

# Public Transfers and Incumbent Voting: Experimental Evidence from the Philippines.\*

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*Work in progress.*

## Abstract

The paper evaluates if incumbents can profit from non-targeted public transfers that they had no control over. I exploit the random assignment of a Community Driven Development program to assess the effects of such interventions. Using data on the municipal level, I find participation in the public program increases the incumbent mayors re-election rates, but had no influence on incumbent vice-mayors or governors. Focusing on mechanisms, the study finds evidence that program effects did not work through political mobilising—neither more citizens ran for office nor turned out to vote. Exploiting village level heterogeneity, I observe the incumbent effect only in villages in which citizens collectively decided on a project *and* received funding. Villages that were mobilised to decide on a project but ultimately did not receive funding punished their village mayor. The paper yields important implications for the implementation of programmatic policies in context of developing democracies.

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# I Introduction

Can local incumbents profit from non-targeted public transfers that they had no control over? The notion of democratic theory that elections can create political accountability assumes that voters correctly link policy outcomes to politicians, evaluate their performance, and adjust their voting behaviour accordingly.<sup>1</sup> Because politicians want to retain office, this mechanism can discipline them by creating incentives to perform according to the preferences of their electorate. In this process, voters have to distinguish what part of policy outcomes can be attributed to the competence of politicians and which part has exogenous causes— i.e. they have to distinguish signal from noise in terms of what type of politician they are facing. In the context of developing democracies, it is common wisdom that politicians try to manipulate this process by targeting voters via *non-programmatic* transfers, providing money, goods or favors in exchange for electoral support.<sup>2</sup> It is less well explored to what extent local politicians can take advantage *programmatically* transfers that are often financed by international aid and implemented by the central government to gain an electoral advantage. This paper is focused on one type of programmatic policy, prominent in many developing democracies, Community Driven Development (CDD) programs. Given the magnitude of these types of programs<sup>3</sup> and the scarcity of empirical evidence, the concern that these programs could undermine electoral accountability has to be taken serious.

Beyond this main empirical puzzle, one question is whether incumbent mayor's gained more electoral support because they could mobilise citizens that previously abstained from the elections, or whether the funding of local public goods motivated opposition voters to switch. CDD programs not only distribute public goods to communities, but also have an institutional component. Theoretically, the programs are thought to increase participation in community level institutions. Therefore, one might expect a mobilisation of citizens and higher voter turnout. Another question is how citizens attribute responsibilities, i.e., do all levels of local government profit equally from the program? Since the policy is implemented at the municipality level, but funds are allocated at the village level (barangay), the question arises if the average effects of incumbent reelection on the municipality level might mask some substantial heterogeneity on the village level.

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<sup>1</sup>For a recent review of models of electoral accountability, see [Ashworth \(2012\)](#).

<sup>2</sup>See [Golden and Min \(2013\)](#) for a review. The article defines a distributive strategy as non-programmatic if the rules are not public and do not shape the distributions of the goods. This includes clientelistic exchanges directed to voters (vote buying) or party members (patronage), as well as fiscal legislative particularism (pork). For a distributive strategy to be programmatic, the rules have to be public and the rules must actually shape the distributions of the goods in question ([Stokes et al., 2013, 7](#)).

<sup>3</sup>Over the last decade, the World Bank alone has invested over \$85 billion on this type of programs worldwide ([Mansuri and Rao, 2013](#)).

The present article addresses these theoretical questions using a randomised control trial combined with detailed election data from 2013 describing hundreds of municipal election and thousands of barangay (village) elections in the Philippines. The research design allows me to distinguish the effect of the policy that was implemented in the whole municipality, from its distributional outcomes, because public goods (called sub-projects) were only distributed to a subset of villages in each municipality. The results indicate that voters credit the incumbent municipal mayor for the policy. I find no evidence that the effects occurred because of voter mobilization. Somewhat surprisingly, municipal vice-mayor do not profit from the policy. While there exists some qualitative evidence that all parties try to gain political capital from the program, the effects do not replicate for governors (usually considered local strongman). On the village level, re-election rates of village mayors within treatment municipalities are lower than in villages within control municipalities. It suggests that voter response to CDD's can not be explained by models of ordinary retrospective voting. Instead, the findings point to a more sophisticated inferential process where voters credit actual involvement and are not easily manipulated. Voters attribute responsibility for policies and their distributional outcomes to different levels of government.

This study contributes to scholarship on distributive politics and political accountability in three ways. First, the study has advantages over earlier studies in terms of causal identification and measurement. While previous work has relied on observational data to estimate the causal effect of CDD programs on electoral outcomes (Cruz and Schneider, 2017), the present study relies a randomized field experiment to identify the effect of the program. Further, measurements of the outcomes are vote shares, disaggregated for each electoral position, rather than binary indicators of re-election. Second, makes several theoretical contributions. The results suggest that voters engage in a more sophisticated inferential process when evaluating politicians than previous theoretical accounts suggested. The voting behaviour can not be explained by models of economic voting alone. Rather, it seems like voters reward some politicians for a pure policy and punish others for outcomes. Theoretically, the results are consistent with selections models under information asymmetries as well as psychological theories of reciprocity. Third, the article also suggests that non-targeted government transfers (that the incumbent had little control over) can lead to distortions of political accountability but only in the short run.

The paper proceeds as follows. Section 2 provides a theoretical review of community driven developments programs as a form of programmatic distribution, evaluates existing evidence and derive hypothesis. Section 3 will describe the local context in the Philippines with a special focus on local politics and may also illuminate scope conditions. It also provides the reader with the necessary background on the KAHALI-

CIDDS program. Section 4 describes the experimental design and data. The paper concludes with a discussion of the results and provides an overview of extensions.

