Donor Motives and Aid Allocation in Uganda

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Abstract

Do foreign aid donors allocate aid strategically or on the basis of need at the subnational level? Recent research argues that aid can more effectively target need if donors bypass governments with poor-quality institutions and channel the delivery of aid at the subnational level through non-state actors. This raises the question of whether donors strategically target aid projects to areas within the country that maximize their influence over the government rather than focusing on areas that need aid the most. This article tests in the context of a key recipient country, Uganda, the hypothesis that donors allocate their aid towards areas controlled by the governing party of the country by examining the placement of aid projects following the 2006 and 2011 parliamentary elections. Using new data on subnational aid projects in Uganda, this article concludes that the US allocates aid strategically at the subnational level.

Do foreign aid donors allocate aid strategically or on the basis of need at the subnational level? Recent research has found that donors bypass governments with poor-quality institutions and channel the delivery of aid at the subnational level through non-state actors (Dietrich 2013, Winters 2010). Some have argued that aid can more effectively target areas of need within a country if it bypasses poor-quality government institutions, because governments with poor institutional quality are less able to prevent the misuse of aid through corruption, graft, and rent-seeking (Dietrich 2013). Yet it is not clear that if aid bypasses the central government, then it actually targets areas of need at the sub-national level. Examples to the contrary are readily available: other research has found that multilateral donors, such as the World Bank and African Development Bank, in Kenya target electoral constituencies controlled by the governing party coalition (Jablonski 2014, Briggs 2014). Instead, donors may bypass the central government to maintain control over the allocation of the aid at the subnational level, but allocate it to areas controlled by the government to influence the recipient's policy orientation.

This paper tests in the context of a key recipient country, Uganda, the hypothesis that donors target their aid strategically at the subnational level by favoring areas controlled by the governing party of the country. It tests this hypothesis by examining the placement of aid projects following the 2006 and 2011 parliamentary elections to see if aid locations are significantly more likely to be found in government-held constituencies. Using new data on subnational aid projects in Uganda, this paper shows whether donors allocate aid on the basis of need or on the basis of influence at the subnational level. The paper shows that bilateral and multilateral donor aid allocation patterns are distinct over time, and, of the individual donors examined, the US is found to allocate aid to

constituencies held by the governing party in Uganda, the National Resistance Movement (NRM).

Donors may systematically differ in their preferences regarding whether to target areas of influence or areas of need (van der Deen 2011). Some donors may find targeting areas of influence useful if doing so can provide leverage on the recipient government to implement policy reforms wanted by the donor. Other donors may prefer to target need if they are indifferent to policy reforms but are concerned with addressing other goals such as poverty reduction and the alleviation of deprivation. Therefore this paper tests for heterogeneity in donor motivations by first analyzing the donor behavior according to whether they are bilateral or multilateral organizations, and then examining the behavior of 4 bilateral and 4 multilateral donors.[1] Multilateral donors significantly disfavor NRM-controlled districts, but only after the 2011 elections.

These findings are substantively important because they show that efforts to target aid directly at the subnational level do not necessarily result in aid that is more targeted on need rather than maximizing strategic influence. While some donors do seem to target aid on need at the subnational level, such as Austria and multilateral organizations like the World Bank and European Union, contrary to the findings in Jablonski (2014) and Briggs (2014), others like the US target their aid strategically. Rather than concluding that donors are simply attempting to maximize strategic influence on the recipient government (Faye and Niehaus 2012), my findings are more consistent with the more

[1] As elaborated further in the research design section, the individual donors are selected according to whether they have sufficient observations to estimate a model after both 2006 and 2011. The bilateral donors examined individually include Austria, Ireland,

nuanced interpretations of donor behavior found in Hienrich (2013) and van der Deen (2011), that donors motivations over favoring strategic or altruistic uses of aid can shift over time and differ across donors.

I. Background: Aid and Elections in Uganda

Since its independence from Britain in 1962, Uganda has had only held four multiparty parliamentary elections. The first was the pre-independence elections in 1962, and elections were not held again until 1980 after Idi Amin, the military dictator who ruled from 1971-1979, had fled the country. The next multiparty parliamentary elections were not held until 2006, despite having held presidential elections in 1996 and 2001. Participation by political parties during these elections was outlawed prior to the 2006 elections, leading some scholars to label Uganda during this period as a "no-party democracy" (Carbonne 2008).

The National Resistance Movement (NRM) is the governing party in Uganda, and has dominated Ugandan politics ever since overthrowing the government of General Tito Okella Lukwa in 1986. The leader of the NRM, Yoweri Museveni, has been the president of Uganda also since 1986, having won election and re-election in presidential elections in 1996, 2001, 2006, and 2011. Museveni won these elections by large margins, garnering 75% in 1996, 69% in 2001, 59% in 2006, and 68% in 2011. Multiparty elections in Uganda were only reintroduced into the country in 2006. The NRM have been just as successful in recent parliamentary elections, winning 142 out of 205 (69%) seats in 2006 and 164 out of 263 (62%) seats in 2011.

Despite initially providing support for Museveni, donors' support for the Ugandan president has waned in recent years due to concerns about corruption and laws that criminalized homosexual behavior. During the 1990s, Museveni was considered one of Africa's so-called new leaders who were expected to lead their countries towards economic and democratic reforms (Hauser 1999). Donors rewarded Uganda's liberal economic reforms with development aid (ibid). Paradoxically, the support that donors gave to the country undermined their efforts to curb corruption in the country, giving rise to periodic crises surrounding new disclosures of aid-fueled corruption (Tangri and Mwenda 2006). Several European donors, including the United Kingdom, suspended aid to Uganda over concerns that individuals in the prime minister's office were stealing foreign aid funds allocated for poverty alleviation.[2] The passage of a law that criminalized homosexual behavior led to further aid sanctions against the country (Plaut 2014).

