether aid projects become more or less effective over time. Civil society projects which often attempt to change norms and behaviour such as perceptions towards democracy, may have a delayed effect on program outcomes. Studies that ignore this dynamic may have biased results. Third, as argued by Mansuri and Rao (2013) it is common in the literature to use self-reported retrospective accounts of change to measure social outcomes tied to civil society. Retrospective measures are prone to measurement error such as recall bias. Rather than retrospective questions we utilise the repeated cross sectional nature of the Afrobarometer. More specifically we use repeated survey questions from waves 4 and 5. Lastly, nearly all the projects mentioned above use surveys taken as part of an impact evaluation. Mansuri and Rao (2013) argue

that exposure to participatory messaging may make civil society project members more likely to indicate a willingness to cooperate or to report higher levels of trust and support for democracy irrespective of any substantial change in actual attitudes or practices. An advantage of the Afrobarometer is that the survey is independent of aid projects, meaning respondents are less likely to repeat slogans or responses based on their belief that this is what stake holders want to hear.

## 1.1 Data

We use geographically referenced foreign aid data produced by AidData (Tierney et al., 2011) to measure intensity of foreign aid. The data sets include all aid projects recorded in Uganda's and Nigeria's Aid management platform, including World Bank and Development Assistance Committee (DAC) projects. Data is available from 1978 until 2014 for Uganda and 1988 until 2014 for Nigeria. Total aid coverage in Nigeria includes information on 28 donors covering 621 projects in 1843 locations with commitments of over \$6 billion USD (Tierney et al., 2011), coverage in Uganda includes projects from 56 donors covering 565 projects in 2426 locations with total disbursements of over \$10.7 billion USD in comparison data . According to Aiddata this accounts for 76% of all official DAC aid projects in Uganda and 26% in Nigeria.

In order to measure the effects of civil society type projects we use AidData's project classification schema. Upon obtaining aid project information researchers at AidData attach activity codes to each project based on information provided by the donor in the title and description fields. We utilise these classifications and focus our analysis on projects classified as "Government and Civil Society" projects. These include projects such as funding for co-operatives, grass roots organisations, legal and judicial development, microcredit and micro insurance groups and also government administration activities.<sup>2 3</sup>

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<sup>2</sup>More precisely we examine aid projects that aim to encourage and strengthen civil society

<sup>3</sup>Government labeled projects may not necessarily focus on advancing civil society. Including these

A key metric of the success of civil society programs is the extent to which they build social cohesion and citizenship. Our outcome variables measuring citizenship and democratic attitudes are taken from waves 3-5 of the Afrobarometer (Data, 2016). The Afrobarometer data set is a nationally representative survey focusing on citizens attitudes and perception on a range of topics including governance and democracy. We use surveys conducted in 2008 and 2012 for both Uganda and Nigeria corresponding to wave 4 and 5 respectively <sup>4</sup>.

The World Bank argues that an effective civil society should encourage *social cohesion and cooperation* - the ability of a community to coordinate and manage its own affairs and *representation* - the ability of the community to represent its collective interests to the state (Mansuri and Rao, 2013). To gauge social cohesion and cooperation within the community we focus on two measure. First, we measure membership in community organisations by creating a dichotomous variable equal to one if a respondent answered that they were either an official leader, active member or inactive member of a voluntary association or community group. Second, we measure community engagement by creating a dichotomous variable equal to one if a respondent attended a community meeting often or several times a year and zero otherwise. We argue that these variables provide a metric of community participation, engagement and cooperation. An area with more community organisations and attendance at community meeting signals that community members have a platform to coordinate and manage their own affairs. To gauge the effectiveness of representatives and the overarching process of democracy we measure satisfaction with democracy. Respondents are asked to rate their overall satisfaction with the way democracy works within their country. A dichotomous variable is created that is equal to one if a respondent is very satisfied or fairly satisfied with democracy.

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projects may weaken the effects of civil society aid projects. To investigate the importance of government labeled projects we examine the number of project titles containing the word 'government'. We find that less than 8% of all projects contain the word 'government'. Which is at least suggestive that the government only projects are minimal. Even for those projects that do contain the word government its not clear that these projects are independent of civil society. For instance, in Uganda there is a large project with the title "Support to Local Government Association-Capacity Building-Northern Uganda".

<sup>4</sup> A small proportion of respondents in Uganda were surveyed in December 2011



Civil society projects and aid projects in general may create an environment that encourages corruption by giving elites such as leaders, resources and power over decision making. To measure exposure to corruption we use two questions. The first asks respondents the proportion of government officials involved in corruption. A dummy variable is created equal to one if a respondent signals most or all government officials are involved in corruption. The second measure elicits a respondents exposure to corruption by asking if they have paid a bribe to obtain a document. Similar to Isaksson and Kotsadam (2016) we utilise the ordinal nature of the data and create a variable between 0 and 3 if a respondent paid a bribe ‘never, once or twice, a few times or often’.

To geolocate Afrobarometer participants we utilise the same method as Knutsen et al (2016).<sup>5</sup> The authors use a number of pieces of information provided by the Afrobarometer to geolocate participants. Each participant is then assigned to a geo-cluster. To identify a Afrobarometer respondents’ exposure to aid projects, we measure the density of aid projects in a 25km radius of each respondent. We select a 25km radius as a reasonable limit for many of the participants who are exposed to aid projects through their local area. However, for robustness we also examine exposure under 50km.

In Figure 1 and 2 we illustrate the location of survey clusters and aid projects for Nigeria and Uganda respectively. Red dots indicate the location of an Afrobarometer survey cluster while the grey circles indicate the 25 km radius around each project.

This research focuses on Uganda and Nigeria because high quality geocoded aid data and Afrobarometer data exist only for these countries. Further, both these countries are prominent recipients of foreign aid over the past two and a half of decades. According to AidData, since 1990 <sup>6</sup> Nigeria has been the largest recipient of foreign aid in sub-Saharan Africa receiving over 60 billion USD in official foreign assistance. This is closely followed by Uganda which received \$36.1 USD placing it 8 of 58 countries in sub-Saharan Africa. The aim of this research is not to contrast Nigeria and Uganda,

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<sup>5</sup>As discussed in further detail within their paper

<sup>6</sup>The earliest high quality data is available from AidData

with varying institutions and history, this task would be problematic. Instead, we include both countries to examine the effect of aid programs under different institutional environments in countries that have received a large proportion of foreign aid.

Although the Afrobarometer measures attitudes and behaviour over a number of periods, the survey is not a panel, since different subjects and locations are surveyed each wave. Since within each wave, survey locations change, we treat each wave as a separate cross-sectional survey and estimate each wave separately. <sup>7</sup>

## 1.2 Summary Statistics

Table 1 and Table 2 presents the means for the explanatory variables included in our regression for Nigeria and Uganda respectively. Respondents are on average 37.10 years old in Nigeria and 39.14 in Uganda. Over 50% of people in Nigeria completed high school, this is more than double the rate in Uganda (24%). Nearly half the respondents in Nigeria rarely go without food (42%) or water (45%), this is similar to those in Uganda where (39%) and (40%) go without food or water respectively. In Nigeria the proportion that go without cash income is substantial, 7% *always* go with out cash while 16% go without cash many times a year. In Uganda, 25% *always* go without cash and 23% have gone without cash numerous times a year. Local infrastructure differs markedly between countries, in Nigeria 82% have access to an electricity grid, 43% have access to piped water and 88% have a school within walking distance. In Uganda, 35% have an electricity grid, 25% have access to piped water and 87% have a school within walking distance.