## 2 Programmatic Distribution and Voting: Theory and Evidence

The literature on distributive politics finds mixed evidence of non-targeted government transfers on incumbent re-election. [Pop-Eleches and Pop-Eleches \(2012\)](#) study the effect of government vouchers on political preferences in Romania. They find that program beneficiaries were significantly more likely to vote for the incumbent governing coalition. These effects occurred both through higher political mobilization and through party-switching. A growing literature evaluates the effect of conditional cash transfers (CCTs)<sup>4</sup> on political preferences and voting behaviour. They find positive effects on voter turnout and incumbent re-election in Mexico ([De La O, 2013, 2015](#)), short term benefits for the presidential party candidate in Brazil ([Zucco, 2013](#)), and stated support for the central government in Uruguay ([Manacorda, Miguel and Vigorito, 2011](#)). [Labonne \(2013\)](#) also finds higher incumbent vote share in the Philippines, but only for a subset of competitive municipalities. [Galiani et al. \(2016\)](#) study a CCT program in Honduras and find that voter turnout and incumbent voting only increased when larger payments were made to voters. Contrary to this evidence, [Imai, King and Rivera \(2016\)](#) re-analyse the data from [De La O \(2015\)](#) and find no effects. Recently, [Blattman, Emeriau and Fiala \(2016\)](#) found evidence that a cash transfers to entrepreneurs increased income and enabled participants to vote freely and less likely to follow vote-buying. An earlier observational study evaluated the predecessor program (KC 1) and found a positive effect the electoral support for the incumbent municipal mayor ([Cruz and Schneider, 2017](#)). The authors point to a underserved credit claiming mechanism: even though mayors had no active part in funding and only a minor part in implementing the program, they publicly support the project, use social media to spread news, and use inauguration ceremonies to convey their involvement.

### 2.1 Theory

Theoretical accounts in the tradition of political accountability perceive of elections as a device for citizens to punish or reward politicians for past performance ([Key, 1966](#); [Barro, 1973](#); [Ferejohn, 1986](#)). Citizens use *retrospection* to inform their voting decision. In its most simplistic form, citizens utility may include pocketbook consideration (in-

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<sup>4</sup>CCT programs provide money to poor families conditional on some criteria (often investments in education or health).

dividual income, individual wellbeing) or sociotropic consideration (public wellbeing) (Fiorina, 1981; Kinder and Kiewiet, 1981; Kramer, 1983; Markus, 1988). CDD is a form of programmatic redistribution because it delivers public goods to villages based on clear and transparent rules (Stokes et al., 2013, 7). Assuming that citizens and communities profit from public goods provision, the theory predicts that voters will reward all incumbents, regardless of their position.

Hypothesis 1 *Treatment Municipalities will have a higher vote shares for incumbents.*

In later selection models, retrospection is barely a mean for voters to form expectations about future behavior of politicians. Past behavior is only instrumental because it can signal competence of the incumbent (Fearon, 1999). Voters evaluate potential outcomes under each candidate, calculate their own utility for each, and vote accordingly. While earlier accounts model governments transfer as bribes from politicians, Bracco et al. (2015) introduce the idea that public good provision can function as a signal of incumbent competence. The receipt of the program provides voters with a signal about the competence of the incumbent. However, in our case, the municipal mayor had little to no influence on the receipt of the project. Therefore, voters will only reward incumbents if they themselves –erroneously–interpret the program receipt as a signal of incumbent competence or if incumbents claim credit for the program.<sup>5</sup>

Hypothesis 2 *Treatment Municipalities will have a higher vote shares for incumbents if voters credit them for the public goods.*

Voters may also want to reward successful applications due to reciprocity norms towards local mayors (Finan and Schechter, 2012; Lawson and Greene, 2014). Voters might reciprocate because (1) they are forward looking and expect future payoffs from anticipating similar programs in their community in the future and therefore reward successful mayors (instrumental reciprocity). A critical assumption of this mechanism is that citizens are aware of the program and credit the incumbent for its implementation or infer that incumbent has favourable characteristics or qualities because the program got implemented. On the other hand, (2) voters may derive utility from rewarding mayors that helped their community, and from punishing mayors that were unsuccessful in their application (intrinsic reciprocity). However, only intrinsic reciprocity would explain that voters punish unsuccessful mayors given that voters do not anticipate that punishment would induce future higher payoffs due to increased effort by the mayor (Sobel, 2005). Alternatively, punishment may also occur under a signaling mechanism where rational forward-looking voters will update their beliefs about

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<sup>5</sup>The reader might note that hypothesis 1 works regardless of this information asymmetry because voters are not driven by any other signal than their own pocket.

the post-electoral pay-off because the punishment will increase the performance of candidates.

Hypothesis 3 *Villages that took part in the social preparation phase, but did not receive the grant will punish the incumbents.*

### 3 Context and Data

The following section briefly describes the local political system in the Philippines followed by a summary of the KALAHI-CIDDS program.