The recent history of democratization in Uganda and the long-standing influence of foreign aid donors in Uganda's politics make it an ideal case to examine the effect of donor motivations on aid allocation. It has been a so-called "donor darling" as a result of not only its democratic reforms, but also its economic reforms that serve to open the economy to international market forces. Additionally, Uganda is in many ways a 'least-likely' case in which to observe strategic behavior on behalf of donors: it is not a major trading partner with foreign aid donors, nor does it maintain a geographic position of strategic importance. On the other hand, Uganda did maintain a seat on the United Nations Security Council (UNSC) in 2009-2010. So, some strategic behavior may result

[2] Reuters. "Britain freezes aid to Uganda over corruption concerns." 16 November 2012.

from donors that attempted to curry favor with Uganda due to its position on the UNSC. Otherwise, Uganda appears to be a case where strategic behavior among donors is unlikely to be observed.

II. Literature Review

Understanding donor motivations for delivering aid is important, as the motivation for giving aid is directly related to how effective aid is in promoting development (Bearce and Tirone 2010; Kilby and Dreher 2010). It is thus not surprising that scholars have been debating where aid goes and why since the beginning of the international aid regime. Early scholars argued that aid was merely an arm of foreign policy, and thus was allocated on the basis of national interests (Schelling 1955). Later scholars argued that a state can have multiple interests, and so aid allocations should be understood as serving different purposes (Morgenthau 1962). The purposes of aid have been reduced down to two: strategic interests and humanitarian principles (McKinlay and Little 1977). The strategic interest of the state as it relates to aid allocation may correspond to variables such as commercial interests in the recipient, national security interests, the influence of the recipient in its region, or the position of the recipient in international organizations like the United Nations Security Council. Secondly, states may allocate aid on the basis of humanitarian principles (Lumsdaine 1993). This perspective argues aid is allocated on the basis of the need of the recipient, which is often measured by poverty.

Yet all donors need not behave the same in how they allocate aid. Early studies of the US aid allocations determined that its use of aid was primarily to pursue its strategic interest (McKinlay and Little 1977). Studies of individual donor countries had more nuanced results, with one study finding that UK aid followed political, commercial, as well as humanitarian interests (McGillivray & Oczkowski 1992), while Arab donors were likely to reward poor, Arab, Islamic, or Sub-Saharan countries with aid (Neumayer 2003). The picture that emerges from these studies is that donors give aid for different reasons, which may stem from donor interests, recipient need, or recipient merit (Alesina & Dollar 2000, Hoeffler & Outram 2011, van der Deen 2011, Heinrich 2013). Some donors are found to be relatively altruistic (e.g. Nordic counties), some have both egoistic and altruistic motives (UK and US), and some, such as France and Italy, were found to be egoists (Berthélemy 2006).

A key distinction that is employed to explain different preferences and motivations towards aid allocation is between multilateral and bilateral donors. Multilateral donors were traditionally thought to be more responsive to recipient needs than bilateral ones (Maizels & Nissanke 1984). One line of reasoning to support this contention is that because multilateral donors may be less constrained to respond to constituencies and demonstrate benefits of the aid, unlike bilateral donors, multilaterals are able invest aid on the basis of recipient need rather than donor interest. One reason why this argument may not hold is that donors themselves are the constituencies for multilateral agencies, and so the allocation decisions of multilaterals are not immune from the interests of major donors like the US (Stone 2008, Fleck and Kilby 2006;

Harrigan, Wang, and El-Said 2006). So whether multilateral aid allocations at the national level are based on need or interest is an open question.

A new line of research on the channel of aid delivery finds that donors allocate their aid differently to countries based on the quality of governance. Winters (2010) finds that the World Bank provides more programmatic and national-level projects in countries that are well-governed, but provides more project and subnational aid to poorly governed countries. Similarly, Dietrich (2013) finds that donors provide aid through non-state actors more frequently when the quality of governance in the recipient country is poor. Both authors assume that sub-nationally allocated aid is delivered on the basis of need, and is isolated from the influence of the recipient government.

However, it is also an open question whether aid that is allocated strategically or on the basis of need at the national level is also allocated or on the basis of need at the subnational level. In other words, inferring donor behavior at the subnational from the motivations for allocation at the national level may suffer from committing an ecological fallacy. For example, Dietrich argues that aid that bypasses the central government is evidence that donors are oriented towards development rather than increasing their strategic influence:

> However, if donor governments used aid solely to obtain policy concessions by recipient governments, the use of bypass tactics is puzzling. By definition, bypass reduces the amount of available funds for striking non-developmental bargains with the recipient government. The fact that donors use multiple bilateral aid delivery tactics may thus serve as prima facie evidence that donors derive more utility from aid success than the conventional wisdom would want us to believe. [2013, 699]

However, this statement assumes that sub-nationally distributed aid is in fact allocated altruistically within the country. Yet sub-nationally distributed aid may be useful for

recipients, if aid that is distributed within government-held electoral districts can provide an advantage for the government during elections (Jablonski 2014).

There are only a handful of subnational studies of aid allocation, and the findings on the determinants thereof are mixed. One study of World Bank (WB) and African Development Bank (AfDB) allocations in 27 African countries finds that these donors ignored regional needs but favoritism shaped its placement of aid projects (Öhler & Nunnenkamp 2013). Jablonski (2014), cited above, also finds that WB and AfDB aid projects are allocated to areas that share the ethnic identity of the president, a conclusion also reached by Briggs (2014). Another study found that the quality of multilateral aid targeting varies across countries, with some countries having higher quality targeting of aid on need than others (Findley et al. 2014). In one of the few studies of subnational aid allocation that includes bilateral donors, Dionne et al. (2013) find that bilateral donors favored areas in which the president's ethnic group was the majority.

III. Theory

The question this paper examines is whether donors are more likely to favor constituencies controlled by the Ugandan governing party, the NRM. I argue that allocating aid to government-held electoral districts is evidence of strategic behavior. Such aid would benefit the government in several ways: first, by rewarding its constituents for their support of the governing party with aid projects, thus serving as a form of "pork barrel spending." This allows the government to consume for itself the funds that it would otherwise have to pay in rewarding constituents.