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<sup>7</sup>It is not possible to collapse the data at some regional, cluster or local level as across waves, afrobarometer survey locations change. This is amplified by the fact that data exist for all afrobarometer clusters in 50 % of cases.

### 1.3 Empirical Strategy

Both data sets are geocoded, this allows us to exploit spatial variation and estimate a spatial model. Aid projects, particularly those studied here, often focus on small rural areas, such as villages or groups of villages. This leaves open the possibility of spatial dependence as distance and density of villages or local areas to aid projects are related. For instance, the effects of aid programs may spill over across villages, adding to the benefit of the program. These externalities are often ignored when examining aid projects. Spatial analysis provides a tool to capture this effect.

More specifically, spatial models may be useful to capture externalities. Externalities may arise when neighbouring areas have an indirect effect on others' development outcomes. The implication of this is that a change in the explanatory variable for a village or region can potentially affect the dependent variable in other regions or villages. For instance Miguel and Kremer (2004) found that de-worming tablets increased school participation in areas where tablets were distributed, the program also affected education outcomes of untreated children. The spatial model we select takes into account other regions dependent and explanatory variables allowing us to account for externalities. As a result spatial models estimate both the direct effect of aid projects in addition to any indirect effect that may arise from spillovers.

The effectiveness of aid projects are also plagued by omitted variables, unobserved factors such as neighbouring village characteristics may influence the dependent variable. Only recently, has spatial data become available, to capture these types of latent influences. Ignoring spatial analysis leads to an omitted variable problem which can directly effect the robustness of the regression model. Some researchers have attempted to control for spatial unobservables by adding a variable that controls for the density of aid projects. These models often lead to results that overstate the true influence of the estimator in comparison to spatial autoregressive models (see LeSage and Pace (2009)).

The analysis focuses on the effect of aid and in particularly civil society aid programs

on metrics of civil society and corruption. Below we outline the methods used to study these outcomes.

We use a Spatial Durbin Model (SDM) given by equation 1. The rationale behind the SDM is to incorporate spatial effects working both through the dependent and the explanatory variables.

$$\mathbf{y} = \boldsymbol{\iota}_n\alpha + \mathbf{X}\boldsymbol{\beta} + \rho\mathbf{W}\mathbf{y} + \mathbf{W}\mathbf{X}\boldsymbol{\gamma} + \boldsymbol{\epsilon}, \quad (1)$$

where

$\mathbf{y}$  is  $n$ -by-1 vector of the dependent variable (proxies for citizenship and democratic attitudes),

$\boldsymbol{\iota}_n$  is  $n$ -by-1 vector of ones with the associated scalar parameter  $\alpha$ ,

$\mathbf{X}$  is  $n$ -by- $q$  matrix of explanatory variables with the associated vector parameter  $\boldsymbol{\beta}$  including including education attainment, age, gender, urban or rural location, measures of income such as if the household had enough food to eat, access to water and cash, electricity and a local school,

$\mathbf{W}$  is  $n$ -by- $n$  non-stochastic row-standardized spatial weight matrix specifying the spatial dependence among regions. In accordance with LeSage and Fischer (2008)

$\mathbf{W}$  is based on six nearest neighbours. The diagonal elements of  $\mathbf{W}$  are set to zero by convention.

$\mathbf{W}\mathbf{y}$  is  $n$ -by-1 spatial lag vector of  $\mathbf{y}$  with associated scalar spatial dependence parameter (parameter of the first order spatial autoregressive process)  $\rho$ , and is assumed to lie within interval  $(-1, 1)$ . In our model we assume that  $0 < \rho < 1$ , which indicates that local levels of citizenship and democratic attitudes are positively related to citizenship and democratic attitudes levels in the neighbouring regions.

$\mathbf{WX}$  is  $n$ -by- $q$  matrix of the spatially lagged explanatory variables with associated vector parameter  $\boldsymbol{\gamma}$ ,

$\boldsymbol{\epsilon}$  is  $n$ -by-1 normally distributed, constant variance disturbance term,  $\boldsymbol{\epsilon} \sim N(0, \sigma_\epsilon^2 \mathbf{I}_n)$ .

For each model we elicit three scalar summary measures: the average direct impact, the average indirect impact and the average total effect, as suggested by (LeSage and Pace, 2009). *Average direct impacts* represent the impact of changes in the  $i^{\text{th}}$  observation of  $x_q$ , denoted as  $x_{iq}$ , on  $y_i$ , and the interpretation is similar in spirit to OLS estimated coefficients (LeSage and Pace, 2009). The direct impacts include feedback influences arising as a result of impacts passing through neighbours, and back to the observation itself (Fischer and Wang, 2011). *Average indirect impacts* can be interpreted as the total impact on individual observation  $y_i$  resulting from changing the  $q^{\text{th}}$  explanatory variable by the same amount across all  $n$  observations. On the other hand, average indirect effects represent additional impacts to an observation, i.e. how changes in all observations influence a single observation  $i$ . Average indirect effects thus represent the indirect spillovers (Dominguez, 2012). *Average total impacts* are represented by the sum of average direct effects and average indirect effects. If the values of the  $q^{\text{th}}$  explanatory variable change by the same unit in all regions, the value of the dependent variable will change by  $(1 - \rho)^{-1} \beta_q$  units.

## 1.4 Hypothesis

To address our primary research questions our first and second hypothesis states:

**Hypothesis 1.** If civil society aid projects have no impact on community participation or perceptions towards democracy then we could expect no relationship between the density of civil society projects and measures of civil society and democracy. This is consistent with the literature that finds that aid projects and civil society projects in particular have little effect on outcomes (Casey and Miguel, 2011). The alternative

hypothesis is that, civil society aid projects increase participation and perceptions towards democracy. A result in this direction would suggest that civil society projects may improve development outcomes.

**Hypothesis 2.** If civil society aid projects have no impact on corruption then we could expect no relationship between the density of civil society aid projects and measures of corruption. The alternative hypothesis is that individuals in society such as elites use civil society for their own gain, increasing corruption. This result is consistent with elite capture.

## 2 Results

This section is broken into two parts: In the first part we examine the effect of both civil society aid projects and aid projects in general on civil society metrics, in the second part we examine the relationship between both types of aid projects and corruption.

### 2.1 Civil Society

The results of estimating the baseline Spatial Durbin Model of community group membership are presented in Table 3. The table includes the scalar measure and p-value for the direct effect, indirect effect and total effect. In Nigeria we find that civil society aid projects have a negative direct effect on membership of community organizations in the fourth wave. A increase in the density of civil society aid projects by one unit is associated with a decrease in membership in community organisations by 10%. The effect reverse in the fifth wave we find that civil society projects have a positive direct effect on community group membership.

In Uganda, we find little systematic evidence that civil society projects have a direct effect on membership of community organisations. Unlike in Nigeria, we find a negative

indirect relationship between membership of community organisations and civil society projects. The coefficient on the indirect effect suggests that a unit increase in civil society aid projects are correlated with a short run decrease in neighbouring area's membership of community groups by 10.4% in the fourth wave.

Although the existence of community organisations is an important step in creating an engaged community, the presence of community groups do not necessarily translate into greater community engagement as community groups may lay dormant or gather infrequently to make any sustained difference. For this reason our second outcome measure examines a respondents attendance at community meetings. In Nigeria, we find that civil society projects have a negative direct relationship between civil society projects and attendance at community meetings. On the other hand, in Uganda we find little meaningful relationship between civil society projects and attendance at community meetings.