#### 3.1 Local Public Finance & Local Politics

Being a unitary presidential democracy with a multiparty system, the country is composed of provinces (81), subdivided into cities (145) and municipalities (1,489), which are further composed of barangays (42,036). Each municipality is governed by a mayor, a vice-mayor and eight municipal councillors elected in first-past-the-post elections. In response to the highly centralised transfer system under autocrat Ferdinand Marcos, the structure of the local government in the Philippines was decentralised by the Local Government Code (LGC) that was enacted in 1991.<sup>6</sup> The policy increased the autonomy of the municipal government by transferring responsibilities for health care (Atienza, 2004), a substantive number of civil servants (Llanto, 2012; Sidel, 1999), and other public enterprises (markets, bus terminals, slaughterhouses), and extension services (agricultural, veterinarian, irrigation) to local governments. In order to finance the new responsibilities, direct federal transfers<sup>7</sup> were introduced.<sup>8</sup> While they have no influence over the size of municipal budget, there is some evidence that especially governors and mayors have considerable leverage on the allocation of the budget (Hutchcroft, 2012; Esguerra, 2001).

Even though the Philippines are a democracy since 1987, political dynasties prevail and campaigns are organised around personalities, families, or "clans" and lack programmatic parties and policy platforms (Hutchcroft and Rocamora, 2003; Querubin, 2016). National and provincial elections (for president, vice-president, and senators) are held every six years and municipal and barangay elections every three years.<sup>9</sup> Local

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<sup>6</sup>See [Local-Government-Code \(1991\)](#).

<sup>7</sup>Internal Revenue Allotment (IRA)

<sup>8</sup>It is funded by a fixed percentage of national tax revenues from three years prior, transferred directly from the national government and constitute about 85% of municipal government revenue (Troland, 2014)

<sup>9</sup>Barangay elections are held roughly 7 months after the national and local elections. Throughout the text I use barangay, village and community interchangeable.

politics are dominated by strong political machines, where party affiliation can change but the personal stays the same.<sup>10</sup> Local politics also tend to be clientelistic (Schaffer, 2007; Capuno, 2012) and resources are often allocated according to political considerations (Fafchamps and Labonne, 2016). At the lowest level of the political hierarchy are *barangay kapitans*—village chiefs with no official party affiliations—, who are often used by municipal mayors as political brokers to distribute clientelistic goods and foster their electoral success (Cruz, Labonne and Querubin, 2017; Ravanilla, 2017). These clientelistic networks are embedded in social norms of reciprocity rooted in the Filipino concept of *utang na loob* which can be translated as "debt of inside" or "debt of gratitude". The social norm is based on mutual exchanges of payment and re-payment (of many forms) and is enforced via *Hiya*, often translated as shame, if one party does not repay its debt (Hollnsteiner, 1964).

### 3.2 The KALAHI-CIDSS (KC) Program

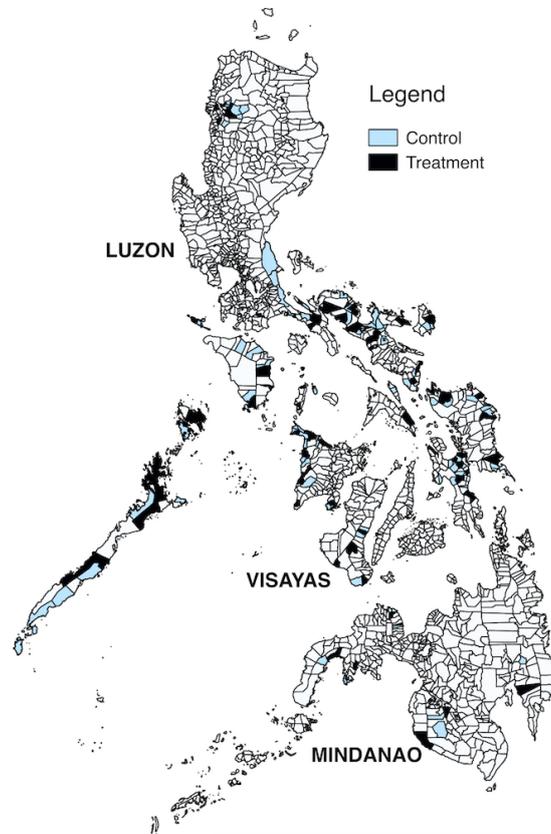
KALAHI-CIDSS (KC) is a community driven development program that delivers public goods to communities. It is implemented from the national government through its Department of Social Welfare and Development (DSWD). The first phase, known as KC1, took place from 2003-2009. In 2011, the central government of the Philippines received US\$120 million grant from the United States government's Millennium Challenge Corporation Compact and a loan of \$59 million by the World Bank (KC2).<sup>11</sup> Within each targeted province, municipalities with 70% or more poverty incidence automatically received the project while municipalities with less than 33% poverty incidence automatically did not receive the project. For a subsample 198 municipalities that had a poverty incidence between 33-69%, the program was randomly assigned to 99 treatment municipalities and not assigned to 99 control municipalities.

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<sup>10</sup>One manifestation can be observed during election campaigns where municipal mayors, vice-mayors, and councilors run as one "team" even though elections are held separately for each position.

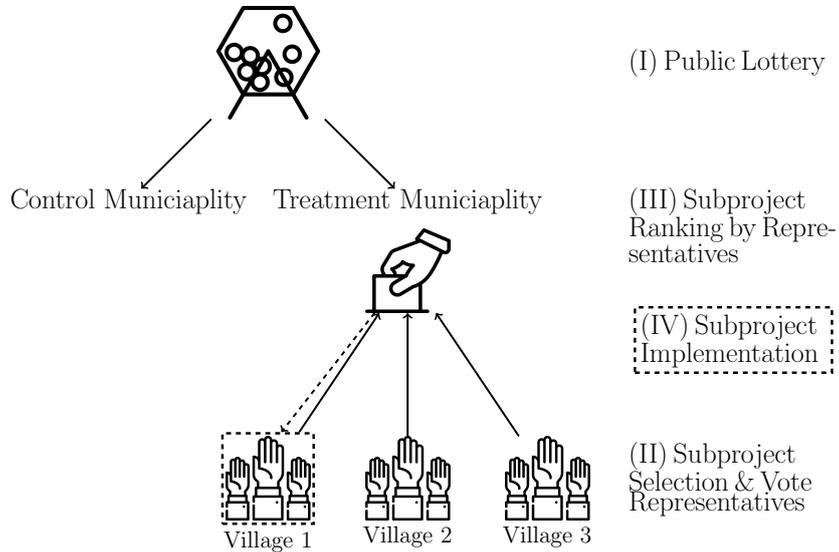
<sup>11</sup>Subsequently, the administration of president Aquino expanded the program from an agency program to a national government program.