Donors can find aid useful if it helps to bring about the policy changes (or the maintenance of policy reforms) that they prefer, such as favorable votes in the UN, economic reforms, and democratization. Donors attempted to use aid as a source of leverage to induce recipients to enact structural adjustment reforms in the 1980s and 1990s, albeit with mixed results. Dollar and Levin (2006) show an increasing tendency for donors to favor countries with democratic institutions and policies that support the rule of law and the protection of private property. Claessens et al. (2009) also show a trend among bilateral donors to greater selectivity to democratization and policy environment of the recipient when making aid allocations.

Foreign aid can enable donors to pursue their preferred policy reforms in recipient countries by serving as both a carrot by serving as a reward for desired behavior and a stick by threatening to remove it. The provision of foreign aid to the constituents of a government can bolster the support for the regime and thus lower the costs for a regime to democratize and serve to stabilize a country undergoing economic shocks. By threatening to take away the aid, and thus deprive the recipient government of a revenue stream that it benefits from, donor governments may have a source of leverage that they might otherwise not have.

However, the 'carrot' value of aid, or the ability of the aid to appease the recipient and induce the desired behavioral outcome, likely outweighs the 'stick' value of the aid, which is only as strong as the ability of the donors to coordinate and enforce the decision to remove aid. As has been documented thoroughly, the ability of donors enforce conditions on aid is not good (see Svennsson 2000 for an analysis of the difficulties with aid conditionality). Furthermore, recipient governments can simply kick out foreign aid

agencies if it believes that the agencies are acting in a manner detrimental to its interests.[3] Thus, appeasement behavior of funding favorable areas is more likely than punishing behavior of funding opposition areas to undermine the NRM.

Allocating the aid sub-nationally ensures that the donor retains some degree of control over how the aid used, unlike a financial transfer like budget support that is more difficult for donors to track. Donors do seem to prefer avoiding the appearance of funding corrupt governments (as evidenced by the fallout from the corruption scandal in Uganda mentioned above), because creating that appearance can result in pressure from domestic publics that prefer not to have their taxes go to such ends. Allocating aid sub-nationally in the form of a service provision is easier for foreign aid agencies to defend to domestic publics, but can still be used by the donor to create leverage with the recipient government by implementing the project in a favorable area.

As discussed above, the literature on the aid allocation policies of multilaterals suggests that while they are not immune from strategic considerations, they are more altruistic than bilateral donors on average. If that finding is correct, the following hypothesis should hold:

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[3] For example, the Sudanese government kicked several humanitarian organizations out of the country in 2009 after the Sudanese president, Omar al-Bashir, was indicted by the International Criminal Court. The government of Sudan has suspected humanitarian organizations have provided evidence of alleged misconduct by the Sudanese government to the court. (See New York Times, March 23, 2009, "Aid Groups' Explusion, Fears of More Misery," < http://www.nytimes.com/2009/03/23/world/africa/23darfur.html> accessed January 16th, 2015 at 4:44pm.

H1: Bilateral (multilateral) donors allocate more (less) aid to constituencies controlled by the governing party of Uganda.

The following section outlines the data that is used to test this hypothesis.

IV. Research Design

The Unit of Analysis

The primary unit of analysis is the district in Uganda. Getting accurate information on the number, name, and location of constituencies in Uganda is surprisingly difficult, because the number of constituencies has increased by nearly double since the 2001 parliamentary elections. The Ugandan government has similarly created new districts and divided previously existing districts into multiple parts. For instance, while there were only 56 districts in 2002, 77 existed in 2006 and 112 by 2011.

A district level rather than constituency level unit of analysis is used for several reasons. District-level covariates are more readily accessible than constituency-level covariates. Furthermore, as described in greater detail below, more subnational aid information is available at the district level than at the constituency level. The constituency-level data represent a subset of the total data set, and so relying on it solely for the analysis may bias the results.

The Dependent Variable

The data for the dependent variable is the aid project location. Under the auspices of AidData (Tierney et al. 2011) and according to the methodology developed by Strandow et al. (2011), I led a team of researchers to assign geographic coordinates to the locations of aid projects at the sub-national level in Uganda. Given that I am concerned with the geographical placement of aid projects by donor at the subnational level, I analyze aid project locations.[4]

The dataset is organized into two panels that represent the period following the first multiparty election in Uganda, held on 23 February 2006, and ends on the date of the second multiparty elections, held on 18 February 2011. The second panel covers the period after the second multiparty elections until late 2013.[5] Given that the analysis focused on the effects of electoral results on aid allocation, the aid projects that were implemented prior to the 2006 elections are not included in the dataset. The temporal information for the aid projects is based on the effective date, which is the project start date at the time of the project's approval, or when that was not available, the signature

[4] The aid projects often have multiple locations, and amount of aid committed to each project location is not available. Other studies attempt to estimate the amount of funds that go to individual project locations, but have to adopt assumptions about how donors allocate the funds between multiple locations. For instance, some studies weight the project locations by population at the regional level (Dionne et al. 2013, Jablonski 2014 (see especially fn. 67)), or distribute the aid funds equally among project locations. This study follows Öhler and Nunnenkamp (2013) and examines project location counts.

[5] The last project in the dataset set was signed on 31 December 2013.

date, the date on which the agreement for the project was signed. If neither date was available, then the project was not included in the analysis.

There are 954 bilateral and 485 multilateral aid project locations in the dataset, for a total of 1,439 aid project locations. 633 bilateral and 286 multilateral aid project locations are recorded after the 2006 election, while 321 bilateral and 199 multilateral aid project locations are recorded after the 2011 election. Table 1 summarizes the aid project locations per donor after the 2006 and the 2011 elections.

Table 1. Summary of Number of Project Locations by Donor after each election

[TABLE 1 HERE]

Along with estimating models for bilateral and multilateral donors, models are estimated for individual bilateral and multilateral donors. I estimate individual models cannot be estimated for a total of 8 major donors, including 4 bilateral donors (Austria, Ireland, Japan, US) and 4 multilateral donors (African Development Fund, European Union, United Nations Development Programme, and International Development Association).