Our final measure of civil society, examines if respondents are satisfied with democracy. In Nigeria, civil society projects appear to have an indirect effect on satisfaction with democracy. A one unit increase in civil society aid projects is correlated with a decrease of neighboring areas' satisfaction with democracy by approximately 6.2%. Next, we investigate satisfaction with democracy in Uganda. We discuss two key results. First, an increase in the proportion of civil society projects increases satisfaction with democracy in program areas. Second, spillover effects appear to be important. The estimates of the indirect effect show that a one unit increase in civil society aid projects is correlated with a decrease of neighboring areas' satisfaction with democracy by approximately 6.5%

## **2.2 Civil Society Discussion**

We draw three conclusions from these findings: First, there is little evidence that civil society projects have a direct positive effect on the organization of community groups or

the subsequent attendance at community meetings, particularly in Uganda. This result is worrying as engaging the community and providing a voice to community members is a central goal of many civil society projects. This result may be explained by selection bias, donors may undertake civil society projects in areas that have low community engagement and civil society. This selection bias is not accounted for in our analysis.

We argue that selection in this direction is likely marginal. A common criticism of civil society projects, such as those that rely on some aspect of community driven development, is that projects are assigned to communities that are the most well-organised. This is because donors require communities to discuss and propose community projects, which requires effective community institutions and strong civic action. Communities with more civic activities tend to have a higher proportion of wealthier, educated and politically connected residents (Mansuri and Rao, 2013). As such, civil society projects may often be implemented in areas with pre-existing high levels of community participation and community infrastructure. Under this situation selection by donors is likely to result in an over estimation of the true effect of civil society projects (positive selection). We examine this issue further in section 2.6.

Second, another possible explanation is that aid projects through substantial injection of funds or materials into local communities may attract the attention of elites (Mansuri and Rao, 2013), who may encourage exclusion, we explore this further in the next subsection 2.3.

Third, civil society projects appear to influence satisfaction with democracy and membership in community organisations in neighbouring areas. Civil society projects through the creation of community groups and other civic institutions may have a large (and often ignored) influence on how outsiders perceive democracy and the creation of community organisations. Civil society projects may encourage community discussion and democratic institutions such as community elections. Neighbouring areas may learn about and observe this behaviour, this may encourage comparisons between institutions



across neighbouring areas, encouraging criticism of undemocratic institutions. This suggests that indirect effects of civil society projects are useful to understand the full impact of aid projects.

### **2.3 Corruption**

We now present results from estimates examining the effect of civil society aid projects on corruption. Our first measure examines respondents' perceptions of the corruptness of government officials. Results are reported in Table 3 for civil society projects. In Nigeria there is no statistically significant relationship between civil society aid projects and the proportion of respondents who believe at least most government officials are corrupt. This differs to the result in Uganda. In the 5th wave, we find a direct effect of civil society aid projects on perceptions that government officials are corrupt. The effect is small, a unit increase in the density of civil society aid projects is correlated with a 2% increase in perceptions that government officials are corrupt. This result provides suggestive evidence of elite capture in Uganda. Aid projects through the transfer of funds may increase opportunities for local government officials to capture resources.

Our second measure elicits respondents' exposure to corruption by asking if respondents had paid a bribe for a document. We do not find evidence that civil society aid projects are associated with the probability of paying a bribe in both Nigeria and Uganda.

### **2.4 Corruption Discussion**

These results provide weak evidence that civil society aid projects and aid projects in general are associated with greater perceptions of corruption in Uganda. It is important to note that, perceptions of corruption may differ for a number of reasons. Aid projects may make corruption more obvious or aid projects such as those related to civil society may distribute information on the correct functioning of government. Both these factors

may increase awareness and thus perception of corruption without increasing the actual level of corruption. This may explain our second result- that aid projects are not correlated with actual experience with corruption.

## 2.5 Time since project

An important aspect of our analysis and indeed previous analysis of the efficacy of aid, is that we assume that the effects of aid projects on outcomes are constant at each point in time. However, this is unlikely to be true. Recently completed aid projects may act as a shock to local areas, increasing outcomes in the short term before declining over time. Alternatively, aid projects may take time before they influence outcomes, for instance, civil society programs may change norms and behaviour slowly, as such the effects of projects may increase over time. Ultimately, this means that studying average treatment effects without accounting for heterogeneity of program effects over time may lead to incorrect inferences. In this subsection we re-estimate the Spatial Durbin model accounting for the year the most recent project was completed. More specifically we replace 'number of projects in a 25km radius' with three dichotomous variables: 1)' very short term project' is equal to one if the most recent project was completed less than one year from the Afrobarometer survey date; 2) 'short term project' is equal to one if the most recent project was completed between one and 2 years from the Afrobarometer survey date; 3)'medium term project' is equal to one if the most recent project was completed between 3 and 4 years prior to the survey. The reference category are areas without aid projects. Results are reported in Table 5 for Nigeria and 6 for Uganda. <sup>8</sup>

In Nigeria we find that very short term civil society projects appear to have the largest effect on membership of community organizations. While there is little effect of civil society projects in areas where the most recent civil society project occurred between 1 and 2 years prior to the survey. We find little difference in the effect of very short

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<sup>8</sup> This analysis assumes that there is no systematic reason why some areas are selected to have more recent projects than other areas.

term and short term projects on attendance at community meetings. Satisfaction with democracy appears more nauseated. Satisfaction with democracy has a negative indirect effect on civil society projects in the very short term, as exposure continues we find little indirect effect on civil society projects, however, we find a direct negative relationship between satisfaction with democracy and civil society projects. Turning to corruption, we do not find any difference between the effect of civil society programs on perceptions of government corruption over time. We also find that very short term civil society projects have a direct positive correlation with paying a bribe, however, over time when the most recent project was completed between 1-2 years this effect switches to a negative indirect effect.

Due to the lack of variation in our time since completion variable in the Uganda sample, we focus predominately on the 5th wave.<sup>9</sup> The key results are the following. Civil society programs have a positive indirect influence on membership in community groups, this is strongest 1-2 years after the completion of the project. Similar to the result in Table 3 civil society programs have both a direct and indirect effect on satisfaction with democracy. This result suggests that the indirect effect is strongest in the very short term, over time this indirect effect is less salient. The negative direct effect is then most strongest in areas where the most recent project was completed at least 1 year prior to the survey. Corruption like in Nigeria, is largest after a civil society project has been in place for at least 1 year. A one unit increase in the proportion of short term civil society projects increases the proportion of respondents who report that most government officials are corrupt by 16.6%. Lastly, it is important to note that civil society projects have little effect on any outcomes in the medium term. More, specifically, civil society projects have little effect on outcomes in areas where the last civil society project occurred over 2 years ago. This is at least suggestive that the largest effect of civil society programs occur in the short term.

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<sup>9</sup>We include results in the 4th wave for transparency

## 2.6 Robustness

We test for the presence of spatial dependence by estimating an LM model (Anselin et al 2008). The null hypothesis states that spatial dependence does not exist and a non-spatial model is more appropriate. The results suggest that a spatial model may be favoured over a non-spatial model. Despite this result we also report the analogous OLS regression as a form of robustness. Table 8 reports results for civil society projects. We report the key variable of interest ‘Aid Project’.<sup>10</sup> In Table 8 we find little relationship between civil society projects and our measures of civil society in Nigeria. In Uganda, we find a negative relationship between civil society aid projects and membership in a community organisation and satisfaction with democracy, however, this result is only found in the fourth wave. We also find that a one unit increase in the density of civil society aid projects is associated with a 2% decrease in attendance at community meeting.