Figure 1: 198 Municipalities included in KC2



Like many similar programs, KC2 had a (a) resource and an (b) institutional component. As of July 2015, the resource component financed public goods investments (called subprojects) reaching from social services (for example health, education, water), infrastructure (roads, bridges), facilities (community production, economic support, and common service facilities), to environmental protection and conservation (Beatty et al., 2015, 19). On average participating municipalities received PHP 450,000 (approximately USD 11,250) per village (Beatty et al., 2015, 11). Out of roughly 2,500 villages within the 99 treatment municipalities, about 500 villages started or finished a public goods project until the village elections in November 2013. Figure 5 in appendix A represents the subprojects in detail.

Figure 2: KC2 Implementation

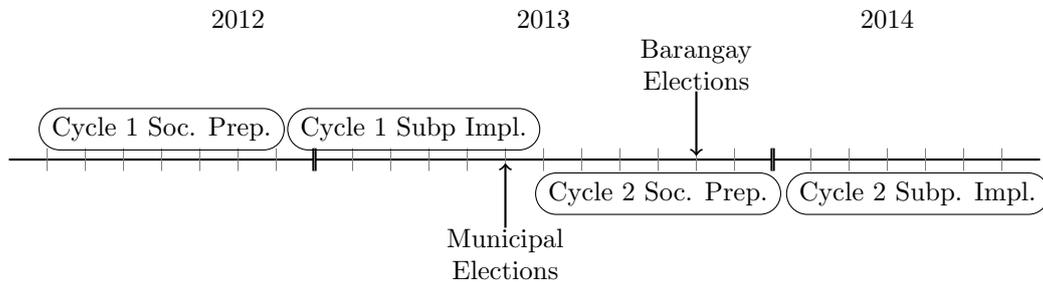


The implementation of KC2 consisted of four steps: (I) The random assignment of eligible municipalities was publicly decided at twelve lotteries conducted throughout the country from May 23rd to June 30th 2011 (Beatty et al., 2015).<sup>12</sup> (II) Communities participated in a series of meetings to identify and prioritize the problems and needs of the community. Community members were trained to design subproject proposals. Further, each village democratically elected three representatives to vote on their behalf. Municipal Inter-Barangay Forum set criteria for the selection of sub-projects. (III) Representatives from each barangays within a treatment municipality compete for funds by presenting proposals at the Municipal Inter-Barangay Forum. The role of the municipality mayor in selecting subprojects is limited to an advising status in the forum. Once a barangay has been prioritized for subproject investment, a community bank account was opened and funds from the project were directly transferred from the Philippine Government’s implementing agency (the Department of Social Welfare and Development; DSWD) accounts into the community account. It is also worth noting that communities are themselves involved in mobilizing resources as a local counterpart contributions including either in cash or in-kind that are pooled from various sources (Beatty et al., 2015).<sup>13</sup>

<sup>12</sup>Funding was only allocated if the municipality was located in a province in which guaranteed municipalities had not been allocated all of KC funding based on the 50% minus one rule, did not receive KC funding, and had a mayor or his/her representative present at the public lottery event.

<sup>13</sup>A minimum of 30% of the total project cost comprises local counterpart contributions from the community, local government units, congresspersons, non-governmental organizations, and other stakeholders

Figure 3: KC2 Timeline and Local Elections



### 3.2.1 The Role of Local Government

Before implementation, the municipal local government unit (LGU) and the DSWD sign a memorandum of agreement, the Administration of Panaad sa Pagsuporta (Manifesto of Support). Once a municipality was randomly selected, mayors are supposed to (a) mobilize their villages and (b) inspect projects. Survey evidence indicates that citizens ascribe influence in *subproject selection* foremost to barangay captains (79%), followed by other village officials (64%) and ordinary citizens (61%). Notably, only 23.9% of respondents named the municipal mayor, 10% named other officials (for example governor, contractor, congressperson) (ADB, 2012, 25). Communities are required to provide Local Counterpart Contribution (LCC) either in cash or in-kind that are pooled from various sources (province, municipality, barangay and community). The Sangguniang Bayan (Municipal Council) has to approve the budget for the counterpart contribution.

### 3.3 Data

At the municipality level, the main dependent variables are incumbent re-election and election turnout. Incumbent re-election measures whether the incumbent was reelected during local elections in 2013.<sup>14</sup> The data was provided by the Commission on Elections (COMELEC) and contains information on voter registration and turnout for the elections in 2010 and 2013. The data includes detailed information about the name of all candidates that ran for the office of mayor, vice-mayor, and governors as well as the votes obtained by each. We know who was elected, when, as well as their party affiliation. The dependent variable takes the value 1 if the newly elected mayor has the same last name and middle name as the incumbent mayor last name and the middle name, and 0 otherwise. At the village level, the dependent variables are incumbent mayor re-

<sup>14</sup>The Philippines were severely effected by typhoon Yolanda that devastated the country in November 2013. Elections were held in May 2013 at the municipality level and October 2013 at the village level. Thus, the elections were not influenced by the natural disaster.

election and the number of candidates per election. Since the village election in 2016 were postponed, I only include the 2013 election.