The Independent Variables

The independent variables are the proportion of a district controlled by the NRM following the 2006 and 2011 elections. That is, the electoral unit in Uganda is the constituency, and the voters in each constituency vote for a member of parliament to represent them. Districts, in turn are made up of electoral constituencies, and the number

of electoral constituencies per district range from 1 to 5. The independent variable is the sum of the constituencies for which an NRM candidate was elected to parliament divided by the number of constituencies for the district. The proportion of NRM control at the district level is used as the main independent variable because more aid project information is available at the district rather than the constituency level. The data for which party won the constituency for the 2011 elections are gathered from the Electoral Commission of Uganda[6] and the information on which party won the constituency for the 2006 election was culled from the record of the parliamentary swearing-in ceremony (Uganda 2006). Finally, the log of the proportion of NRM control is calculated (Fox 2007) to create a normalized distribution. (The results of the regressions are not sensitive to whether the proportion is logged or not.)

The Control Variables

The variables selected as controls are factors that theoretically may also affect how donors allocate aid sub-nationally that the multivariate analysis must 'hold constant' in order to identify any effect that NRM control may have on aid allocation decisions. One set of factors is the urban and rural population of a district, which is taken from the most recent census in Uganda (Uganda Bureau of Statistics 2014). A second set of factors attempts to capture the level of need in a district, and uses two health and one education-related measure. It uses the number of health facilities and the immunization rate in a district, along with the ratio of teachers to students (Uganda Bureau of Statistics 2013). The education variable has information for 2009 and 2013, and these data are used

[6] http://www.ec.or.ug/eresults.php

in the 2006-2010 and 2011-2013 panels respectively. Finally, district size measured in thousand hectare units is included as a control variable. District size is measured by aggregating the size of electoral constituencies that make up the district using data from the Global Mapping of Electoral Districts project (Selway et al. 2014).

The Model

The model is estimated with a negative binomial regression.[7] The negative binomial regression is similar to the Poisson regression in that it is useful for analyzing count data, but unlike the Poisson regression, it allows the conditional variance to exceed the conditional mean (Long 1997, pp. 230-231). Models using the negative binomial regression are each estimated for bilateral and multilateral donors and then for each of the four individual bilateral and multilateral donors.

To aid in the interpretation of the results of the regression analysis, I describe the incident rate ratio (IRR) for each main independent variable along with including the regression coefficients in the regression tables. The IRR for a given explanatory variable shows the expected percent change in the dependent variable above or below a value of 1. For example, an IRR of 1.50 suggests that with each unit increase in the explanatory variable results in a 50% increase in the expected counts in the dependent variable. Values for the IRR less than 1 suggest a decrease in the expected counts for the dependent variable.

[7] Specifically, the negative binomial regression model was estimated using the *nbreg* command in Stata 13.1. The replication files including the .dta and .do files will be made available at the author's website.

V. Exploratory Data Analysis

Prior to estimating the negative binomial regression, it is worthwhile to pause and see what can be learned simply by examining the data. Figures 1-4 are a series of scatterplots with the aid project data for bilateral and multilateral donors on the *y*-axis and the proportion of NRM control on the *x*-axis after 2006 and then after 2011. For descriptive purposes, a linear regression line is fitted to the data (Berk 2004).

Figure 1. Bilateral Aid and NRM Control after 2006

[INSERT FIGURE 1 HERE]

Upon examining figure 1, several trends in the data stand out. First of all, note that there are more points on the right-hand side of the plot than on the left-hand side. This is because the NRM won a majority of the constituencies in the 2006 election and so control a large percentage of the districts. Second, note that the regression line has a negative slope, suggesting that the number of bilateral aid project locations decreases as the proportion of NRM control increases. This initial finding suggests that H1 may not hold for the period following the 2006 election. Next, there appears to be an outlying observation in the upper right-hand corner of the plot. It turns out that this observation is Iganga district with some 22 bilateral aid project locations. As the mean number of aid

project locations per district is 5.65 and standard deviation is 4.39, the number of aid proejects in Iganga is some 5 standard deviations above the mean.

Figure 2. Multilateral Aid and NRM Control after 2006

[INSERT FIGURE 2 HERE]

The data for multilateral donors for 2006 follows a similar pattern as for bilateral donors. The regression line fitted to the data has a negative slope, suggesting that multilateral donors may allocate fewer aid project locations in NRM-controlled districts. Additionally, there appear to be two outliers in the data. In this case, the outliers are Kasese district with 17 aid project locations and Kabarole district with 15 project locations. As the average number of multilateral project locations of 2.33 per district and the standard deviation is 2.79, these districts are 6.09 and 5.38 standard deviations above the mean respectively.

Figure 3. Bilateral Aid and NRM Control after 2011

[INSERT FIGURE 3 HERE]

The first and perhaps most important difference between figure 3 and figures 1 and 2 is that the slope of the regression line is now positive. This is the first piece of evidence that bilateral donors favor government-controlled districts. The four dots near the top of the plot suggest potential outliers, including the capital Kampala with 25

project locations, Kisoro district (22), Ntungamo district (18), and Masindi district (16). As the average number of bilateral aid project locations after the 2011 elections is 3.08 with a standard deviation of 4.36, these districts were 5.73, 5.05, 4.13, 3.67 standard deviations above the mean respectively. The data seem to be more prevalent on the right-hand side of the plot and seem to fan out towards the top and bottom of the plot, while the data on the left-hand side of the plot are clustered towards the bottom of the plot.

Figure 4. Multilateral Aid and NRM Control after 2011

[INSERT FIGURE 4 HERE]

Figure 4 also has the regression line with a positive slope found in figure 3 in figure 4. However, unlike the data in figure 3 that include a number of locations in the upper-right-hand part of the plot, the data in figure 4 have a shape that resembles an inverted U. Thus, it is unclear if the regression line in figure 4 describes the trend in the data as well as in the previous figures. The data in figure 4 lack the clear outliers that the other figures seem to have, with fewer observations on the left- and right-hand sides of the plot, and more observations towards the center.

