Distribution or Diversion? Distribution of Local Public Goods in the Presence of Clientelist Brokers

July 9, 2019

Abstract

In this article, I argue that, in clientelist regimes, money officially allocated to local public goods will sometimes be diverted to private handouts, and that the extent of diversion will be systematically correlated with electoral outcomes. I show that allocated funds are more likely to translate into local public goods in opposition areas and the incumbent's ethnic core. Diversion of funds is greatest in areas outside the ethnic core that are nevertheless won by the regime. This is consistent with a model in which brokers tasked with delivering non-coethnic voters to the regime divert funds for this purpose. As a result of extensive diversion in loyal non-coethnic districts, these voters are significantly *less* likely to see completed local public goods projects than either core voters *or* those who oppose the regime. This unexpected result suggests that the behavior of local brokers may be responsible for a number of puzzling findings in the distributive politics literature.

Existing literature finds that leaders in developing countries often – though not always – allocate more local public goods to the communities that vote for them (Vaishnav and Sircar, 2012; Albertus, 2013; Rosas, Johnston and Hawkins, 2014). In most cases, these patterns are interpreted as distribution from the center to voters in exchange for their support; a model in which voters support politicians in anticipation of better local public goods is particularly prominent in the African politics literature (Ichino and Nathan, 2013; Posner, 2005; Carlson, 2015).

But this conclusion sits uneasily with other literature that suggests that blocs of voters in poor countries do not directly negotiate a quid-pro-quo with the central state, but are delivered to the regime by networks of local brokers who either compel political loyalty or buy it with targeted private goods (Koter, 2013; Baland and Robinson, 2008; Boone, 2011; Frye, Reuter and Szakonyi, 2014; de Kadt and Larreguy, 2014). Clientelist brokers require access to discretionary funds for vote-buying and their own compensation (Trantidis and Tsagkroni, 2017; Singer, 2009; de la O, 2015; Jablonski, Sacks and Larizza, 2014; Camp, 2015; Camp and Szwarcberg, 2015; Novaes, 2015; Zarazaga, 2015; Kasara, 2007), but since governments can't overtly allocate money to clientelism, the money must be diverted from other components of the budget. This raises the question: When we see that loyal constituencies are granted allocations for local public goods, are voters actually receiving these goods? Or are these funds intended for use by the local brokers who keep voters loyal?

The question is relevant to our models of how voters and leaders behave. Most distributive politics literature assumes two actors: voters, who vote in response to distribution, and elected leaders, who distribute goods to earn support. If this is the correct model, then the correlation between local electoral outcomes and allocations to local public goods will be sufficient to determine whether there is an exchange of goods for support. In clientelist countries, however, there will likely be another actor, an intermediary (or coordinated group of intermediaries) who can both divert resources and influence vote choice, and the intermediary's actions will moderate the apparent relationship between vote choice, official allocations, and *de facto* local public goods provision. Communities who appear to support the incumbent in exchange for greater allocations of local public goods may actually be voting in exchange for handouts bought with diverted funds. Conversely, if we find a negative correlation between observed local public goods and support for the incumbent, this is not necessarily surprising, and may mean that brokers deliver votes to the regime by spending almost all of a community's official allocation on clientelism instead of local public goods.

I look for evidence of systematic diversion[1] of funds officially intended for local public goods in micro-level budgetary data from Uganda, a small sample of which I audit on the ground to determine whether it is possible to use these data to distinguish diverted funds from those that are actually used to provide local public goods. The audits show that project line-items to which a reporter attached an optional note on the status of the project were significantly more likely to be completed within two years. Then, taking the lack of a status report as an indicator that money was more likely to be diverted, I identify the correlates of diversion in the records of several thousand projects in 304 Ugandan sub-counties. I show that diversion is lower (local public goods are more likely to be provided) in opposition areas and the incumbent's ethnic core constituencies. Diversion is highest (and local public goods least likely to be provided) in areas outside the ethnic core that nevertheless elected MPs from the ruling party. This is consistent with a model in which local officials who double as clientelist brokers[2] for the regime divert money officially intended for local public goods and use it to buy voter handouts and compensate themselves and other brokers. Local officials who work among voters who do not need to be bought, or whose votes are not needed, are not allowed to divert money.

I also show that, as a result of systematically greater diversion, non-coethnic voters who support the regime are *dis*favored in the allocation of actual local public goods: non-coethnic constituencies that support

---

[1] In this article, I use the term diversion to signify that that funds are not being used for their official purpose, which is local public goods. Diverted funds may be spent on something else, like handouts, or taken as rents.

[2] I mean "broker" here as a general term for actors who are participating in a clientelist machine, at some level between regime leadership and voters. Brokers at different levels of the machine may be directly mobilizing voters or paying and supervising other brokers who are.

the ruling party have the lowest number of completed local public goods projects. This is consistent with existing models that argue clientelist spending substitutes for public goods provision (Keefer and Khemani, 2009; Robinson and Verdier, 2013) and with findings that clients of powerful local agents will be under-served with public goods (Kasara, 2007). However, it is a different conclusion than we would draw analyzing allocations alone, and different from expectations in existing literature that African politicians reward (or entice) supporters with local public goods.

The study makes several contributions. First, it highlights the need to consider the actions of local brokers when we interpret patterns of distribution in clientelist countries. Second, it provides some initial insight into how expenditure and diversion can be identified in existing micro-financial data, which will improve the reliability of the conclusions we can draw from this valuable data source. Third, it provides evidence on the political conditions under which public resources will be most likely to be diverted to clientelist handouts. These findings build on existing literature that shows local public goods are provided to leaders' electoral core and private goods to voters who need more persuasion (Rosas, Johnston and Hawkins, 2014), that brokers divert most where they most effectively deliver votes (Novaes, 2015; Larreguy, 2013) and that clientelist handouts, and brokers more generally, are not as necessary among African regime's ethnic core voters (Koter, 2013).

Finally, the theory and results can help reconcile a number of inconsistent findings in the distributive politics literature. This study can help explain why coethnics of African incumbents are generally found to have better local public goods, while co-partisans of the regime more generally are not (Harris and Posner, 2016; Miguel and Zaidi, 2003; Ejdemyr, Kramon and Robinson, 2016; Burgess et al., 2015): this study suggests that while coethnic partisans are indeed favored, non-coethnic partisans receive fewer local public goods. The theory can explain why Raffler (2017) finds that increased monitoring of local bureaucrats by local officials only improves service delivery in opposition areas: my model indicates that local officials in regime areas are tasked with something other than provision of local public goods. Lastly, the study can explain why a number of existing studies find that opposition voters are better off than others, a pattern for which we have not previously had a clear strategic explanation (Masaki, 2015; Andre and Mesple-Somps, 2011; Banful, 2011).