## 4 Experimental Design

The KALAH I program offers an ideal case to test the theory. While the allocation of funds is usually conducted on the basis of a poverty count calculated for each municipality, for a subset of 198 municipalities the program was assigned randomly. These municipalities constitute the sample for this study. The random assignment of eligible municipalities was publicly decided at twelve lotteries conducted throughout the country from May 23rd to June 30th 2011. Prior to each lottery, municipalities within each province were matched on four variables: *poverty incidence, population, land area, number of barangays*. This block randomization creates treatment and control groups that are balanced on blocked covariates. This is an advantage over earlier work that evaluated the electoral effects without an experimental manipulation (see [Cruz and Schneider \(2017\)](#)). Please see figure 6 in appendix A for the distribution across treatment and control groups.

### 4.1 Identification

KALAH I-CIDDS was mostly concerned with community institutions and not explicitly tailored to influence electoral outcomes. Thus, the treatment effects on secondary outcomes should be treated with some caution. I define the treatment  $T$  as the participation of the whole municipality in the social preparation phase (including subproject identification) and the receipt of a public goods program of a subset of villages within the municipality. To identify the causal effect of the treatment on incumbent vote share, I rely on matched pair design where 198 municipalities were first paired based on covariates (resulting in 99 pairs) and, secondly, assigned randomly into treatment and control groups through public lotteries. Using the potential outcome framework ([Splawa-Neyman, Dabrowska and Speed, 1990](#); [Rubin, 1974](#)), we can define  $Y_{i1}$  as the outcome under treatment,  $Y_{i0}$  as the outcome under control, and  $Y_{i1} - Y_{i0}$  as the individual treatment effect and write average treatment effect:

$$ATE = E[Y_i | T_i = 1] - E[Y_i | T_i = 0] \quad (1)$$

The definition of the ATE above assumes that all municipalities that were assigned to treatment actually received the treatment. However, the program was rolled out in 3 cycles spanning from 2012 to 2016. By the time of the elections in 2013, all municipalities took part in the social preparation phase, but only some received public goods. Therefore, I rely on intent-to-treat effect (ITT). Here, we distinguish assignment to treatment and actual treatment. If a municipality  $i$  was assigned to treatment we denote it by  $z_i = 1$

and by  $z_i = 0$  when assigned to control group. The actual treatment status is indicated by  $t_i(z)$  when treatment assignment is  $z$ . Using the notation, we define:

$$ITT_Y = E[Y_i(z = 1, t(z = 1)) - Y_i(z = 0, t(z = 0))] \quad (2)$$

## 4.2 Estimation

To estimate of the intent-to-treat effect for *incumbent re-election* I rely on local linear regression:

$$E(Y_i) = \beta_0 + TD_i + \beta_1 C_{1,i} + \beta_2 C_{2,i} + \dots + \beta_{99} C_{99,i} + e_i \quad (3)$$

$Y_i$  denotes the incumbent re-election in municipality  $i$ .  $D_i$  is an indicator that takes the value 1 if the municipality is eligible for the program and 0 if it is not. The treatment estimator is given by the parameter  $T$ .  $C_{1,i} \dots C_{99,i}$  denotes a set of dummy variables corresponding to each of the 99 treatment pairs and  $e_i$  denotes the error term. The ordinary least squares regression adjustment for binary outcomes is robust for randomized experiments as shown asymptotically by [Lin \(2013\)](#) and via simulation by [Humphreys, Sanchez de la Sierra and Van der Windt \(2013\)](#); [Judkins and Porter \(2016\)](#).<sup>15</sup> I include the set of dummy variables because I rely on a blocked randomised design and estimated standard errors should take the blocking into account.<sup>16</sup> If the probability of assignment to treatment is constant across blocks, the inclusion pair dummies into 3 will leave the treatment effect unchanged but produce more precise standard errors ([Bruhn and McKenzie, 2009](#)).

# 5 Results

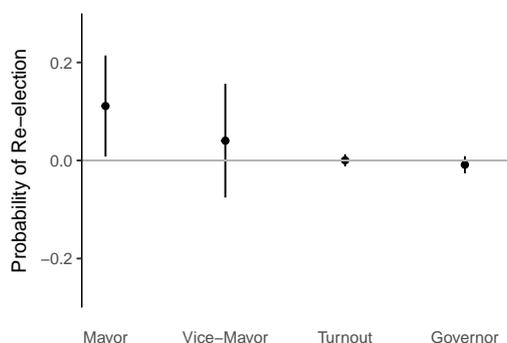
## 5.1 Municipal Elections

Table 4 shows that effects of the KAHALI program on incumbent re-election and voter-turnout. I find a statistically significant positive effect for the 2013 election. The magnitude of the estimated effect in is substantial.

<sup>15</sup>All main results are robust when estimating the parameters with logit link functions.

<sup>16</sup>If the the method of randomisation is ignored in the estimation, standard errors tend to be conservative ([Kernan et al., 1999](#); [Bruhn and McKenzie, 2009](#)).

Figure 4: Municipal Elections 2013



Beta coefficients from OLS regression with 90% confidence intervals. The independent variable is CDD program participation for municipality  $i$ . A series of dummy variables (99) for each treatment/control pair is included. Provincial governor vote shares are disaggregated by municipality.