In summary, the relationships shown in figures 1 and 2 suggest a negative relationship between both bilateral and multilateral aid projects and NRM control after 2006, while figures 3 and 4 show a positive relationship between both types of aid projects and NRM after 2011. These scatterplots provide some initial evidence that contradict H1 and help to confirm H1, and suggest that the strategic allocation of aid varies over time.

VI. Main Results

Table 2. Negative Binomial Results for Bilateral and Multilateral Donors

[INSERT TABLE 2 HERE]

The results of the negative binomial regression including four models, one each for bilateral and multilateral aid project locations after 2006 and then after 2011, are displayed in table 1. Model 1, for bilateral aid after 2006, suggests a negative relationship with the level of NRM control. The incident risk ratio (IRR) for NRM control is .88, suggesting that a one-unit increase in NRM control is associated with a 12% decrease in bilateral aid project locations. Model 2, for multilateral aid after 2006, does not have a significant relationship with NRM control, although the positive value of the coefficient contrasts with the negative slope of the regression line in figure 2. In model 3, the coefficient for NRM control is significant and positive, suggesting that NRM control is positively associated with the number of aid project locations. The IRR for NRM control in model 3 is 1.34, suggesting that increased NRM control is associated with a 34% increase in bilateral aid projects locations. In model 4, and contrary to the slope of the regression line in figure 4, the coefficient for NRM control is negative and significant for multilateral aid. The IRR for NRM control in model 4 is .80, suggesting that increased NRM control is associated with a 20% decrease in multilateral aid project locations.

Table 3. Negative Binomial Regression for Major Bilateral Donors

[INSERT TABLE 3 HERE]

The results in table 3 drills down into the behavior of four bilateral donors after 2006 and after 2011 to provide more insight into the findings in models 1 and 3. In model 5, Austria has a negative and significant relationship with NRM control, contrary to H1 above, and with an IRR of .22 and suggesting a 78% decrease in Austrian aid projects. The next two models for Irish and Japanese aid have no significant relationship with NRM control, although the coefficient for NRM control is negative in the model for Japan. The coefficient for NRM in the model for US aid, however, is significant and positive, providing some evidence in favor of H1. The IRR is 1.23, suggesting a 23% increase in US aid projects as NRM increases. The patterns in models 5-8 are consistent for models 9-12, which cover the period after the 2011 elections. The coefficient for NRM control is negative and significant for Austrian aid, but is positive and significant for US aid. The IRR for Austria and the US is .55 and 1.56 respectively.

Table 4. Negative Binomial Regression for Major Multilateral Donors

[INSERT TABLE 4 HERE]

Models 13-16 include the results for four multilateral donors after the 2006 elections. None of the coefficients for the NRM control variable are significant, although they are negative for UNDP and EU aid projects. Models 17-20 cover the same donors for the period after the 2011 elections, and in three of these models the coefficients for NRM control are negative and significant. While the coefficients for NRM control are

significant for UNDP and IDA are significant at the .05 level, the coefficient in the EU model is significant at the .10 level. The IRR for UNDP, IDA, and EU is .62, .75, and .76, respectively, and so suggesting decreases of aid projects of 38%, 25%, and 24% as NRM control increases for each of these donors. The results for these models suggest support for H1, that multilateral donors are less likely to favor areas with greater NRM control.

VII. Discussion

The results of the foregoing analysis differ considerably from the results of similar studies of subnational aid allocation. Jablonski (2014) finds that World Bank and African Development Bank projects were allocated in regions controlled by the governing coalition in Kenya between 1980 and 2010; Briggs (2014) finds that bilateral and African Development Bank projects were similarly allocated in Kenya between 1989 and 1995[8]; Öhler and Nunnenkamp (2013) find that African Development Bank and World Bank projects between 2005 and 2011 were allocated to regions in which the president was born, and interpret this finding as evidence of favoritism in the allocation of aid projects.

[8] Actually, he only finds that two of eight bilateral donors – UK and France – clearly seemed to favor the areas controlled by the Kenyan governing coalition, but nevertheless concludes that bilateral donors bias their aid allocations more than multilateral donors (Briggs 2014, 200).

Here, I find that bilateral allocations were significantly greater in NRM-controlled areas, but only after 2011, while multilateral aid allocations significantly decreased after 2011. Of the individual donors examined, only the US seemed to consistently favor districts with higher level of NRM control and Austria consistently did not favor these areas, while the World Bank, European Union, and UNDP significantly provided less aid after then 2011 elections. (The coefficient for AfDB is positive but not significant.)

The preponderance of the US in terms of the total number of bilateral aid projects seems to explain the different signs on the coefficients for bilateral projects after 2006 (which was positive) and after 2011 (which was negative). Referring again to Table 1, the US with 233 projects after 2006 makes up some 36% of all bilateral aid allocations. After the 2011 election, however, the US makes up some 60% of all bilateral aid allocations. The different findings for bilateral donors appear to result from the influence of the US.

What explains the divergent results between this and the previous studies? First off, the previous studies focused heavily on one case, Kenya. The manner in which donors interact with the recipient government and the favor shown to it probably differs across countries. In this analysis, it is likely not coincidental that the downturn in multilateral aid projects after 2011 coincides with highly public corruption scandals that resulted in the suspension of aid and a series of laws criminalizing homosexual behavior that were heavily criticized by Western donors. Yet it is perhaps illustrative of the problems donors face in applying aid sanctions that the US continued aid allocations to NRM-controlled constituencies at the same time that multilateral donors were decreasing these allocations.

VIII. Conclusion

The proposition that this paper explores is whether donors allocate aid strategically at the subnational level. Using subnational aid data for Uganda, I tested whether bilateral or multilateral donors as a group were more likely to allocate aid projects to government-held constituencies following the 2006 and 2011 elections, and also for whether individual bilateral and multilateral donors favored government-held constituencies. Significantly favoring districts with higher proportions of NRM control is interpreted as strategically allocating aid, as these aid projects may benefit the recipient government through constructing popular support for the regime and thereby increasing the leverage donors have over the recipient government.