Selection bias may be an important factor explaining the largely insignificant effect of civil society projects on outcomes. In an attempt to identify the direct of selection bias, we restrict our sample to survey areas without an aid project by the third wave of the Afrobarometer. The third wave does not include any completed civil society projects in Nigeria and only a single project in Uganda making it ideal for this analysis. Our sample is reduced to 2055 respondents in Nigeria and 2012 respondents in Uganda. We then identify the areas which will be surrounded by at least one civil society aid project in the future i.e in wave 4 or 5. There are 504 and 440 respondents who are not surrounded by a civil society aid project in wave 3 but experience an aid project in the future in Nigeria and Uganda.<sup>11</sup> We can then examine the characteristics of areas that contain aid projects in the future with areas that are not selected for aid projects. We hypothesise, that if positive selection into aid projects exists we expect that areas with aid projects in the future will have better characteristics than those without aid

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<sup>10</sup> This model includes the variable future project. See below for further details

<sup>11</sup> The assumption is that areas without an aid project by wave three of the Afrobarometer have not been affected by large scale aid projects (like the ones measured in our dataset).

projects. Alternatively, if negative selection exists, areas with aid projects in the future will have worse characteristics than areas without aid projects.

We report results in Table 10 and 11 for Nigeria and Uganda respectively. Column 2 reports the average characteristics of no project areas, column 3 reports the average characteristic of areas with a project in the future. Beginning with Nigeria, we find that 58% of respondents in an areas with a future project complete high school compared to 51% in an areas with no future project. We also find that close to half of all respondents surrounded by a future project have never gone without food or water compared to around 42% in areas without aid projects. Close to 35% of respondents in the vicinity of a future aid project, never go without cash. Village infrastructure and services including access to an electricity grid, piped water and schools are all greater in areas with a future project. Despite these differences we find areas with future aid projects appear to contain groups of the population that that always go without food, water and cash. These results suggest that in Nigeria areas selected for future aid projects have better infrastructure and services and a greater proportion of people that never go without food, water and cash. This is at least partially suggestive that areas selected (prior to the implementation of the program) for aid projects have better development outcomes than non-aid project areas.

In the Ugandan sample, there appears to be less differences in respondent demographics between areas with future projects and areas without. Over 12% of respondents in areas with a future project, always go without water, compared to 2% in areas without a future project. We also find that areas with future projects are more likely to have piped water but less likely to have a school within walking distance. Importantly, we also find that areas with future projects have lower membership in community groups and attendance at community meetings compared to areas without future aid projects. These results are at least suggestive that areas selected for civil society aid projects have lower measures of civil society related to community engagement. As a result selection bias maybe important in this analysis.

In order to control for selection biases that may result from unobservables that may influence project locations we follow Isaksson et al (2016) and re-estimate our spatial model and include an indicator variable for future projects. More specifically the variable 'future project' is equal to one for those living in a 25km radius of an aid project that is planned but has yet to be implemented. Including this variable allows us to compare future projects to current projects, this comparison controls for unobservable time-invariant characteristics that may influence donor selection of project locations. We re-estimate the SDM model including a dummy variable equal to one if a aid project exists in a 25 km radius and the future project variable. We then take the difference between the two coefficients, to obtain the differential effect of aid projects in a 25km radius.<sup>12</sup>

Results are reported in Table 7. In Nigeria our results are fairly consistent with our baseline model, the key difference is that civil society projects are now associated with a decrease in satisfaction with democracy. In Uganda, the signs for the differential effect are identical to the baseline. However, the previous statistical significance of the indirect effect of civil society projects on membership in community groups and satisfaction with democracy is no longer valid. Both these results are consistent with our analysis on selection bias. In Nigeria where negative selection bias does not appear to be an issue, controlling for selection appears to lower the effect of civil society programs suggesting our original estimates may have underestimated the negative effect of civil society programs. On the other hand, in Uganda, where negative selection appears to prevail, controlling for selection reduces the negative effect of civil society projects found in the baseline model. Despite this, the overall results suggest that at best civil society aid projects have no effect on membership and participation in community groups and are positively associated with measures of corruption but increase satisfaction with democracy. It is also revealing that a number of these effects are indirect spillovers that effect non-project areas.

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<sup>12</sup>TOMAS can you double check this

### 3 Conclusion

The promotion of civil society through civil society organisations and community participation has become a new and important aspect of development cooperation. These organisations help to articulate concerns raised by communities, promoting civic and political participation. In so doing, donors hope they will contribute to solving social conflicts and to monitoring government action. Despite strong support for the promotion of civil society in developing countries, potential risks such as the capture of resources by elites may pose a threat to the effectiveness of civil society. This paper breaks new ground by utilising new geocoded foreign aid data to estimate a spatial dependence model. This model allows us to explore both the direct and indirect relationship between foreign aid projects on measures of civil society and corruption.

Despite the touted benefits of civic capacity building through greater community participation. We find little systematic relationship between the density of civil society aid projects and measures of civic capacity. This is troubling as civic capacity building is one of the main goals of these projects. Rather, results suggest a negative indirect relationship between membership in community organisation, satisfaction with democracy and the density of civil society aid projects. This suggests that civil society aid projects may be indirectly influencing neighboring communities. Ignoring this indirect influence may lead to a biased estimate of the true effect of civil society projects. Whether projects indirectly influence neighboring areas through the transfer of information or other methods is a valuable task for future researchers.

We also find little relationship between corruption and the density of civil society aid projects. The only exception is in Uganda where a small positive relationship exists. This result is consistent with Alatas et al. (2012) in that even if civic society programs encourage the power of elites, it appears to play little influence on perceptions of corruption or the proportion of people who pay a bribe. Further research is also needed to understand whether certain types of civil society programs are more effective in reducing

corruption and building civic capacity.

Lastly, we attempt to understand the impacts of civil society projects over time. Our results suggest impacts are strongest in the short term. Due to data limitations this work is preliminary and requires further analysis to identify if this form of aid is sustainable.