Figure 1: Stylized model of distribution from center to public

constituency resources

center
rents

local
allocation

agent
rents

handouts

LPGs
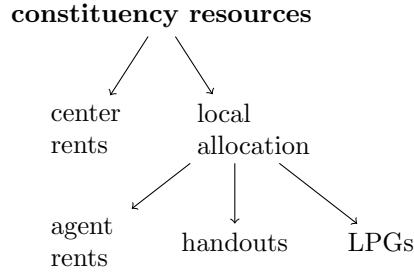
1   Clientelism and Diversion

To predict where diversion will be greatest, I assume a general model like the one shown in Figure 1. In the model, there is a pool of resources that must be distributed across n constituencies, with $1/n$ resources for each constituency. The regime decides how much of each constituency's share can be taken as rents, and officially allocates the rest to the constituency's local officials, who then devote money to local public goods (LPG's), vote-buying, and/or rents for themselves.

The central government must devolve resources to lower officials, rather than keeping resources at the center, because it does not have the capacity to directly administer local governance. The center must allocate and disburse resources to *all* lower officials, rather than only some, because whether disbursements hit local accounts is easily observed by donors, auditors and other interested parties. However, what is done with the money is less observable and local officials will use the money for different purposes, as instructed by the center. The government will instruct some local officials to serve purely as administrators, using the money to provide local public goods, as budgeted. The government will instruct others to serve as brokers in the clientelist machine, converting the money to voter handouts and compensation for their services and that of other brokers.

The government's goal is to maintain power while spending as little money as possible, so they can maximize their own rents. The government is sensitive to citizen preferences, and since it must allocate resources to constituencies anyway, prefers to use allocations to increase genuine support in the population, reducing the need for repression or election fraud. Voters, for their part, are primarily concerned with maximizing access to resources. Given a choice, citizens prefer productive goods like roads, schools and agricultural inputs – in other words, local public goods – to small private handouts (Weghorst and Lindberg, 2013; Fujiwara and Wantchekon, 2013; Adida et al., 2017).

The government would also prefer to spend the money on local public goods rather than handouts,

because LPG's cost less per voter served than private handouts do (de Mesquita et al., 2005; Stokes, 2005). First, voters can share local public goods in a way they can't share handouts, increasing voters served per dollar spent. More importantly, local public goods are easier to observe and target, reducing the regime's monitoring costs. Local public goods are targeted to constituencies, whose collective political support the government can directly observe with existing electoral infrastructure; since constituencies benefit from voting as a bloc, communities will police themselves without additional monitoring from the regime (Ichino and Nathan, 2013). Targeting handouts, on the other hand, requires the involvement of knowledgeable local brokers who can identify buy-able voters, estimate how much it will cost to buy their vote, and monitor whether they fulfill their end of the bargain in the polling booth. These agents must be compensated for their time and effort, and pose a risk of moral hazard. With the number, size and targeting of individual handouts difficult for the regime to monitor, brokers may take too much in compensation, or even use the government's resources to mobilize voters for another party (Zarazaga, 2015; Novaes, 2015; Larreguy, 2013).

However, though both voters and the regime would prefer to exchange local public goods for votes, not all voters believe local public goods are something they can reasonably expect from the regime. Construction of local public goods takes time and voters who do not trust the government to follow through on its promises will instead prefer the concrete and immediate benefits of voter handouts (Kramon, 2016; Hanusch, Keefer and Vlaicu, 2016; Koter, 2013). Voters may also not trust *other* voters to coordinate on the candidate promising local public goods, and, faced with a prisoner's dilemma, choose to defect to a candidate providing handouts (Fujiwara and Wantchekon, 2013; Adida et al., 2017). In practice, these voters will have to receive handouts to vote for the government.

To minimize cost when some voters must be purchased with handouts, the state will engage in three strategies. First, in any given constituency, they will provide either local public goods *or* handouts because providing both is a waste of resources. Second, they will provide handouts only to those voters whose votes they need to ensure a minimum winning coalition. They will not provide handouts to voters whose votes can be secured with promises of local public goods, or to those outside the spoils coalition, whose votes are not needed to produce a majority; both of these groups of voters will instead receive local public goods. Third, they will reduce deadweight loss by limiting the amount that local actors take in money for themselves. Though skilled clientelist brokers must be compensated to prevent defection, local agents who are not acting as brokers, or who are not very effective as brokers, will not be allowed to siphon off additional personal compensation that could otherwise be going to rents at the center.[3] This will leave disproportionately more

---

[3] All local officials receive an official salary, and this may be sufficient compensation for some or all brokers. But since effective brokers have often made substantial investments in building their voter networks, they can't necessarily be easily replaced and

money available for local public goods.

The model has several testable implications. First, we should expect to see less diversion, and more public goods provision, among the government's ethnic core voters. Voters in the ethnic core find promises of future local public goods credible (Koter, 2013; Carlson, 2015) and may even infer a promise of future LPG's where none is made explicit (Wantchekon, 2003). The regime can exchange local public goods for support in core areas, without requiring additional payments for handouts or broker rents.

H1: Provision of local public goods will be higher/diversion of resources will be lower in the government's ethnic core constituencies

Diversion will also be lower in constituencies that are not part of the spoils coalition, which will dispro-portionately be constituencies in which the opposition currently holds power. The fact that the opposition has won in these areas implies one of three things: regime brokers in these areas are ineffective; regime brokers are faithless agents using government resources to mobilize the opposition; or the regime has decided these voters are unnecessary and is not attempting to buy their votes. In any of these cases, it is against the regime's interest to allow local officials to divert resources to handouts or their own rents and will instead prefer that these officials translate funds into more easily-monitored local public goods

H2: Provision of local public goods will be higher/diversion of resources will be lower in non-coethnic constituencies where the incumbent party loses

In contrast, it is more likely the regime is providing handouts in non-coethnic constituencies where they win. Something is winning these voters to the regime, but it won't be the types of local public goods that are typically expected to go to the ethnic core. Therefore, I hypothesize that voters in non-coethnic areas are won with private handouts, the money for which is diverted from funds ostensibly for the provision of local public goods.

H3: Provision of local public goods will be lower/diversion of resources will be higher in non-coethnic constituencies where the incumbent party wins

---

thus may be able to extract more in compensation than officials who are not working as brokers.

1.1 Distinction from other theories

The predictions of the theory contrast with the predictions of other common theories of distribution. Existing theories that leaders favor their coethnics (Posner, 2005; Carlson, 2015; Ejdemyr, Kramon and Robinson, 2016) would not predict that leaders will also provide more local public goods in non-coethnic opposition areas. Theories that suggest leaders provide local public goods to entice voters to the regime (e.g. (Weghorst and Lindberg, 2013)) would not predict that local public goods are more likely to be provided to ethnic core voters and those who vote against the regime.

However, the theory is consistent with other existing findings. There is strong empirical evidence that local public goods are better in African leaders' ethnic cores (Franck and Rainer, 2012; Burgess et al., 2015). There is also existing evidence that opposition voters are better off than regime supporters (Masaki, 2015; Andre and Mesple-Somps, 2011; Banful, 2011). Specifically in Uganda, there is evidence that the government exerts particular pressure on local governments in opposition areas to spend money as allocated (Buntaine, Nielson and Skaggs, 2017; Lambright, 2014), and that improving monitoring of local government officials only improves service delivery in opposition areas (Raffler, 2017).