The findings suggest that donor motivations for aid allocation are heterogeneous. While the US does in fact allocate its aid in a manner open to strategic interpretation, other donors such as Austria do not. The patterns in aid allocation are not constant over time either. Bilateral donors as a whole gave less aid to government-controlled constituencies after the 2006 elections, but more after the 2011 elections. Multilateral donors significantly favored government-held districts less after 2011, but not after 2006.

The assumption made in this paper is that the same logic used to test for strategic or altruistic behavior in aid allocations at the national level can be usefully applied to explain donor aid allocations at the subnational level. While that is a worthwhile question, this analysis I believes the limits of that framing, but is consistent with recent research that shows donors allocate aid strategic or altruistic according to the circumstances in the particular country (van der Veen 2011, Heinrich 2013). Instead of

approaching the objective function of donors as either strategic or humanitarian, a more useful approach may be to consider how the organizational dynamics of aid agencies affect how they interact with the recipient government and so how they allocate aid. For example, factors such as the average length of tenure of aid agency staff, the length of the aid relationship with the recipient country, the size of the aid agency, the degree to which government personnel are involved in the planning stage of aid projects, the independence of the aid agency office from the central government in the donor country, are fruitful ways of gaining further insight into the sources of heterogeneity in aid delivery among donors.

Additionally, the specific political context of the recipient country can also play a significant role in how donor countries interact with the recipient, and so future analyzes should take into account time-varying factors such as electoral years, membership in the UN Security Council, corruption scandals, and so on. Finally, subnational aid projects are a fruitful subject for spatial dependence models that may be able to capture coordination among donors. For instance, the fact that the US favors NRM-held areas while Austria does not may actually be evidence of coordination among these donors to specialize in different parts of the country.[9] Sub-national aid coordination may thus help to explain the heterogeneity of aid allocations by donors.

[9] Briggs (2014, 201) briefly considers this possibility among bilateral donors in Kenya, but dismisses it by referencing a study on an aid project from 1978 that was unduly influenced by the Kenyan president at the time, Daniel arap Moi.

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Table 1. Summary of Number of Project Locations by Donor after each election

Donor	**2006**	**2011**
African Development Fund (AfDF)	46	4
Arab Bank for Economic Development in Arica (BADEA)	6	4
Austria	31	26
China	12	2
Denmark	4	0
European Union	103	52
International Bank for Reconstruction and Development (IBRD)	1	0
International Development Association (IDA)	86	0
Ireland	27	15
Islamic Development Bank (IDB)	13	0
Japan	99	60
Netherlands	38	0
Norway	55	1
Spain	2	0
Sweden	4	24
United Kingdom	128	0
United Nations Development Programme (UNDP)	31	86
United States of America	233	193
Total	919	520

Table 2. Negative Binomial Results for Bilateral and Multilateral Donors

VARIABLES	(1) Bilateral 2006-10	(2) Multilateral 2006-10	(3) Bilateral 2011-13	(4) Multilateral 2011-13
NRM 2006, Logged	-0.117**	0.0627		
	(0.0510)	(0.0714)		
NRM 2011, Logged			0.296**	-0.220**
			(0.115)	(0.101)
Logged Urban Population	0.0522	0.290**	0.257*	0.363**
	(0.0872)	(0.117)	(0.156)	(0.151)
Logged Rural Population	0.0997	0.267	0.428	-0.0920
	(0.171)	(0.227)	(0.304)	(0.259)
Immunization Rate	0.000758	0.0125***	0.00679	0.00614*
	(0.00223)	(0.00288)	(0.00415)	(0.00325)
Health Facilities	0.00413	0.00440	0.00419	-0.0150*
	(0.00404)	(0.00430)	(0.00702)	(0.00824)
Pupil-Teacher Ratio 2009	0.0297***	0.000130		
	(0.00652)	(0.00869)		
Pupil-Teacher Ratio 2013			0.0158*	0.0109
			(0.00948)	(0.00827)
District Size	-0.000662	0.000445	-3.49e-05	0.00209***
	(0.000484)	(0.000667)	(0.000834)	(0.000772)
Constant	-1.598	-6.548**	-8.551**	-2.846
	(2.077)	(2.792)	(3.641)	(3.022)
Lnalpha	-1.892***	-1.804***	0.0109	-0.513
	(0.333)	(0.452)	(0.207)	(0.314)
Observations	75	75	109	109

Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table 3. Negative Binomial Regression for Major Bilateral Donors

VARIABLES	(5) Austria 2006-10	(6) Ireland 2006-10	(7) Japan 2006-10	(8) US 2006-10	(9) Austria 2011-13	(10) Ireland 2011-13	(11) Japan 2011-13	(12) US 2011-13
NRM 2006, Logged	-1.466***	0.0609	-0.165	0.206**				
	(0.441)	(0.206)	(0.124)	(0.0931)				
NRM 2011, Logged					-0.583**	3.309	-0.0661	0.446**
					(0.264)	(2.919)	(0.190)	(0.192)
Logged Urban Population	0.467	-0.481	0.425**	-0.235	0.774*	-0.214	0.195	0.393
	(0.475)	(0.310)	(0.213)	(0.152)	(0.399)	(0.879)	(0.265)	(0.293)
Logged Rural Population	-1.054	-0.742	0.456	0.844***	-0.482	-0.572	0.549	0.531
	(1.169)	(0.698)	(0.429)	(0.293)	(0.673)	(1.160)	(0.493)	(0.529)
Immunization Rate	-0.00816	0.00910	-0.00838	-0.00152	-0.000428	0.0334**	0.00893	-0.00164
	(0.0181)	(0.00687)	(0.00625)	(0.00387)	(0.00995)	(0.0159)	(0.00636)	(0.00744)
Health Facilities	0.0336	-0.00966	0.00156	0.00474	0.00319	-0.104	-0.00273	0.00923
	(0.0264)	(0.0266)	(0.00984)	(0.00591)	(0.0153)	(0.0888)	(0.0121)	(0.0115)
Pupil-Teacher Ratio 2009	0.0498	0.0126	0.0390**	0.00427				
	(0.0388)	(0.0155)	(0.0155)	(0.0117)				
Pupil-Teacher Ratio 2013					0.0133	0.0262	0.0480***	0.0264
					(0.0223)	(0.0351)	(0.0171)	(0.0180)
District Size	0.00446	0.00386**	-0.00179	-0.00342***	0.00280	0.00393	-0.000887	-0.00227
	(0.00337)	(0.00168)	(0.00117)	(0.000904)	(0.00176)	(0.00345)	(0.00136)	(0.00160)
Constant	1.185	10.48	-11.45**	-7.143**	-4.985	-0.593	-12.44**	-11.76*
	(13.30)	(8.906)	(5.288)	(3.468)	(7.418)	(16.16)	(6.095)	(6.443)
Lnalpha	0.378	-15.44	-0.566	-1.089***	0.481	0.908	0.347	1.118***
	(0.883)	(1,004)	(0.518)	(0.381)	(0.929)	(0.729)	(0.412)	(0.238)
Observations	75	75	75	75	108	108	108	108