As expected, the participation in the program increased the likelihood for incumbent re-election. While there exists some qualitative evidence that all parties try to gain political capital from the program<sup>17</sup>, the effects do not replicate for vice mayors or governors. The standard errors are sizable and no estimate is significantly different from 0 even at low levels of statistical significance ( $p < .10$ ). These findings suggest that voters credit mayors for the policy implementation, but not vice mayors or governors. This is not only corroborated by the uncertainty of the estimates, but also by these effect sizes. Further, I find no evidence that the results are driven by higher voter turnout. All point estimates are close to 0.

## 5.2 Village Elections

I now turn to the electoral effects on the village level. Table 1 present the results of the village elections. Since the randomization occurred on the municipal level, all standard errors are clustered at the municipal level. Somewhat surprisingly, I find negative effects of the CDD program on village mayor re-election. The participation in the program decreased the odds for incumbent re-election by a factor of 0.90. The effects are significant conventional security levels. Since KALAHI had an institutional component that was intended to foster grass-roots democracy, one might expect more citizens to apply for the position of barangay captain. This increased competition could have resulted in lower re-election rates. However, as we can see in the second row in table 1, the estimated effect of the program on the number of candidates is negative and indistinguishable from 0. All villages within treatment municipalities received the the

<sup>17</sup>See for example figure 7 in appendix A.

Table 1: Village Elections 2013

Election	2013
Barangay Kapitans	-0.028** (0.012)
Candidates	-0.019 (0.028)
Pair Dummies	✓
Num. obs.	4,842

\*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$

Beta coefficients from OLS regression. Standard errors in parentheses are clustered at the municipality (N=198). The independent variable is CDD program participation for village  $i$ . Pair dummies refer to a series (99) dummy variables for each treatment/control pair.

policy intervention, but not all villages had a subproject being implemented. If voters attribute responsibility for the policy to municipal mayors, but assign responsibility for the receipt of the subprojects to barangay mayors—as earlier research indicates—only voters in treatment municipalities that actually received subprojects will reward their barangay mayor. Voters in communities that applied for a subproject but did not receive it will punish the barangay captain. The average negative effect indicates that voters in non-receiving villages punished the barangay mayor more than those voters in receiving villages rewarded the mayor.

## 6 Discussion

The results indicate that voters credit the incumbent municipal mayor for the policy. The electoral returns only occur and are not driven by electoral returns. This suggests that non-targeted government transfers (that the incumbent had little control over) can lead to distortions of political accountability but only in the short run. Somewhat surprisingly, municipal vice-mayor do not profit from the policy. Voters seem to engage in a more sophisticated inferential process when evaluating politicians. The result can be explained by more effective credit claiming on the part of the mayor than of the vice-mayor. Re-election rates of village mayors within treatment municipalities are lower than in villages within control municipalities. It suggests that voter response to CDD's can not be explained ordinary retrospective economic voting. Voters attribute responsibility for policies and their distributional outcomes to different levels of government.

## References

- ADB. 2012. *The KALAHI-CIDSS Project in the Philippines, Sharing Knowledge on Community-Driven Development*. Mandaluyong City, Philippines: Asian Development Bank.
- Ashworth, Scott. 2012. "Electoral accountability: recent theoretical and empirical work." *Annual Review of Political Science* 15:183–201.
- Atienza, Maria Ela L. 2004. "The Politics of Health Devolution in the Philippines: Experiences of Municipalities in a Devolved Set-up." *Philippine Political Science Journal* 25(48):25–54.
- Barro, Robert J. 1973. "The control of politicians: an economic model." *Public choice* 14(1):19–42.
- Beatty, Amanda, Ariel BenYishay, Simona Demel, Edith Felix, Elizabeth King, Aniceto Orbeta and Menno Pradhan. 2015. *Impact Evaluation of the Kalahi-CIDSS: Interim Report*. Innovations for Poverty Action (IPA).
- Blattman, Christopher, Mathilde Emeriau and Nathan Fiala. 2016. "Do anti-poverty programs sway voters? Experimental evidence from Uganda." *Working Paper*.
- Bracco, Emanuele, Ben Lockwood, Francesco Porcelli and Michela Redoano. 2015. "Intergovernmental grants as signals and the alignment effect: Theory and evidence." *Journal of Public Economics* 123:78–91.
- Bruhn, Miriam and David McKenzie. 2009. "In pursuit of balance: Randomization in practice in development field experiments." *American economic journal: applied economics* 1(4):200–232.
- Capuno, Joseph J. 2012. "The PIPER forum on 20 years of fiscal decentralization: a synthesis." *Philippine Review of Economics* 49(1):191–202.
- Cruz, Cesi and Christina J Schneider. 2017. "Foreign Aid and Undeserved Credit Claiming." *American Journal of Political Science*.
- Cruz, Cesi, Julien Labonne and Pablo Querubin. 2017. "Politician Family Networks and Electoral Outcomes: Evidence from the Philippines." *American Economic Review*.
- De La O, Ana. 2013. "Do conditional cash transfers affect electoral behavior? Evidence from a randomized experiment in Mexico." *American Journal of Political Science* 57(1):1–14.