1.2 Ugandan case

The scope conditions of the model apply in Uganda. First, vote-buying is common – 80% of Ugandan Afrobarometer respondents report that candidates offer "election incentives" – but there is no money officially allocated for this purpose. On the other hand, officially allocated funds often fail to translate into actual goods and services. Reinikka and Svensson (2004) audit school budgets in Uganda, and show leakage rates of up to 87%, while McPake et al. (1999) show leakage of up to 90% of funds allocated to purchase of medical drugs. Over the past decade, Ugandan media has determined that over one hundred hospitals, which had been receiving operating funds from the Ministry of Health, simply did not exist (Habati, 2010). They have also uncovered billions of dollars being allocated to ghost schools, teachers and pupils (Bichachi, 2012) and millions allocated to ghost soldiers (Allio, 2001) and ghost refugees (Parker, 2018). Official expenditures on goods and services that are never provided is so common there is a term for it: "air supply" (Eke, 2018; Bichachi, 2012). It is therefore reasonable to begin from the assumption that at least some money is being diverted from local public goods to handouts.

As in the model, money allocated to local public goods is devolved to local agents: the sub-county government, led by an elected chair and an appointed bureaucrat (the subcounty chief), is responsible for

monitoring and administrating, respectively, almost all local public goods.[4] The sub-county receives large transfers for operating government schools and clinics; constructing roads, wells and other infrastructure; providing dispute resolution; and running agricultural extension and other development programs. Much of the funding allocated to local governments by the center was initially provided by the World Bank, and the Bank monitors its disbursement. Audits reveal that funds roughly matching budgeted amounts are, in fact, deposited in lower government accounts (Muwanga, 2016). Nevertheless, the Bank confirms that resources devolved to local governments for local public goods are often diverted to clientelism instead (Hieder, 2014).[5]

Finally, the center has multiple mechanisms by which it can control how much sub-county officials, whether appointed or elected, divert. The sub-county chief reports to the district chief, who is directly appointed by the central government. Sub-county officials are monitored by Resident District Commissioners (RDCs), who sit on local government committees and report directly to the president. Officially, RDCs monitor security and oversee the provision of public goods and services. Unofficially, are there to keep the regime in power (Green, 2010; Manyak and Katono, 2010). At the most extreme, the president can, with the support of 2/3 of parliament, directly take over a local government. All of this suggests that the behavior of local governments, including the diversion of funds, will broadly reflect the demands of the central government: accordingly, Raffler (2017) shows that sub-county chairs expect to face sanctions from the center if they object to the extent of diversion.

2 Measuring Diversion

The data I use here are kept by the Ugandan Ministry of Finance, with support and oversight from the World Bank, and provide a record of every budgeted local public goods project in the country in the 2012-13 fiscal year. Each project's line-item includes the source of funds, the location and purpose for which the money was budgeted, the total amount budgeted, the total amount spent, and information on the status of the project. The location, purpose, budget and funding source are entered following a collaborative budgeting process between central and local officials, while data on expenditures and project status are entered by the local bureaucrats responsible for implementing the project.

---

[4]Sub-counties also have elected councils, with one representative for each parish in the sub-county as well as special representatives representing women, youth, and other groups. However, the chair and chief are generally treated in the literature as the lead actors in the sub-county (Raffler, 2017; Martin and Raffler, 2018; Habyarimana, Khemani and Scot, 2018).

[5]Access to sub-county accounts is granted to the chief bureaucrat. Diversion will not occur without the awareness and cooperation of the chief, but there is disagreement about the extent to which elected chairs are also involved. Raffler (2017) argues that bureaucrats often divert without chairs' knowledge. However, Martin and Raffler (2018) find that most Ugandans think elected chairs have more control over local public goods than bureaucrats do, and Habyarimana, Khemani and Scot (2018) show that local public goods provision is correlated with the integrity of local politicians, not with the integrity of bureaucrats. Most likely, both actors have some control over expenditures, and both are monitored by the regime.

These data are similar to data used to study distribution in a number of countries (Bohlken, 2016; Harris and Posner, 2016; Vaishnav and Sircar, 2012). The question is whether they can be used to differentiate between expenditure and diversion. Existing studies typically assume that reporting irregularities, like missing or duplicate records, are signals of diversion (Oliva, 2015; Cho and Gaines, 2007). Though in many cases this may be true, it is not the only theoretically plausible relationship between diversion and poor record-keeping. If the regime uses official reports to flag illicit diversion, local leaders who are not allowed to divert may indeed be under particular pressure to signal this with careful records, while leaders who will not be sanctioned for diversion may not bother to pretend they have spent money. On the other hand, since the data are accessible to the World Bank, the regime might frown on obvious irregularities that would raise concerns at the Bank; in this case both diverting and non-diverting leaders would report reasonable-looking expenditure on local public goods and diversion will not be easily detectable. A final possibility is that leaders who have not diverted, and spent the money as intended, may be those who put the least effort into reporting, because they know that if their poor record-keeping were to trigger an audit, auditors would find everything in order.

Which local officials have an incentive to produce careful (or careful-looking) records will be difficult to predict theoretically, as expenditure and diversion are monitored and punished by multiple domestic agencies as well the Bank, and there is some disagreement across and within agencies about who has access to the data and how they are using it.[6] Therefore, whether there are patterns in these data that are correlated with diversion is something I test empirically.

2.1 Verifying expenditure

To determine whether (and how) the characteristics of the line-item can be used to identify whether money was diverted or used to provide public goods, I audited budget line-items for small, discrete local public goods projects in the 2012-2013 FY budgets against leaders' records in May and June of 2015. The sample for the study was twelve sub-counties nested in three Ugandan districts. The chosen districts are all relatively populous, with an urban center and peri-urban and rural sub-counties. The districts were chosen to represent the three theoretically relevant groups of voters. District A[7] is located in the incumbent presidents' ethnic

---

[6]The Ministry of Local Government regulates and monitors local finances along with the Office of the Auditor General. Unauthorized diversion may be investigated or sanctioned by the Inspectorate of Government or the Prosecutor General. I was first told about the data from a member of staff at the Auditor General's office, but was later told by a more senior staff member that the AG does not keep a copy of the data. Similarly, though information from these records is public and ostensibly released online, access to the data is tightly controlled and officially requires written approval from the Minister of Finance and/or the World Bank.