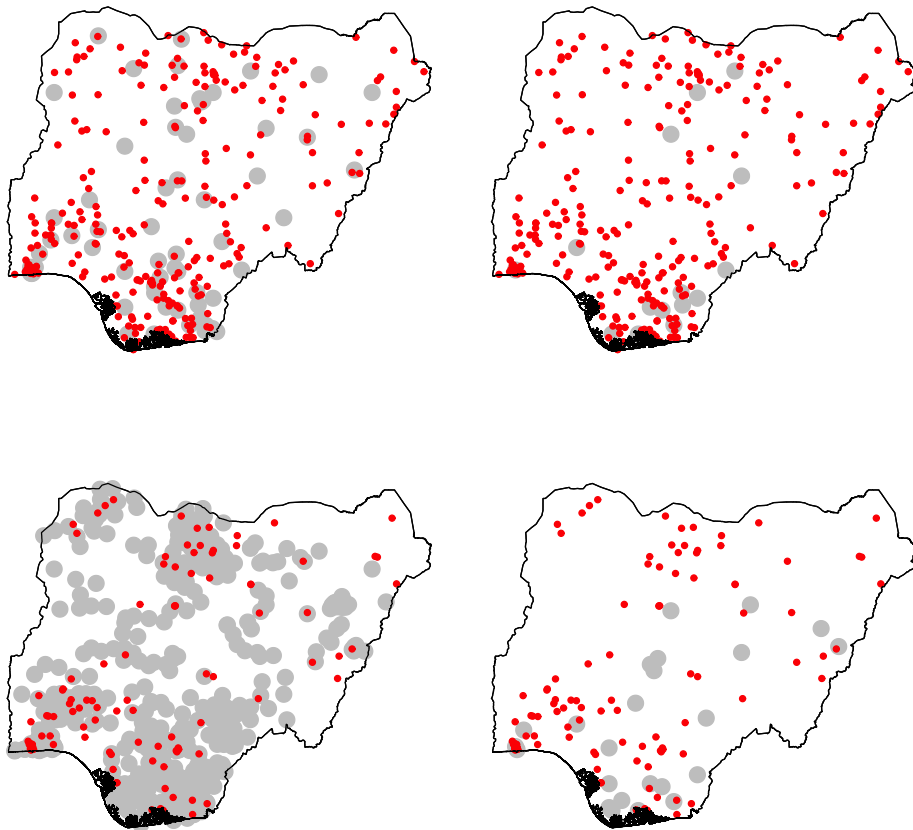
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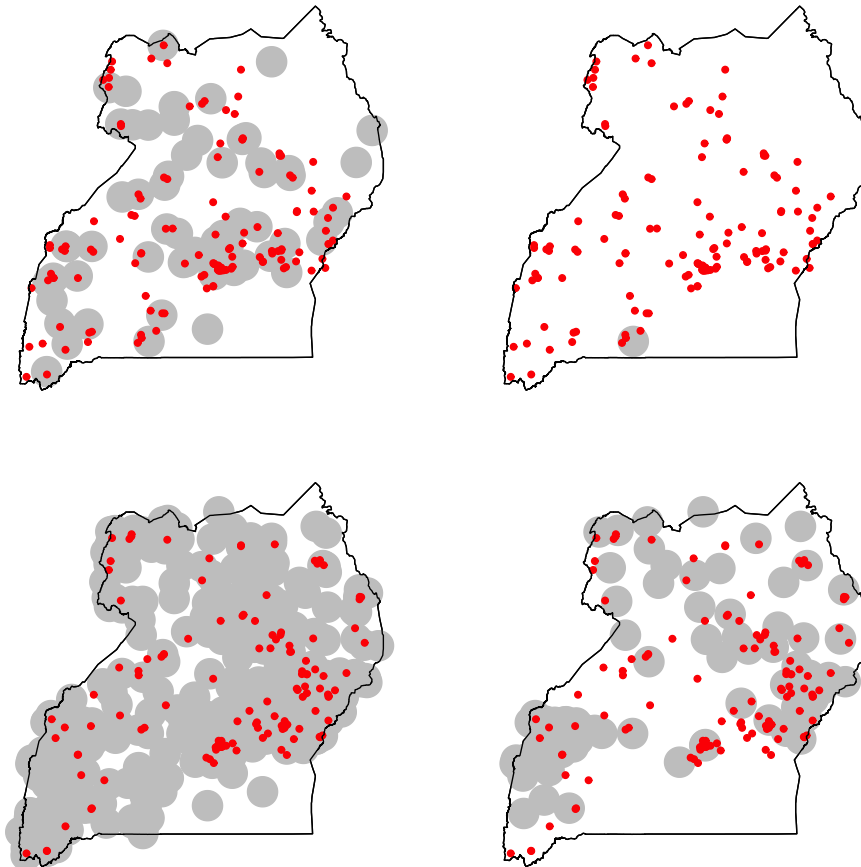
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Note: Red points indicate locations of survey, shaded circles indicate locations of projects with 25 km radius. Left panels: all aid projects implemented in the given locations, right panels: civil society aid projects. First row: wave 4 survey, second row: wave 5 survey

**Figure 1:** Nigeria



Note: Red points indicate locations of survey, shaded circles indicate locations of projects with 25 km radius. Left panels: all aid projects implemented in the given locations, right panels: civil society aid projects. First row: wave 4 survey, second row: wave 5 survey

**Figure 2:** Uganda

**Table 1:** Summary Statistics: Nigeria

	All	<25km to project	>25km to project	Diff
Age	37.10	36.608 (1.330)	37.420 (1.074)	0.795 (1.722)
Completed high school	0.54	0.634 (0.009)	0.472 (0.007)	-0.162*** (0.012)
<i>Gone without food</i>				
Never	0,423	0.448 (0.009)	0.408 (0.007)	0.040*** (0.012)
Just once or twice	0,177	0.195 (0.007)	0.166 (0.005)	-0.028*** (0.009)
Several times	0,176	0.193 (0.007)	0.165 (0.005)	-0.028*** (0.009)
Many times	0,089	0.076 (0.005)	0.098 (0.004)	0.021*** (0.007)
Always	0,134	0.088 (0.005)	0.163 (0.005)	0.075*** (0.008)
<i>Gone without water</i>				
Never	0,45	0.490 (0.009)	0.425 (0.007)	-0.066*** (0.012)
Just once or twice	0,159	0.169 (0.007)	0.154 (0.005)	-0.016* (0.009)
Several times	0,19	0.182 (0.006)	0.194 (0.007)	0.012 (0.009)
Many times	0,114	0.096 (0.005)	0.125 (0.005)	0.028*** (0.008)
Always	0,087	0.062 (0.005)	0.103 (0.004)	0.041*** (0.007)
<i>Gone without cash income</i>				
Never	0,277	0.308 (0.009)	0.258 (0.006)	-0.049*** (0.011)
Just once or twice	0,212	0.195 (0.007)	0.223 (0.006)	0.028*** (0.009)
Several times	0,284	0.286 (0.009)	0.283 (0.007)	-0.003 (0.011)
Many times	0,155	0.151 (0.007)	0.157 (0.005)	0.006 (0.009)
Always	0,071	0.060 (0.004)	0.079 (0.004)	0.019*** (0.006)
Electricity grid in local area	0.82	0.914 (0.005)	0.762 (0.006)	-0.151*** (0.009)
Piped water in local area	0.43	0.491 (0.009)	0.400 (0.007)	-0.091*** (0.012)
School in local area (or walking distance)	0.88	0.890 (0.006)	0.876 (0.005)	-0.014* (0.008)
Member of community organisation	0,35	0.339 (0.009)	0.357 (0.007)	0.018 (0.011)
Attend meeting regularly	0,308	0.266 (0.008)	0.335 (0.007)	0.069*** (0.011)
Satisfied with democracy	0,303	0.262 (0.008)	0.328 (0.007)	0.065*** (0.011)
Most government officials are corrupt	0,572	0.585 (0.009)	0.564 (0.007)	-0.021* (0.012)
Pay a bribe to obtain a document	0,338	0.363 (0.014)	0.322 (0.011)	-0.041** (0.017)
Obs	7495			

Note: Results reported for Uganda and Nigeria. Source: Afro barometer (2016) and Aid data (2016).