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Table 4. Negative Binomial Regression for Major Multilateral Donors

VARIABLES	(13) AfDF 2006-10	(14) UNDP 2006-10	(15) EU 2006-10	(16) IDA 2006-10	(17) AfDF 2011-13	(18) UNDP 2011-13	(19) EU 2011-13	(20) IDA 2011-13
NRM 2006, Logged	0.136	-0.213	-0.0601	1.087				
	(0.144)	(0.355)	(0.137)	(0.125)				
NRM 2011, Logged					0.843	-0.464**	-0.276*	-0.295**
					(0.533)	(0.217)	(0.151)	(0.117)
Logged Urban Population	0.466*	0.128	0.306	1.499**	0.645	0.0718	0.486*	0.715***
	(0.243)	(0.475)	(0.212)	(0.295)	(0.783)	(0.294)	(0.251)	(0.199)
Logged Rural Population	-0.163	-0.252	0.407	1.156	2.452	-0.0859	-0.390	-0.164
	(0.416)	(1.388)	(0.450)	(0.390)	(1.713)	(0.501)	(0.372)	(0.300)
Immunization Rate	0.00880	0.0515***	0.0155***	0.999	0.00277	0.0216***	-0.00698	-0.00129
	(0.00554)	(0.0168)	(0.00566)	(0.00566)	(0.0200)	(0.00644)	(0.00560)	(0.00460)
Health Facilities	-0.000855	-0.00925	0.00535	1.006	-0.100	-0.0342*	-0.00842	-0.00640
	(0.00791)	(0.0337)	(0.00849)	(0.00592)	(0.0650)	(0.0196)	(0.0121)	(0.00783)
Pupil-Teacher Ratio 2009	-0.0168	0.0358	0.0126	0.986				
	(0.0182)	(0.0412)	(0.0167)	(0.0151)				
Pupil-Teacher Ratio 2013					-0.173**	0.0147	0.0281**	0.00938
					(0.0827)	(0.0144)	(0.0129)	(0.0116)
District Size	0.000368	0.000236	0.00172	1.000	-0.00328	0.00416**	0.00168*	0.000589
	(0.00132)	(0.00335)	(0.00137)	(0.00112)	(0.00459)	(0.00162)	(0.00101)	(0.000886)
Constant	-3.470	-5.572	-10.53*	0.00256	-28.60	-2.346	-2.054	-6.119*
	(4.932)	(16.02)	(5.621)	(0.0103)	(18.28)	(6.101)	(4.241)	(3.382)
Lnalpha	-16.38	0.965*	-0.113	8.22e-08	1.080	0.610*	-0.917	-14.89
	(1,457)	(0.519)	(0.341)	(5.40e-05)	(1.127)	(0.370)	(1.035)	(743.8)
Observations	75	75	75	75	108	108	108	108

Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Figure 1. Bilateral Aid and NRM Control after 2006