[7]I anonymize the districts because otherwise the officials would be identifiable and my goal is to describe the correlates of diversion, not to identify officials who are violating the law.

stronghold; District B votes for the opposition; and District C is a non-coethnic district that historically votes for the incumbent.[8]

From the budgets of each of these districts, I dropped line-items that provided general operating funds for schools and other local services, as well as projects that provided training or other intangibles. I also dropped any projects for which the location or purpose was "not specified", or for which the officially budgeted amount was zero. The included projects are small, discrete goods such as boreholes, latrines, or school outbuildings. I selected these types of goods for several reasons. First, they can be completed quickly, on a variety of terrains, by a relatively large number of firms using available equipment and supplies. Non-expenditure on these types of small projects can be less plausibly attributed to logistical delays than it could be for larger projects like highways, electrification or sewage systems. It is reasonable to attribute a lack of expenditure within two years to intentional diversion, and to expect that, in the absence of diversion, completion rates would be similar across constituencies. Finally, because these projects are simpler, records for these types of projects are substantially more straightforward and expenditure easier to verify.

Two research assistants visited the headquarters of each sub-county, and gathered information about all projects completed in the sub-county between 2011 and the time of the enumerator's visit in 2015. Almost all interviewed officials brought out their record books for the time in question. To avoid strategic misreporting, we did not tell the leaders that we would be matching projects against budgets or even that we had access to central financial records. However, we did prompt the officials to check for certain projects if these were mentioned in the central financial records but not mentioned by the official (e.g. "Have you recently constructed any latrines?"). The research assistants then asked to photograph the appropriate entries from accounting books and any invoices for labor and materials that were necessary for the projects.[9]

I then hand-matched the projects to line-items from the 2012-2013 budget using a conservative approach: I coded projects as verified only where the stated project and location reported by the chairman matched the central records exactly and receipts provided credible evidence of expenditure.[10] The resulting variable is a simple dummy measure indicating there was evidence that money was spent on the intended project.

---

[8]Selection for this portion of the study was not random. Instead, I prioritized districts with many projects, so there would be enough projects to audit, and selected a variety from within these districts. I cannot claim that the selected sub-counties are necessarily representative of their types, but together they provide evidence that the correlates of diversion I find in the data are not limited to a particular type of district.

[9]It is possible that local officials who fabricate their reports to the Ministry of Finance also maintain falsified account books and receipts. There are a few reasons that I don't think this possibility is disqualifying. First, the receipts were credible: there was variation in handwriting and a sufficient number of corrected errors to look like real accounting over time. Second, fabricating complete records is far more time-consuming than fabricating a single line on a form. Third, even if these receipts were entirely fabricated, we still need to explain why some leaders would go to so much trouble to *look* like they were spending money, while others wouldn't.

[10]I used a conservative approach to avoid systematically overestimating completion rates among leaders who reported any local project they could remember (or invent), regardless of whether it was in the correct location or time-frame.

Leaders of two sub-counties in the sample, both from District C, refused to cooperate with the research team. In the analysis below, I code projects in these two sub-counties as missing data. In the judgment of the research assistants who interacted with these leaders, however, both leaders refused because they did not want any outside investigation into extensive diversion of funds. The below analyses are almost identical if all projects in these sub-counties are coded as incomplete.

2.2 Correlates of project completion

The results of the audits indicate that diversion is the norm for all constituencies: few line-items, regardless of their characteristics, could be matched to a credibly complete project. I was able to confirm the completion of only 16 projects out of 96, or 17% of the budget line-items.[11]

Tables 1 and 2 provide the same data two ways. Table 1 gives the likelihood a line-item will have certain characteristics, conditional on whether the project is complete or incomplete. Table 2 gives the rate of project completion among line-items with certain characteristics.

Tables 1 and 2 here.

The primary correlate of eventual project completion is the inclusion of a status report by the end of the fiscal year. Table 1 shows that status reports are the aspect of the line-item least likely to be fabricated by leaders who did not complete the project, and the most likely to be reported diligently by those who did: two-thirds of line-items representing completed projects included a status report, while only a third of line-items of incomplete projects did. Altogether, projects with a status report were more than three times as likely to be complete as projects without one. The correlation between project completion and the inclusion of a status report is significant at standard levels using a t-test. It is also significant using a logit model that includes random effects at the sub-county and district levels, which account for the non-independence of data within the same administrative unit and control for unmeasured local confounders.

I interpret these results to mean that expenditures are easy to fabricate, and the regime wants to be able to produce some official record of expenditure for donors' benefit, so officials report more-or-less plausible expenditures whether or not they actually produced local public goods. Status reports are optional and require more effort to fabricate than expenditures, so leaders who are not expected to spend money on local

---

[11]In several sub-counties, leaders only had records that several boreholes or rainwater tanks had been provided in the sub-county, without an indication of where, exactly, they were placed. Had we been able to match these boreholes to their specific line-items, completion rates might have been 5-7 percentage points higher.

public goods and who have not done so, will not exert effort to invent one. Leaders who are expected to provide local public goods, on the other hand, will find it easier to report on progress they have actually made, and have an incentive to fill out the status report, since this will credibly distinguish them from leaders who have diverted. There is some further evidence in the data that the presence of a status report is correlated with honest accounting of real expenditure. Line items that record zero expenditure, but include a status report – in other words, line-items in which the local leader admits to spending nothing during the fiscal year and explains the reason for the delay – have a 47% completion rate, almost three times the rate of completion in the sample as a whole.[12]

The measure is noisy, but since completion rates are significantly correlated with status reports, we can infer that the conditions under which more items have status reports are the same conditions under which provision is greatest and diversion is lowest. The audits show that the total number of confirmed completed projects in a sub-county is consistently 20-30% of the number of projects with status reports.

3   Identifying the Correlates of Diversion

The results of the audits provide initial data consistent with the hypotheses that diversion should be greatest in non-coethnic but loyal districts, and lower in both ethnic core and non-coethnic opposition areas. Though completion rates were low in all districts, they were highest in District B (24%), which is the opposition's stronghold. District A, which is in the incumbent's ethnic stronghold, had an intermediate level of completion (15%). District C, the non-coethnic district that nevertheless goes for the incumbent, had an apparent completion rate of 0%. This suggests that leaders in District C are diverting more money from local public goods, as part of delivering votes to the regime.

In this section, I increase the sample to include the financial records of 304 sub-counties in a random sample of 39 districts for the 2012-2013 fiscal year, and take the presence of a status report as a proxy for more likely provision of local public goods.[13] None of the districts I audited are included in the larger sample, but I include the same types of discrete local public goods projects. For this part of the analysis all included projects are funded by transfers from the government.

---

[12]This helps explain why reported expenditure in year one is actually lower among projects that were completed by year two: leaders who are conscientiously working toward completion of the project are also more conscientious about reporting obstacles. Leaders who are diverting money, and know they will not ever complete the project, simply fabricate an expenditure the first year.

[13]I take a sample because using the full dataset was impractical: each district's data was in a separate file that had to be merged both to other districts' data and to the political variables, in some cases with hand-matching. The sample also does not include any districts from Karamoja, in the northeast, as these records are kept in a separate database entirely. A map of the sampled districts is shown in Appendix A.