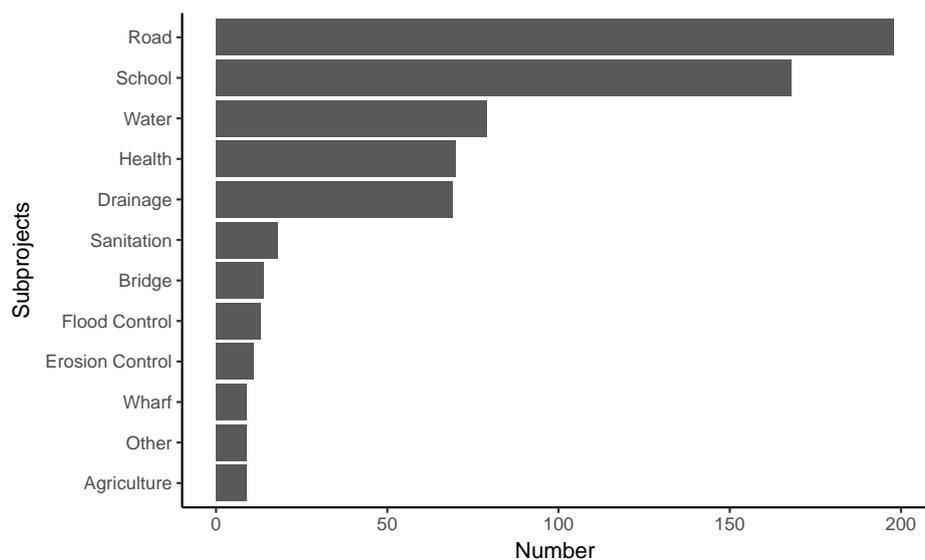
- De La O, Ana Lorena. 2015. *Crafting Policies to End Poverty in Latin America*. Cambridge University Press.
- Esguerra, Jude. 2001. "Budget dictators." *Barangay-Bayan* 1(1).
- Fafchamps, Marcel and Julien Labonne. 2016. Family Networks and Distributive Politics. Technical report CEPR Discussion Papers.
- Fearon, James D. 1999. "Electoral accountability and the control of politicians: selecting good types versus sanctioning poor performance." *Democracy, accountability, and representation* 55:61.
- Ferejohn, John. 1986. "Incumbent performance and electoral control." *Public choice* 50(1):5–25.
- Finan, Frederico and Laura Schechter. 2012. "Vote-buying and reciprocity." *Econometrica* 80(2):863–881.
- Fiorina, Morris P. 1981. "Retrospective voting in American national elections."
- Galiani, Sebastian, Nadya Hajj, Pablo Ibararan, Nandita Krishnaswamy and Patrick J McEwan. 2016. Electoral reciprocity in programmatic redistribution: Experimental Evidence. Technical report National Bureau of Economic Research.
- Golden, Miriam and Brian Min. 2013. "Distributive politics around the world." *Annual Review of Political Science* 16:73–99.
- Hollnsteiner, Mary Racelis. 1964. *The dynamics of power in a Philippine municipality*. Community Development Research Council, University of the Philippines.
- Humphreys, Macartan, Raul Sanchez de la Sierra and Peter Van der Windt. 2013. "Fishing, commitment, and communication: A proposal for comprehensive nonbinding research registration." *Political Analysis* 21(1):1–20.
- Hutchcroft, Paul D. 2012. "Re-slicing the pie of patronage: the politics of the internal revenue allotment in the Philippines." *The Philippine Review of Economics* 49(1):109–134.
- Hutchcroft, Paul D and Joel Rocamora. 2003. "Strong demands and weak institutions: The origins and evolution of the democratic deficit in the Philippines." *Journal of East Asian Studies* 3(2):259–292.
- Imai, Kosuke, Gary King and Carlos Velasco Rivera. 2016. Do Nonpartisan Programmatic Policies Have Partisan Electoral Effects? Evidence from Two Large Scale Randomized Experiments. Technical report Working Paper.

- Judkins, David R and Kristin E Porter. 2016. "Robustness of ordinary least squares in randomized clinical trials." *Statistics in medicine* 35(11):1763–1773.
- Kernan, Walter N, Catherine M Viscoli, Robert W Makuch, Lawrence M Brass and Ralph I Horwitz. 1999. "Stratified randomization for clinical trials." *Journal of clinical epidemiology* 52(1):19–26.
- Key, Valdimer Orlando. 1966. *The responsible electorate*. Belknap Press of Harvard University Press.
- Kinder, Donald R and D Roderick Kiewiet. 1981. "Sociotropic politics: the American case." *British Journal of Political Science* 11(2):129–161.
- Kramer, Gerald H. 1983. "The ecological fallacy revisited: Aggregate-versus individual-level findings on economics and elections, and sociotropic voting." *American political science review* 77(1):92–111.
- Labonne, Julien. 2013. "The local electoral impacts of conditional cash transfers: Evidence from a field experiment." *Journal of Development Economics* 104:73–88.
- Lawson, Chappell and Kenneth F Greene. 2014. "Making clientelism work: How norms of reciprocity increase voter compliance." *Comparative Politics* 47(1):61–85.
- Lin, Winston. 2013. "Agnostic notes on regression adjustments to experimental data: Reexamining Freedman's critique." *The Annals of Applied Statistics* 7(1):295–318.
- Llanto, Gilberto M. 2012. "The assignment of functions and intergovernmental fiscal relations in the Philippines 20 years after decentralization." *Philippine Review of Economics* 49(1):37–80.
- Local-Government-Code. 1991. "THE LOCAL GOVERNMENT CODE OF THE PHILIPPINES."
- Manacorda, Marco, Edward Miguel and Andrea Vigorito. 2011. "Government transfers and political support." *American Economic Journal: Applied Economics* 3(3):1–28.
- Mansuri, Ghazala and Vijayendra Rao. 2013. *Localizing Development: Does Participation Work?* World Bank Publications.
- Markus, Gregory B. 1988. "The impact of personal and national economic conditions on the presidential vote: A pooled cross-sectional analysis." *American Journal of Political Science* pp. 137–154.
- Pop-Eleches, Cristian and Grigore Pop-Eleches. 2012. "Targeted government spending and political preferences." *Quarterly Journal of Political Science* 7(3):285–320.