**Table 2:** Summary Statistics: Uganda

	All	<25km to project	>25km to project	Diff
Age	39.14	38.010 (0.879)	41.293 (1.534)	3.283** (1.645)
Completed high school	0.24	0.251 (0.006)	0.214 (0.007)	-0.037*** (0.010)
<i>Gone without food</i>				
Never	0,390	0.425 (0.007)	0.325 (0.009)	-0.099*** (0.011)
Just once or twice	0.159	0.191 (0.005)	0.097 (0.005)	-0.094*** (0.008)
Several times	0,165	0.172 (0.005)	0.151 (0.007)	-0.020*** (0.008)
Many times	0,118	0.113 (0.004)	0.127 (0.006)	0.013*** (0.007)
Always	0.168	0.099 (0.004)	0.300 (0.008)	0.201*** (0.008)
<i>Gone without water</i>				
Never	0.409	0.461 (0.009)	0.311 (0.008)	-0.150*** (0.011)
Just once or twice	0.141	0.166 (0.005)	0.094 (0.005)	-0.072*** (0.008)
Several times	0,165	0.167 (0.005)	0.160 (0.007)	-0.007 (0.008)
Many times	0,159	0.116 (0.004)	0.241 (0.008)	0.125*** (0.008)
Always	0,126	0.090 (0.004)	0.195 (0.007)	0.104*** (0.007)
<i>Gone without cash income</i>				
Never	0,128	0.139 (0.005)	0.107 (0.006)	-0.032*** (0.008)
Just once or twice	0,132	0.150 (0.005)	0.096 (0.005)	-0.054*** (0.007)
Several times	0,260	0.273 (0.006)	0.235 (0.008)	-0.038*** (0.010)
Many times	0,228	0.219 (0.007)	0.245 (0.005)	0.026*** (0.009)
Always	0,252	0.218 (0.005)	0.317 (0.009)	0.010*** (0.010)
Electricity grid in local area	0.350	0.412 (0.006)	0.224 (0.007)	-0.188*** (0.010)
Piped water in local area	0.260	0.315 (0.006)	0.170 (0.007)	-0.145*** (0.010)
School in local area (or walking distance)	0.870	0.852 (0.005)	0.907 (0.005)	0.055*** (0.007)
Member of community organisation	0,382	0.389 (0.009)	0.370 (0.006)	-0.021 (0.011)
Attend meeting regularly	0,525	0.468 (0.007)	0.635 (0.009)	0.167*** (0.011)
Satisfied with democracy	0,521	0.492 (0.007)	0.576 (0.009)	0.084*** (0.011)
Most government officials are corrupt	0,444	0.461 (0.007)	0.412 (0.009)	-0.049*** (0.011)
Pay a bribe to obtain a document	0,294	0.321 (0.009)	0.242 (0.011)	-0.079** (0.015)
Obs	8835			

Note: Results reported for Uganda and Nigeria. ~~28~~ Source: Afro barometer (2016) and Aid data (2016).

**Table 3: Civil Society Aid Projects**

<b>Nigeria</b>	Wave 4		Wave 5	
	coef.	z-stat	coef.	z-stat
<b>Member of Comm. Org.</b>				
Direct	-0.099*	-1.847	0.042*	1.937
Indirect	0.022	0.254	-0.040	-0.908
Total	-0.077	-0.865	0.001	0.059
<b>Attend Comm. Meetings</b>				
Direct	-0.086*	-1.796	-0.003	-0.085
Indirect	0.123	1.633	0.044	1.029
Total	0.036	0.604	0.041	1.027
<b>Satisfied with Democracy</b>				
Direct	-0.011	-0.232	0.001	0.031
Indirect	0.064	0.661	-0.062*	-1.803
Total	0.053	0.596	-0.061**	-2.196
<b>Most Government Corrupt</b>				
Direct	-0.036	-0.700	-0.026	-1.058
Indirect	-0.005	-0.041	0.007	0.226
Total	-0.041	-0.656	-0.020	-0.824
<b>Pay Bribe to Obtain Docs.</b>				
Direct	0.035	0.423	-0.003	-0.080
Indirect	-0.244	-1.545	-0.051	-0.945
Total	-0.209	-1.413	-0.053	-1.068
<b>Uganda</b>				
<b>Member of Comm. Org.</b>				
Direct	0.002	0.025	0.011	1.052
Indirect	-0.104***	-3.143	-0.008	-0.357
Total	-0.102***	-3.115	0.003	0.164
<b>Attend Comm. Meetings</b>				
Direct	0.018	0.539	-0.009	-0.879
Indirect	-0.010	-0.295	0.002	0.124
Total	0.008	0.455	-0.007	-0.754
<b>Satisfied with Democracy</b>				
Direct	0.067**	2.109	-0.000	-0.036
Indirect	-0.065*	-1.799	0.016	0.762
Total	0.002	0.074	0.015	0.697
<b>Most Government Corrupt</b>				
Direct	-0.008	-0.246	0.020*	1.897
Indirect	0.020	0.726	-0.019	-1.276
Total	0.013	0.823	0.001	0.104
<b>Pay Bribe to Obtain Docs.</b>				
Direct	-0.067	-1.250	-0.018	-1.356
Indirect	-0.027	-0.547	0.012	0.576
Total	-0.095**	-2.569	-0.006	-0.294

Note: Results reported for Uganda and Nigeria. Source: Afro barometer (2016) and Aid data (2016).

**Table 4: All Aid Projects**

<b>Nigeria</b>	Wave 4		Wave 5	
	coef.	z-stat	coef.	z-stat
<b>Member of Comm. Org.</b>				
Direct	-0.016**	-2.383	0.002	1.014
Indirect	0.004	0.510	0.001	0.345
Total	-0.012**	-2.158	0.003	0.756
<b>Attend Comm. Meetings</b>				
Direct	-0.013**	-2.177	-0.001	-0.333
Indirect	0.011	1.640	0.006	1.543
Total	-0.002	-0.494	0.005	1.338
<b>Satisfied with Democracy</b>				
Direct	0.003	0.487	-0.000	-0.226
Indirect	-0.000	-0.011	-0.006**	-1.976
Total	0.003	0.481	-0.007***	-2.594
<b>Most Government Corrupt</b>				
Direct	-0.003	-0.524	-0.001	-0.646
Indirect	0.001	0.137	0.002	0.831
Total	-0.003	-0.580	0.001	0.428
<b>Pay Bribe to Obtain Docs.</b>				
Direct	0.018*	1.787	0.003	1.176
Indirect	-0.012	-0.909	-0.005	-0.861
Total	0.007	0.596	-0.001	-0.239
<hr/>				
<b>Uganda</b>				
<hr/>				
<b>Member of Comm. Org.</b>				
Direct	0.007	1.136	-0.003	-1.190
Indirect	-0.025***	-3.554	-0.007	-1.318
Total	-0.018***	-3.126	-0.009*	-1.691
<b>Attend Comm. Meetings</b>				
Direct	-0.001	-0.214	-0.002	-1.018
Indirect	0.002	0.385	-0.001	-0.222
Total	0.001	0.327	-0.002	-1.055
<b>Satisfied with Democracy</b>				
Direct	0.006	0.968	-0.001	-0.349
Indirect	-0.008	-0.934	0.006	1.173
Total	-0.002	-0.192	0.005	0.957
<b>Most Government Corrupt</b>				
Direct	-0.004	-0.727	0.004**	2.130
Indirect	0.007	1.189	-0.006*	-1.782
Total	0.003	0.987	-0.001	-0.449
<b>Pay Bribe to Obtain Docs.</b>				
Direct	-0.008	-0.812	-0.003	-1.304
Indirect	-0.008	-0.729	0.004	0.840
Total	-0.016**	-2.212	0.001	0.147

Note: Results reported for Uganda and Nigeria. Source: Afro barometer (2016) and Aid data (2016).