Altogether, there are 1543 applicable projects in these data. The number of applicable projects in each district varies widely from 1 in Busia District to 91 in Sironko. The largest share of projects in the data (53%) were infrastructure related to water and sanitation, followed by construction of classrooms or outbuildings at government schools (20%); road maintenance (10%); and purchase of supplies for government offices and facilities (10%). Slightly more than half of projects (57%) had positive reported expenditure and 6% had a status report.

Table 3 identifies the correlates of local public goods provision, as proxied by the presence of a status report. Per the hypotheses, I separate out constituencies in the regime's ethnic core.[14] I code coethnic constituencies as those within the boundaries of Ankole kingdom, which is one of several traditional ethnic kingdoms in Uganda, and the one to which the incumbent president belongs; most voters within Ankole will share the ethnic identity of the president. The remainder of constituencies are classified as non-coethnic. Within non-coethnic constituencies, and in accordance with hypotheses 2 and 3, I use a dummy that indicates whether the constituency voted against the regime in 2011.

In combination, the ethnicity and partisanship variables divide the sample into three mutually-exclusive categories.[15] First are coethnic constituencies, all of which elected an NRM MP: neither brokers or handouts are necessary for the regime to win over these constituencies. The second category includes non-coethnic constituencies that elect an NRM MP: handouts are necessary in these areas and were likely provided to produce a victory for the regime. Third are non-coethnic constituencies that voted against the regime: regime brokers in these areas are either absent or ineffective, and therefore less likely to be allowed to divert funds.

The type of goods I include in the data should be less affected by differences in logistical constraints or local government capacity, but I nevertheless control for local conditions that might make expenditure, project completion or record-keeping more difficult. A large number of new administrative districts in Uganda were created in or after 2010. District creation, which mandates new services and administrative posts, may or may not itself be a clientelist good (Green, 2010; Grossman and Lewis, 2014), but either way officials in new districts may be slower to move, because multiple services are coming online at once or because new roles are filled by inexperienced leaders or leaders who must cooperate in new ways (Turley et al., 2016; Baldwin,

---

[14]I use ethnicity, rather than vote margin, to proxy for regime strongholds because large vote margins in favor of the regime may be endogenous to the efforts of regime brokers. Strong support for the regime could be correlated with more or less active brokers, and more or less diversion, depending on whether the measure is picking up innate support or effective clientelism. For transparency, I show the results using vote margin as an indicator of latent competitiveness in Table 7 in the appendix: the results show that diversion is lower in less competitive districts, irrespective of which party is the winner.

[15]Table 6 in the appendix dummies out non-coethnic constituencies that support the regime. The table shows, as Table 3 does, that projects in these constituencies are significantly less likely to be complete than in either non-coethnic constituencies where the incumbent loses, or constituencies populated by the incumbent's coethnics.

2013). Larger or urban constituencies, with more people per administrator, may have similar difficulties.

I also control for political conditions that are not necessarily related to clientelism but which might be correlated with lower expenditure or poor record-keeping in districts outside the ethnic core. Voters outside the ethnic core are less likely to have an ethnic cue to guide their partisanship,[16] and may be less able to coordinate with their neighbors about what party to support, reducing electoral threat to the local incumbent and therefore his responsiveness to local demands. Therefore, in Models 2 and 3, I control for the share of votes won by the sub-county chair: lower values indicate more partisan splintering among the electorate.

Local leaders may also deliberately obstruct project completion if they believe credit for the project will accrue to leaders from another party (Williams, 2017). Outside the ethnic core, voters are more likely to have members of multiple parties within or across levels of government, so leaders in these districts may be less able to cooperate to produce local public goods. Models 2 and 3 include different measures of local divided government. In Model 2, I use a dummy that indicates that at least two parties (including independents) are represented across different levels of government. In Model 3, I control for the whether a majority of the sub-county council is of the same party as the sub-county chair.

Finally, I include random effects at the level of the sub-county and district, and region fixed effects.[17] The effects account for the non-independence of observations within the same political units, and absorb variation from unmeasured unit-level characteristics, including the competence of local governments, geographical constraints, or the preferences of the community over local public goods.

Table 3 here.

The results of all models are consistent with the hypotheses. Line-items for projects in the ethnic core are significantly more likely to have a status report, which implies they are more likely to represent real expenditure on local public goods. Similarly, projects in constituencies that support the opposition are significantly more likely to have a status report than non-coethnic constituencies that elected an MP from the ruling party. Overall, 15% of projects in opposition areas have a status report; 17% in constituencies within the president's ethnic homeland; and only 1% in areas outside the ethnic core that elected an MP from the ruling party.

---

[16]Museveni's primary challenger, Kizza Besigye, is from the same region of the country he is, and other ethnic parties – the DP and UPC – are small and represent only two of Uganda's over 80 ethnic groups.

[17]I use random effects at the lower levels because I have limited within-unit variation at the sub-county and district. I use fixed effects for region because there are too few region clusters for the model to accurately estimate cluster variables at this level.

This is consistent with the pattern found in the audit exercise, and with the theory that local officials tasked with delivering the votes of non-coethnics siphon off resources ostensibly intended for the provision of local public goods to fund the clientelist machine. Where handouts and brokers are not necessary, because coethnics will support the regime in return for local public goods, local actors spend more on public goods and divert less to handouts or their own rents. In opposition areas, where local agents either have not been successful in winning votes to the regime, or where the regime is not attempting to win votes at all, money allocated to local public goods is significantly more likely to be spent as budgeted.

3.1 Placebo test

To provide more evidence that the results are driven by political factors, rather than differences in capacity or local preferences, I conduct a placebo test. In addition to 1,543 projects in the data that are sponsored by the government, there are also 136 relevant projects sponsored by international donors. All donor projects are in non-coethnic areas. Donor-funded projects should not be affected by clientelist diversion: donors are not interested in helping the regime stay in power at the expense of project completion. If there are partisan patterns in completion of donor projects, therefore, we should be concerned that partisanship is picking up something other than clientelist diversion.

In Table 4, I run models similar to those in Table 3. In these models, I include the 136 donor-funded projects, and add a dummy for donor-sponsored projects. Then I add an interaction between whether the sub-county has an MP from the NRM and whether the project was sponsored by a donor.[18] There are no donor-funded projects in the regime's ethnic home territory, so I drop these districts and the coethnicity dummy. The controls and hierarchical effects are otherwise the same as those in Table 3.

Table 4 here.

The results show that, as above, districts that elect an MP from the ruling party have significantly fewer completed government projects than districts that voted against the regime. However, this effect does not hold among donor projects: the negative coefficient on the unconditional partisanship variable is almost completely counteracted by the interaction term. In expectation, donor projects in regime and opposition areas are equally likely to be completed: predicted probabilities indicate that 30% of donor projects in areas with an opposition MP can be expected to have status reports, while 33% of projects in areas with

---

[18]I use an interaction rather than running a separate regression to maintain my sample size and statistical power.

regime MPs will have the same. This is evidence that leaders of constituencies with and without regime MPs are equally capable of providing local public goods and keeping good records, and do so when using donor funds, but don't when the funding comes from the government. That constituencies loyal to the NRM are disproportionately failing to spend government funds, but not donor funds, supports the argument that officials in these constituencies are diverting with the government's blessing, in exchange for delivering votes to the regime.