- Querubin, Pablo. 2016. "Family and Politics: Dynastic Persistence in the Philippines." *Quarterly Journal of Political Science* 11(2):151–181.
- Ravanilla, Nico. 2017. "Motives in pork distribution: Partisan bias or patronage." *Unpublished manuscript. Ann Arbor: University of Michigan* .
- Rubin, Donald B. 1974. "Estimating causal effects of treatments in randomized and nonrandomized studies." *Journal of educational Psychology* 66(5):688.
- Schaffer, Frederic Charles. 2007. *Elections for sale: the causes and consequences of vote buying*. Lynne Rienner Publishers Boulder, CO.
- Sidel, John Thayer. 1999. *Capital, coercion, and crime: Bossism in the Philippines*. Stanford University Press.
- Sobel, Joel. 2005. "Interdependent preferences and reciprocity." *Journal of economic literature* 43(2):392–436.
- Splawa-Neyman, Jerzy, DM Dabrowska and TP Speed. 1990. "On the application of probability theory to agricultural experiments. Essay on principles. Section 9." *Statistical Science* 5(4):465–472.
- Stokes, Susan C, Thad Dunning, Marcelo Nazareno and Valeria Brusco. 2013. *Brokers, voters, and clientelism: The puzzle of distributive politics*. Cambridge University Press.
- Troland, Erin. 2014. "Can Fiscal Transfers Increase Local Revenue Collection? Evidence From The Philippines." *Working Paper* .
- Zucco, Cesar. 2013. "When payouts pay off: Conditional cash transfers and voting behavior in Brazil 2002–10." *American Journal of Political Science* 57(4):810–822.

## A Appendix

Figure 5: Subprojects implemented in the 198 municipalities until November 2013



Source: Department of Social Welfare and Development, Republic of The Philippines

Note: Projects financed by Millennium Challenge Corporation (MCC) and Additional Financing (AF) from the World Bank.

Table 2: Summary Statistics: Municipality Level

Statistic	N	Mean	St. Dev.	Min	Max
treatment	198	0.500	0.501	0	1
Turnout 2010	198	0.791	0.064	0.412	0.956
Turnout 2013	198	0.773	0.053	0.492	0.877
Mayor Re-election 2013	198	0.672	0.471	0	1
Vice Mayor Re-election 2013	198	0.414	0.494	0	1
Governor Vote Share	187	0.557	0.306	0	1

Figure 6: Covariate Balance across Treatment and Control Groups

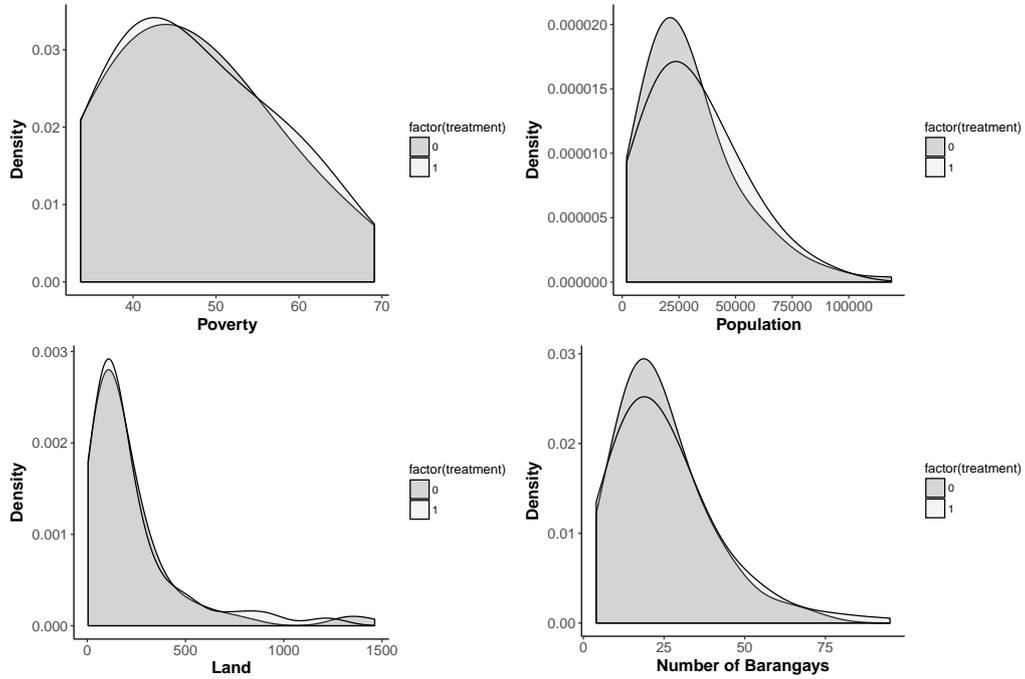


Figure 7: Example Ribbon Cutting



"Leyte governor Leopoldo Dominico "Mic" L. Petilla lead the ribbon cutting during the turn over of KALAHI CIDSS Water System project worth P637,233.00 in barangay Canha-ayon, Hindang Leyte a 14 Kilometers from the national road. With him are Mayor Edpidio Cabal Jr., and Barangay Captain Romeo Bongas. (Gina P. Gerez)." Source: Provincial Government of Leyte <http://www.leyteprovince.org/gallery.html>