**Table 5:** Time Since Completion: Nigeria

	<b>Civil Society Projects</b>					
	Direct		Indirect		Total	
	W4	W5	W4	W5	W4	W5
<b>Member of Comm. Org.</b>						
V. short term	-0.178*	0.1897**	0.0162	-0.0702	-0.162*	0.1194
	[1.706]	[2.5345]	[0.1013]	[-0.357]	[-1.699]	[ 0.7035]
Short term	-0.048	0.045	0.0858	0.6465	0.0368	0.6916
	[-0.601]	[0.4595]	[0.481]	[1.2185]	[0.214]	[1.1577]
Med. term						
<b>Attend Comm. Meeting</b>						
V. short term	-0.1425	0.0087	0.1513	0.14942	0.0087	0.1581
	[1.443]	[ 0.1204]	[1.342]	[0.9224]	[0.181]	[ 0.9286]
Short term	0.008	-0.2078*	0.143	0.2562	0.1521	0.0483
	[0.123]	[-1.9051]	[1.007]	[0.4955]	[1.172]	[0.0850]
Med. term						
<b>Satisfied with democracy</b>						
V. short term	-0.081	-0.0376	0.1040	-0.2456**	0.023	-0.2833**
	[-0.765]	[-0.4313]	[ 0.775]	[-2.0515]	[0.209]	[-2.5353]
Short term	0.0543	-0.2354**	-0.026	0.0191	0.0278	-0.2162
	[0.6576]	[-2.1918]	[-0.1554]	[0.0489]	[0.1111]	[-0.5530]
Med. term						
<b>Most Government Corrupt</b>						
V. short term	0.0285	-0.078	-0.0622	-0.0301	0.0337	-0.1082
	[0.229]	[-0.9628]	[-0.5098]	[-0.2717]	[-0.5188]	[-1.0780]
Short term	0.1451	-0.0703	0.2721*	-0.0755	0.127	-0.1459
	[-1.768]	[-0.6942]	[1.9019]	[-0.251]	[0.9870]	[-0.4138]
Med. term						
<b>Pay bribe to obtain doc.</b>						
V. short term	0.311*	-0.0327	-0.2191	-0.1292	0.0924	-0.162
	[1.945]	[-0.2568]	[-1.0261]	[-0.6238]	[0.5522]	[-0.7369]
Short term	-0.0426	0.1512	-0.5639*	0.1101	-0.6066**	0.2613
	[-0.343]	[1.0169]	[-1.8293]	[0.1722]	[-1.994]	[0.3551]
Med. term						

Note: Results reported for Uganda and Nigeria. Source: Afro barometer (2016) and Aid data (2016). Significance level indications: \*\*\* $p < 0.01$ , \*\* $p < 0.05$ , \* $p < 0.10$ .

**Table 6:** Time Since Completion: Uganda

	<b>Civil Society Projects</b>					
	Direct		Indirect		Total	
	W4	W5	W4	W5	W4	W5
<b>Member of Community Org.</b>						
V. short term	-0.0484 [-0.6258]	0.002 [0.5966]	-0.3638*** [-2.8877]	-0.098 [-0.9735]	-0.4122*** [-3.4312]	-0.0681 [-0.686]
Short term		-0.007 [-0.7910]		0.6823*** [2.8040]		0.6153** [2.2494]
Med. term		0.0002 [0.0098]		-0.2785 [-0.5657]		-0.2783 [-0.5052]
<b>Attend Comm. Meeting</b>						
V. short term	0.0789 [0.8109]	-0.0366 [-0.8006]	-0.0492 [-0.4602]	0.0696 [1.2193]	0.02967 [0.3811]	0.0329 [0.7793]
Short term		0.0811 [1.1403]		0.1201 [1.0875]		0.2012* [1.7790]
Med. term		0.0205 [0.1678]		-0.3301 [-1.4200]		-0.3096 [-1.2792]
<b>Satisfied with democracy</b>						
V. short term	0.1523* [1.9251]	0.0133 [0.2959]	-0.24365* [-1.9055]	-0.1569* [-1.6627]	-0.0912 [-0.7274]	-0.1436 [-1.527]
Short term		-0.1866** [-2.3083]		0.0388 [0.1600]		-0.1477 [-0.5710]
Med. term		-0.0288 [-0.2365]		-0.4208 [-0.9016]		-0.4496 [-0.8668]
<b>Most Government Corrupt</b>						
V. short term	0.0847 [1.1406]	0.0518 [1.0650]	-0.0265 [-0.3252]	-0.03332 [-0.4779]	0.05816 [1.0934]	0.0185 [0.2785]
Short term		0.1661** [2.1384]		0.14814 [0.9749]		0.3142* [1.9171]
Med. term		-0.0142 [-0.0995]		0.0807 [0.2881]		0.0665 [0.2273]
<b>Pay bribe to obtain document</b>						
V. short term	-0.2723* [-1.9214]	-0.0837 [-1.3071]	-0.0808 [-0.527]	0.0341 [0.3089]	-0.3531* [-2.5623]	-0.0496 [-0.5458]
Short term		0.0426 [0.4276]		0.137 [0.6028]		0.1796 [0.7126]
Med. term		-0.0164 [-0.1006]		0.14132 [0.2913]		0.1249 [0.2349]

Note: Results reported for Uganda and Nigeria. Source: Afro barometer (2016) and Aid data (2016). Significance level indications: \*\*\* $p < 0.01$ , \*\* $p < 0.05$ , \* $p < 0.10$ .

**Table 7: Civil Society Projects- Including Future Projects**

<b>Nigeria (P151DUMMY)</b>	<b>Wave 4</b>		<b>Wave 5</b>	
	coef.	z-stat	coef.	z-stat
<b>Member of Comm. Org.</b>				
Direct	-0.110*	-1.840	0.086	1.377
Indirect	-0.038	-0.406	0.056	0.350
Total	-0.148	-1.622	0.142	0.776
<b>Attend Comm. Meetings</b>				
Direct	-0.129**	-2.454	-0.082	-1.198
Indirect	0.151*	1.817	0.270	1.584
Total	0.022	0.308	0.187	1.040
<b>Satisfied with Democracy</b>				
Direct	-0.028	-0.516	-0.159**	-2.290
Indirect	0.105	0.963	-0.186*	-1.790
Total	0.077	0.738	-0.345***	-3.306
<b>Most Government Corrupt</b>				
Direct	-0.019	-0.318	-0.066	-0.975
Indirect	-0.028	-0.371	-0.023	-0.279
Total	-0.047	-0.776	-0.089	-0.953
<b>Pay Bribe to Obtain Docs.</b>				
Direct	0.001	-0.023	0.019	0.195
Indirect	-0.212	-1.230	-0.211	-1.084
Total	-0.211	-1.290	-0.192	-0.915
<hr/>				
<b>Uganda</b>				
<hr/>				
<b>Member of Comm. Org.</b>				
Direct	-0.030	-0.402	-0.015	-0.354
Indirect	-0.168	-1.108	0.104	0.806
Total	-0.198	-1.366	0.089	0.633
<b>Attend Comm. Meetings</b>				
Direct	0.080	0.907	-0.017	-0.473
Indirect	-0.074	-0.602	-0.021	-0.343
Total	0.006	0.054	-0.038	-0.628
<b>Satisfied with Democracy</b>				
Direct	0.154*	1.912	-0.020	-0.511
Indirect	-0.234	-1.394	-0.037	-0.351
Total	-0.080	-0.489	-0.057	-0.484
<b>Most Government Corrupt</b>				
Direct	0.085	1.079	0.001	0.019
Indirect	0.025	0.266	0.007	0.119
Total	0.110	1.389	0.008	0.126
<b>Pay Bribe to Obtain Docs.</b>				
Direct	-0.272*	-1.912	-0.060	-1.280
Indirect	-0.240	-1.166	0.052	0.442
Total	-0.513***	-2.756	-0.008	-0.129

Note: Results reported for Uganda and Nigeria. Source: Afro barometer (2016) and Aid data (2016). Significance level indications: \*\*\* $p < 0.01$ , \*\* $p < 0.05$ , \* $p < 0.10$ .