4   Distribution of Local Public Goods

Systematic differences in the rate of diversion mean that the patterns evident in official allocations may not reflect actual patterns of local public goods provision on the ground. In Table 5, I analyze the official and actual allocation of the selected local public goods across sub-counties.

The dependent variable in Model 1 is the number of government-funded projects for which any money was officially budgeted, per 100,000 people. The dependent variable in Model 2 is the count of *only* projects that have a status report. I estimate the coefficients with a Poisson model: the counts have been normalized by population, but are still highly right skewed. In both models, the independent variables of interest are partisanship of the MP and ethnicity. I control for urban location and whether the sub-county is in a newly created district. As above, I include random effects at the level of the district and fixed effects at the level of the region. The location effects control for unmeasured variation in pre-existing need for the projects I include, as well as variations in local preferences over types of goods, and any geographic considerations that may make provision or completion more likely.

Table 5 here.

Model 1 shows that there are few political predictors of official allocation: neither constituencies in Ankole Kingdom nor constituencies that support the regime receive more goods per capita than other types of constituencies. Model 2 on the other hand, shows a much different pattern, which is consistent with earlier results. Coethnic constituencies have significantly more projects with status reports, as do constituencies that previously voted against the regime.[19]

Altogether, non-coethnic districts that support the regime have by far the lowest number of projects with

---

[19]Table 8 in the appendix shows that the results are robust when I code constituencies into categories rather than separately including ethnicity and party.

status reports: 0.07 projects per 10,000 on average, compared to 0.41 and 0.53 in coethnic and opposition constituencies respectively. Based on the ratio of status reports to confirmed projects on the audits, this translates to roughly 1.5 completed projects per 100,000 people in low diversion areas, and only 0.2 projects per 100,000 in non-coethnic districts that support the regime. In other words, in contravention of models in which voters are rewarded for their loyalty with local public goods, non-coethnic constituencies that vote against the regime have up to *eight times* as many completed projects as non-coethnic constituencies that vote for the regime. The difference across Models 1 and 2 indicate that systematic variations in diversion have the potential to change our conclusions about who is receiving what and what voters demand.

5   Conclusion

In this study, I audit local public goods projects included in official Ugandan budgets to determine whether and how the data can be used to capture diversion, and then use the data to determine where diversion is most likely. I show that diversion is greatest in non-coethnic districts that vote for incumbent. This finding is consistent with an argument that the regime is dependent on local brokers to capture the non-coethnic vote, and local officials acting as brokers siphon off public funds to spend on clientelism instead. The end result is somewhat surprising for the distributive politics literature: non-coethnic voters who vote for the regime receive fewer public goods than either core voters *or* those who support the opposition. The results contrast markedly with existing theory that African regimes win over hesitant voters by providing local public goods.

If this result carries to other African countries, it may provide a relatively parsimonious explanation for an array of puzzling findings. For example, evidence of better outcomes for coethnics is relatively easy to come by in many African countries, but evidence of improved outcomes for copartisan voters has proven more elusive. Indeed, a growing number of studies find, as I do, that outcomes, if not allocations, are better in opposition areas. The results may also explain why distributional decisions appear to vary by the good in question, if goods vary in their value to voters or to brokers, and why increased supervision of bureaucrats only reduces diversion of funds in opposition areas, where bureaucrats are actually tasked with providing local public goods.

References

Adida, Claire, Jessica Gottlieb, Eric Kramon and Gweneth McClendon. 2017. "Breaking the Clientelistic Voting Equilibrium: The Joint Importance of Salience and Coordination." AidData Working Paper 48.

Albertus, Michael. 2013. "Vote Buying With Multiple Distributive Goods." *Comparative Political Studies* 46(9):1082–1111.

Allio, Emmy. 2001. "Defence Paid sh300m to Ghosts." *Daily Monitor* .

Andre, Pierre and Sandrine Mesple-Somps. 2011. The Allocation of Public Goods and National Elections in Ghana. Mpra paper University Library of Munich, Germany.

Baland, Jean-Marie and James A. Robinson. 2008. "Land and Power: Theory and Evidence from Chile." *American Economic Review* 98(5):1737–65.

Baldwin, Kate. 2013. "Why Vote with the Chief? Political Connections and Public Goods Provision in Zambia." *American Journal of Political Science* 57(4):794–809.

Banful, Afua. 2011. "Old Problems in the New Solutions? Politically Motivated Allocation of Program Benefits and the "New" Fertilizer Subsidies." *World Development* 39(7):1166–1176.

Bichachi, Odoobo. 2012. "From ghost soldiers to ghost investors." *The Observer* . 4 May.

Bohlken, Anjali Thomas. 2016. "Targeting Ordinary Voters or Political Elites: Why Pork is Distributed Along Party Lines in India." Presented to the Toronto Political Behavior Workshop, November 2016.

Boone, Catherine. 2011. "Politically Allocated Land Rights and the Geography of Electoral Violence." *Comparative Political Studies* 44(10):1311–1342.

Buntaine, Mark, Daniel Nielson and Jacob Skaggs. 2017. "Escaping the Valley of Disengagement: Two Field Experiments on Motivating Citizens to Monitor Public Goods." Unpublished manuscript.

Burgess, Robin, Remi Jedwab, Edward Miguel, Ameet Morjaria and Gerard Padro i Miquel. 2015. "The Value of Democracy: Evidence from Road Building in Kenya." *American Economic Review* 105(6):1817–51.

Camp, Edwin. 2015. "Cultivating Effective Brokers: A Party Leader's Dilemma." *British Journal of Political Science* pp. 1–23.

18

Camp, Edwin and Mariela Szwarcberg. 2015. "Stealing for the Party: Brokers and Competitive Distribution in Argentina." Unpublished manuscript.

Carlson, Elizabeth. 2015. "Ethnic Voting and Accountability in Africa: A Choice Experiment in Uganda." *World Politics* 67(2):353–385.

Cho, Wendy K. Tam and Brian J. Gaines. 2007. "Breaking the (Benford) Law: Statistical Fraud Detection in Campaign Finance." *The American Statistician* 61(3):218–223.

de Kadt, Daniel and Horacio Larreguy. 2014. "Agents of the Regime? Traditional Leaders and Electoral Clientelism in South Africa." MIT Political Science Working Paper 2014-24.

de la O, Ana. 2015. How Corruption Breeds Clientelism. In *Mexico's Evolving Democracy: A Comparative Study of the 2012 Elections.* The Johns Hopkins University Press.

de Mesquita, B.B., A. Smith, J.D. Morrow and R.M. Siverson. 2005. *The Logic of Political Survival.* Political science: Economics MIT Press.