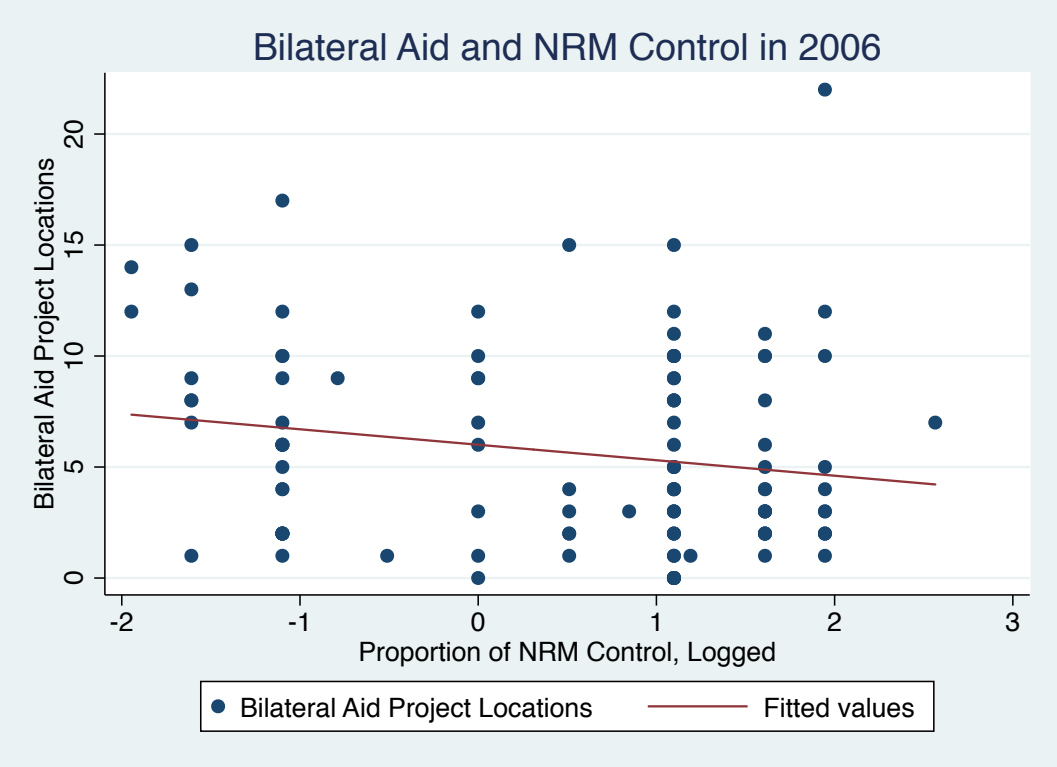

Figure 2. Multilateral Aid and NRM Control after 2006

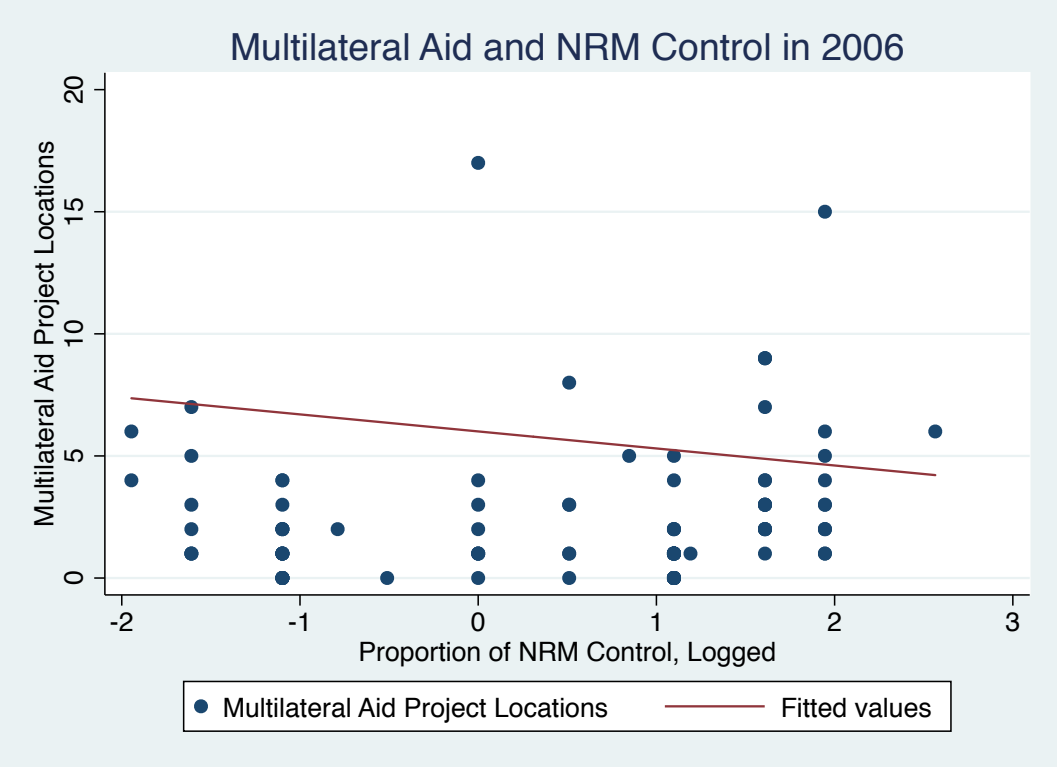

Figure 3. Bilateral Aid and NRM Control after 2011

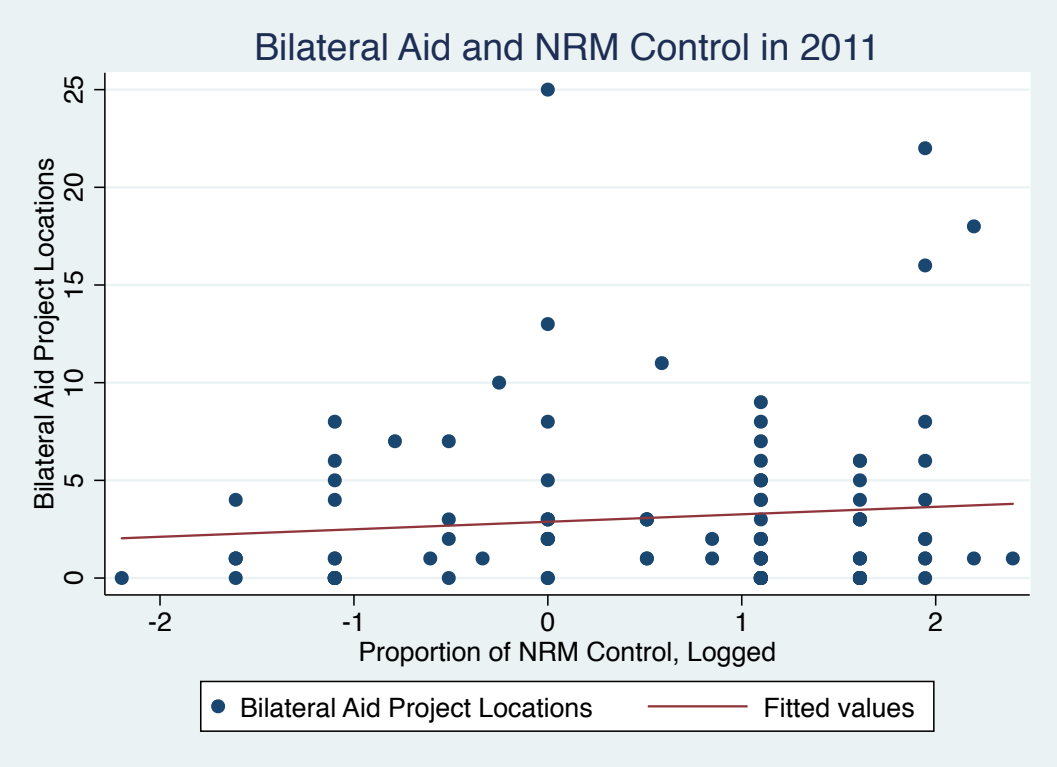

Figure 4. Multilateral Aid and NRM Control after 2011