**Table 8:** Standard Regression Model: Civil Society Aid Projects

<b>Nigeria</b>	Wave 4		Wave 5	
	Coef.	z-values	Coef.	z-values
<b>Member of Community Org.</b>				
Aid Project	-0.0336	0.040	0.004	0.0114
<b>Attend Comm. Meeting</b>				
Aid Project	-0.047	0.036	-0.012	0.013
<b>Satisfied with democracy</b>				
Aid Project	-0.001	0.040	-0.008	0.013
<b>Most Government Corrupt</b>				
Aid Project	-0.004	0.039	-0.013	0.012
<b>Pay bribe to obtain document</b>				
Aid Project	0.010	0.062	-0.021	0.017
<b>Uganda</b>				
<b>Member of Community Org.</b>				
Aid Project	-0.035***	0.012	-0.005	0.007
<b>Attend Comm. Meeting</b>				
Aid Project	-0.001	0.012	-0.017**	0.007
<b>Satisfied with democracy</b>				
Aid Project	-0.012	0.011	0.004	0.007
<b>Most Government Corrupt</b>				
Aid Project	0.016	0.010	-0.006	0.007
<b>Pay bribe to obtain document</b>				
Aid Project	-0.030*	0.018	-0.013	0.009

Note: Results reported for Uganda and Nigeria. Source: Afro barometer (2016) and Aid data (2016). Significance level indications: \*\*\* $p < 0.01$ , \*\* $p < 0.05$ , \* $p < 0.10$ .

**Table 9:** Standard Regression Model: All Aid Projects

	Wave 4		Wave 5	
	Coef.	Std.Er.	Coef.	Std.Er.
<b>Nigeria</b>				
<b>Member of Community Org.</b>				
Aid Project	-0.008**	0.004	0.000	0.001
<b>Attend Comm. Meeting</b>				
Aid Project	-0.007**	0.003	-0.001	0.001
<b>Satisfied with democracy</b>				
Aid Project	0.002	0.003	-0.001	0.001
<b>Most Government Corrupt</b>				
Aid Project	0.001	0.003	-0.001	0.001
<b>Pay bribe to obtain document</b>				
Aid Project	0.011**	0.006	-0.001	0.002
<b>Uganda</b>				
<b>Member of Community Org.</b>				
Aid Project	-0.007***	0.002	-0.003*	0.002
<b>Attend Comm. Meeting</b>				
Aid Project	-0.001	0.002	-0.003**	0.001
<b>Satisfied with democracy</b>				
Aid Project	-0.002	0.002	-0.000	0.001
<b>Most Government Corrupt</b>				
Aid Project	0.003	0.002	-0.001	0.001
<b>Pay bribe to obtain document</b>				
Aid Project	-0.007*	0.004	-0.001	0.002

Note: Results reported for Uganda and Nigeria. Source: Afro barometer (2016) and Aid data (2016). Significance level indications: \*\*\* $p < 0.01$ , \*\* $p < 0.05$ , \* $p < 0.10$ .

**Table 10:** Selection of aid projects: Nigeria

	No proj.	Future proj.	Diff
Age	30.877 (0,466)	44.659 (3.853)	-13,782*** (4.301)
Completed high school	0.483 (0.019)	0.450 (0.018)	0.033 (0.026)
Gone without food			
Never	0.402 (0.019)	0.421 (0.018)	-0.019 (0.026)
Just once or twice	0.243 (0.017)	0.236 (0.015)	0.007 (0.023)
Several times	0.226 (0.017)	0.218 (0.015)	0.008 (0.022)
Many times	0.090 (0.011)	0.072 (0.009)	0.018 (0.014)
Always	0.039 (0.008)	0.053 (0.008)	-0.014 (0.011)
Gone without water			
Never	0.387 (0.019)	0.394 (0.017)	-0.007 (0.026)
Just once or twice	0.208 (0.016)	0.190 (0.014)	0.018 (0.021)
Several times	0.219 (0.016)	0.203 (0.014)	0.016 (0.022)
Many times	0.095 (0.115)	0.118 (0.011)	0.024 (0.016)
Always	0.092 (0.011)	0.096 (0.010)	0.004 (0.015)
Gone without cash income			
Never	0.232 (0.017)	0.230 (0.014)	0.002 (0.022)
Just once or twice	0.243 (0.017)	0.234 (0.015)	0.009 (0.023)
Several times	0.281 (0.018)	0.286 (0.016)	0.005 (0.024)
Many times	0.157 (0.014)	0.152 (0.013)	0.005 (0.019)
Always	0.088 (0.011)	0.099 (0.011)	0.011 (0.016)
Electricity grid in local area	0.686 (0.018)	0.732 (0.016)	-0.046* (0.024)
Piped water in local area	0.222 (0.017)	0.384 (0.017)	-0.162*** (0.025)
School in local area (or walking distance)	0.778 (0.016)	0.762 (0.015)	0.016 (0.023)
Member of community organisation	0.358 (0.019)	0.384 (0.017)	-0.025 (0.026)
Attend meeting regularly	0.311 (0.018)	0.348 (0.017)	-0.038 (0.025)
Satisfied with democracy	0.294 (0.018)	0.233 (0.015)	0.061*** (0.023)
Most government officials are corrupt	0.559 (0.020)	0.598 (0.017)	-0.038 (0.026)
Pay a bribe to obtain a document	0.266 (0.027)	0.350 (0.026)	-0.084** (0.038)

**Table 11:** Selection of aid projects: Uganda

	<b>No proj.</b>	<b>Future proj.</b>	<b>Diff</b>
Age	38.915 (2.961)	38.232 (2.639)	0.683 (4.066)
Completed high school	0.146 (0.016)	0.216 (0.015)	-0.069*** (0.023)
Gone without food			
Never	0.410 (0.023)	0.466 (0.018)	-0.056* (0.029)
Just once or twice	0.127 (0.015)	0.148 (0.013)	-0.021 (0.020)
Several times	0.214 (0.019)	0.220 (0.015)	-0.006 (0.024)
Many times	0.159 (0.017)	-0.092 (0.011)	0.067*** (0.019)
Always	0.089 (0.013)	0.074 (0.010)	0.015 (0.016)
Gone without water			
Never	0.479 (0.023)	0.478 (0.018)	0.001 (0.029)
Just once or twice	0.140 (0.016)	0.105 (0.011)	0.035* (0.019)
Several times	0.157 (0.017)	0.178 (0.014)	-0.021 (0.022)
Many times	0.140 (0.016)	0.126 (0.012)	0.014 (0.020)
Always	0.083 (0.013)	0.112 (0.012)	-0.029* (0.018)
Gone without cash income			
Never	0.074 (0.012)	0.115 (0.012)	-0.040** (0.018)
Just once or twice	0.083 (0.013)	0.070 (0.009)	0.013 (0.016)
Several times	0.224 (0.019)	0.248 (0.016)	0.024 (0.025)
Many times	0.254 (0.020)	0.260 (0.016)	0.007 (0.026)
Always	0.365 (0.022)	0.306 (0.017)	0.058** (0.028)
Electricity grid in local area	0.274 (0.021)	0.192 (0.014)	0.082*** (0.025)
Piped water in local area	0.195 (0.018)	0.166 (0.014)	0.029 (0.023)
School in local area (or walking distance)	0.908 (0.013)	0.876 (0.012)	0.033* (0.019)
Member of community organisation	0.352 (0.022)	0.371 (0.018)	-0.019 (0.028)
Attend meeting regularly	0.622 (0.022)	0.599 (0.018)	0.023 (0.029)
Satisfied with democracy	0.484 (0.023)	0.571 (0.018)	-0.087*** (0.029)
Most government officials are corrupt	0.360 (0.022)	0.356 (0.018)	0.007 (0.028)
Pay a bribe to obtain a document	0.174 (0.023)	0.250 (0.023)	-0.076** (0.034)