Ejdemyr, Simon, Eric Kramon and Amanda Lea Robinson. 2016. "Segregation, Ethnic Favoritism, and the Strategic Targeting of Local Public Goods." Unpublished manuscript.

Eke, A. 2018. *Kleptocracy: African Style.* Dorrance Publishing Company Incorporated.

Franck, Raphael and Ilia Rainer. 2012. "Does the Leader's Ethnicity Matter? Ethnic Favoritism, Education, and Health in Sub-Saharan Africa." *American Political Science Review* 106(2):294–325.

Frye, Timothy, Ora John Reuter and David Szakonyi. 2014. "Political Machines at Work Voter Mobilization and Electoral Subversion in the Workplace." *World Politics* 66(2):195–228.

Fujiwara, Thomas and Leonard Wantchekon. 2013. "Can Informed Public Deliberation Overcome Clientelism? Experimental Evidence from Benin." *American Economic Journal: Applied Economics* 5(4):241–55.

Green, Elliott. 2010. "Patronage, District Creation, and Reform in Uganda." *Studies in Comparative International Development* 45(1):83–103.

Grossman, Guy and Janet Lewis. 2014. "Administrative Unit Proliferation." *American Political Science Review* 108(1):196–217.

Habati, Mubatso Asinja. 2010. "The 100 Ghost Hospitals." *The Independent (Kampala)* .

Habyarimana, James, Stitu Khemani and Thiago Scot. 2018. "Political Selection and Bureaucratic Productivity." World Bank Policy Research Paper No. WPS 8673.

Hanusch, Marek, Philip Keefer and Razvan Vlaicu. 2016. "Vote Buying or Campaign Promises? Electoral Strategies When Party Credibility is Limited." IADB Working Paper Series No. IDB-WP-691.

Harris, J. Andrew and Daniel Posner. 2016. "(Under What Conditions) Do Politicians Reward their Supporters." Unpublished manuscript.

Hieder, Caroline. 2014. Project Performance Assessment Report: Second Local Government Development Project. Technical Report 87597 World Bank.

Ichino, Nahomi and Noah Nathan. 2013. "Crossing the Line: Local Ethnic Geography and Voting in Ghana." *American Political Science Review* 107(2):344–361.

Jablonski, Ryan, Audrey Sacks and Marco Larizza. 2014. "The Clientelism Tradeoff: How Discretionary Revenue Shapes Spending Choices." Unpublished manuscript.

Kasara, Kimuli. 2007. "Tax Me If You Can: Ethnic Geography, Democracy, and the Taxation of Agriculture in Africa." *American Political Science Review* 101(1):159–172.

Keefer, Philip and Stuti Khemani. 2009. "When Do Legislators Pass on Pork? The Role of Political Parties in Determining Legislator Effort." *The American Political Science Review* 103(1):99–112.

Koter, Dominika. 2013. "King Makers: Local Leaders and Ethnic Politics in Africa." *World Politics* 65(2):187–232.

Kramon, Eric. 2016. "Electoral Handouts as Information: Explaining Unmonitored Vote Buying." *World Politics* 68(3):454–498.

Lambright, Gina M. S. 2014. "Opposition Politics and Urban Service Delivery in Kampala, Uganda." *Development Policy Review* 32(S1):s39–s60.

Larreguy, Horacio. 2013. "Monitoring Political Brokers: Evidence from Clientelistic Networks in Mexico." Unpublished manuscript.

Manyak, Terrell and Isaac Wasswa Katono. 2010. "Decentralization and Conflict in Uganda: Governance Adrift." *African Studies Quarterly* 11(4).

Martin, Lucy and Pia Raffler. 2018. "Fault Lines: The Effects of Bureaucratic Power on Electoral Accountability.".

Masaki, Takaaki. 2015. "The Political Economy of Aid Allocation in Africa: Evidence from Zambia." AidData Working Paper 5.

McPake, Barbara, Delius Asiimwe, Francis Mwesigye, Mathias Ofumbi, Lisbeth Ortenblad, Pieter Streefland and Asaph Turinde. 1999. "Informal economic activities of public health workers in Uganda: implications for quality and accessibility of care." *Social Science & Medicine* 49(7):849 – 865.

Miguel, Edward and Farhan Zaidi. 2003. "Do Politicians Reward their Supporters? Regression Discontinuity Evidence from Ghana." Unpublished manuscript.

Muwanga, John F.S. 2016. Report of the Auditor General on the Financial Statements of Uganda in Support to Municipal Infrastructure Development (USMID) for the Fiscal Year Ended 30th June 2016. Technical report Office of the Auditor General.

Novaes, Lucas. 2015. "Disloyal Brokers and the Problem of Clientelistic Party Building." Unpublished manuscript.

Oliva, Paulina. 2015. "Environmental Regulations and Corruption: Automobile Emissions in Mexico City." *Journal of Political Economy* 123(3):686–724.

Parker, Ben. 2018. "Audit finds UN refugee agency critically mismanaged donor funds in Uganda." *The New Humanitarian* .

Posner, Daniel N. 2005. *Institutions and Ethnic Politics in Africa.* Political Economy of Institutions and Decisions Cambridge University Press.

Raffler, Pia. 2017. "Does Political Oversight of the Bureaucracy Increase Accountability? Field Experimental Evidence from an Electoral Autocracy.".

Reinikka, Ritva and Jakob Svensson. 2004. "Local Capture: Evidence from a Central Government Transfer Program in Uganda." *Quarterly Journal of Economics* 119(2).

Robinson, James A. and Thierry Verdier. 2013. "The Political Economy of Clientelism*." *The Scandinavian Journal of Economics* 115(2):260–291.

Rosas, Guillermo, Noel P Johnston and Kirk Hawkins. 2014. "Local public goods as vote-purchasing devices? Persuasion and mobilization in the choice of clientelist payments." *Journal of Theoretical Politics* 26(4):573–598.

Singer, Matthew. 2009. "Buying Voters with Dirty Money: The Relationship between Clientelism and Corruption." Presented to the American Political Science Association, Toronto.

Stokes, Susan C. 2005. "Perverse Accountability: A Formal Model of Machine Politics with Evidence from Argentina." *American Political Science Review* 99(3):315–325.

Trantidis, Aris and Vasiliki Tsagkroni. 2017. "Clientelism and corruption: Institutional adaptation of state capture strategies in view of resource scarcity in Greece." *The British Journal of Politics and International Relations* 19(2):263–281.

Turley, Ty, Maarten Voors, Erwin Bulte, Andreas Kontoleon and John A. List. 2016. "Chief for a Day: Elite Capture and Management Performance: Evidence from a Field Experiment in Sierra Leone." *Management Science* .

Vaishnav, Milan and Neelanjan Sircar. 2012. "Core or Swing? The Role of Electoral Context in Shaping Pork Barrel." Unpublished manuscript.

Wantchekon, Leonard. 2003. "Clientelism and Voting Behavior: Evidence from a Field Experiment in Benin." *World Politics* 55(3):399–422.

Weghorst, Keith R. and Staffan I. Lindberg. 2013. "What Drives the Swing Voter in Africa?" *American Journal of Political Science* 57(3):717–734.

Williams, Martin J. 2017. "The Political Economy of Unfinished Development Projects: Corruption, Clientelism, or Collective Choice?" *American Political Science Review* 111(4):705–723.

Zarazaga, Rodrigo. 2015. "Plugged in Brokers: A Model of Vote-Buying and Access to Resources." *Journal of Applied Econometrics* 18(2).

Table 1: Characteristics of line-item by project completion

Was project complete...	No	Yes
Any reported expenditure	70	50%
Non-round expenditure	45	50
Unique/non-duplicate expenditure†	43	50
Status report	36	69*

† Of line-items with non-zero expenditure * p< 0.05

Table 2: Completion rates by line-item characteristics

Does line-item display...	No	Yes
Any reported expenditure	26	13%
Non-round expenditure	12	14
Unique/non-duplicate expenditure	12	15
Status report	9	29*

† Of line-items with non-zero expenditure * p< 0.05

Table 3: Correlates of Records with Status Reports

	(1)	(2)	(3)
In incumbent's ethnic core	3.935**	8.210***	4.744***
	(1.198)	(1.514)	(1.307)
MP from ruling party	-3.828***	-4.417***	-4.027***
	(0.656)	(0.707)	(0.670)
Newly created district	-0.966$^+$	-1.217*	-1.206$^+$
	(0.584)	(0.596)	(0.619)
Urban	-2.974$^+$	-3.953$^+$	-3.780$^+$
	(1.715)	(2.044)	(2.057)
Sub-county population	-0.047$^+$	-0.031	-0.038
	(0.025)	(0.024)	(0.024)
Vote share of sub-county chair		2.840$^+$	2.692
		(1.534)	(1.640)
Party mismatch across levels of government		-0.870$^+$	
		(0.462)	
Party mismatch between chair and council			-0.210
			(0.392)
N	1540	1371	1371

Standard errors in parentheses

$^+$ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table presents the determinants of projects with included status reports. The model is a generalized logit with nesting at the sub-county, MP constituency, district and region level.

Table 4: Correlates of Records with Status Reports, Gov't and Donor Projects

	(1)	(2)	(3)
MP from ruling party	-4.831***	-2.638***	-2.307***
	(0.894)	(0.700)	(0.670)
New district	-1.458$^+$	0.631	0.587
	(0.885)	(0.586)	(0.604)
Urban	-2.267	1.101	1.295
	(2.925)	(2.691)	(2.193)
Sub-county population	-0.049$^+$	-0.014	-0.025
	(0.025)	(0.022)	(0.022)
Donor-funded project	1.279*	2.039***	2.157***
	(0.642)	(0.615)	(0.631)
Donor × ruling MP	4.390***	2.405*	2.474*
	(1.261)	(1.053)	(1.087)
Vote share of sub-county chair		1.317	1.355
		(1.623)	(1.723)
Party mismatch across levels of gov't		-0.856$^+$	
		(0.486)	
Party mismatch between chair and council			-0.295
			(0.378)
N	1534	1412	1412

Standard errors in parentheses

$^+$ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table presents the determinants of projects with included status reports, for donor-funded projects only. The model is a generalized logit with nesting at the sub-county, MP constituency, district and region level.

Table 5: Predictors of Allocated and Completed Projects

	(1)	(2)
In incumbent's ethnic core	-0.027	1.552*
	(0.232)	(0.711)
MP from ruling party	0.002	-1.487*
	(0.144)	(0.583)
Sub-county population	-0.030***	-0.042*
	(0.004)	(0.020)
New district	0.121	-2.141**
	(0.116)	(0.740)
Urban	-0.430*	-2.903
	(0.214)	(2.118)
N	353	353

Standard errors in parentheses

$^{+}$ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table presents the distribution of local public goods across sub-counties. The dependent variable in Model 1 is the number of discrete projects allocated to each sub-county in the 2012-2013 fiscal year. The DV in Model 2 is the count of projects *with a status report*. The coefficients are estimated with Poisson models.

A Sample map

Figure 2: Map of sampled districts

B Models using categorical independent variables

Table 6: Correlates of Records with Status Reports

	(1) record	(2) record	(3) record
Non-coethnic NRM constituency	-3.841***	-4.421***	-4.055***
	(0.642)	(0.699)	(0.661)
New district	-0.962	-1.184*	-1.142+
	(0.585)	(0.591)	(0.608)
Urban	-2.950+	-4.002+	-3.500+
	(1.704)	(2.055)	(1.862)
Sub-county population	-0.047+	-0.033	-0.042+
	(0.028)	(0.023)	(0.024)
Vote share of sub-county chair		2.764+	2.812+
		(1.520)	(1.629)
Party mismatch across levels of gov't		-0.858+	
		(0.451)	
Party mismatch between chair and council			-0.188
			(0.389)
N	1540	1371	1371

Standard errors in parentheses

$^+$ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table presents the determinants of projects with included status reports. The model is a generalized logit with nesting at the sub-county, MP constituency, district and region level.

Table 7: Correlates of Records with Status Reports

	(1)	(2)	(3)
Winner's vote margin	1.462*	1.411*	1.581*
	(0.659)	(0.628)	(0.630)
MP from ruling party	-4.535***	-5.020***	-4.772***
	(0.678)	(0.729)	(0.697)
Newly created district	-1.565*	-1.879**	-1.773**
	(0.626)	(0.610)	(0.609)
Urban	-5.434**	-6.066**	-5.819**
	(2.042)	(2.087)	(2.160)
Sub-county population	-0.065**	-0.057*	-0.062**
	(0.023)	(0.022)	(0.022)
Vote share of sub-county chair		3.042*	3.116*
		(1.412)	(1.421)
Party mismatch across levels of government		-0.588	
		(0.426)	
Party mismatch between chair and council			-0.090
			(0.327)
N	1563	1393	1393

Standard errors in parentheses

$^{+}$ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table presents the determinants of projects with included status reports. The model is a generalized logit with nesting at the sub-county, MP constituency, district and region level. The margin of victory is the difference between the winner's and second-place finishers' vote shares; higher values indicate less competitive constituencies. The measure does not differentiate constituencies won by the incumbent from constituencies won by the opposition.

Table 8: Predictors of Allocated and Completed Projects

	(1)	(2)
Non-coethnic NRM constituency	0.009	-1.418**
	(0.124)	(0.523)
Sub-county population	-0.030***	-0.041*
	(0.004)	(0.018)
New district	0.119	-2.069**
	(0.114)	(0.701)
Urban	-0.429*	-2.820
	(0.214)	(2.096)
N	353	353

Standard errors in parentheses

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table presents the distribution of local public goods across sub-counties. The dependent variable in Model 1 is the number of discrete projects allocated to each sub-county in the 2012-2013 fiscal year. The DV in Model 2 is the count of projects *with a status report*. The coefficients are estimated with Poisson models.