Policy Deliberation and Voter Persuasion
Experimental Evidence from an Election in the Philippines*

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Abstract

In a randomized experiment in cooperation with two parties competing in the 2013 congressional election in the Philippines, we estimate the causal effect on voting behavior of a town-hall style campaign in which candidates debate with voters. Keeping the platform fixed, we find that this "deliberative" style has a positive effect on parties' voteshares compared to the status quo, in which voters play a passive role. Consistent with the parties' advocacy for underprivileged groups, we observe heterogeneous effects by income, education, and gender, and we show that the deliberative campaigns changed voters' attitudes on platform issues.

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1 Introduction

Normative proponents of a participatory approach to political decision making suggest that deliberation can lead to revelatory discussion and more legitimate collective choices (Gutmann and Thompson (1996); Habermas (1996); Macedo (2010); Rawls (1997)).

On purely instrumental grounds, deliberation may be an avenue through which individuals can reveal private information prior to collective decision making, helping voters coordinate their voting behavior (Austen-Smith and Feddersen (2006); Coughlan (2000); Meirowitz (2006)). In fact, laboratory experimental work has shown that policy choices can be more effective in eliciting information and encouraging cooperation when they are chosen through deliberative settings (Goeree and Yariv (2011); Dal Bó, Foster and Putterman (2010)).

In principle, if the benefits of the approach materialize in terms of legitimation and information transmission, then it might be in the interest of politicians to use deliberation as a strategy to persuade voters of the merits of a particular alternative. In addition, opening a debate could help both politician and voters uncover common interests through the revelation of private information.

Empirically, assessing the potential benefits of a deliberative campaign on a party's electoral prospects is challenging, as these could be confounded with other factors that might affect both the behaviors of politicians and the opinions of voters. Fundamentally, the effect that a political strategy might have on voting behavior is a function of the platform message, the communication strategy, the intrinsic traits of the politician, and the audience characteristics. Therefore, being able to disentangle what portion of the total effect in voting behavior is due to deliberation implies directly manipulating the communication strategy of the campaign, while keeping fixed any other relevant variable that might affect voting behavior. In this study, we implement such an experimental design by randomizing the assignment of the communication strategy of a political campaign to different voting areas, while keeping its platform content fixed.

The implementation of the experiment involved the cooperation of two national party-lists competing for representation in the most recent legislative election of May, 2013 in the Philippines. According to law, 20 percent of congressional seats are reserved for minority groups. To fill these seats, voters do not vote for candidates to represent their electoral districts, as in the first-past-the-post race that apportions the remainder 80 percent of Congress, but for "party-lists" in a closed-list (CL), proportional representation (PR) system. In other words, voters on Election Day cast two different votes, one for their candidate in their district and one for their preferred party-list at the national level.

Analyzing this particular party-list electoral race allows us to focus on a type of party that distinguishes itself programatically from the mainstream parties that compete in the general legislative, presidential and local mayoral elections, where corruption and vote buying have been widespread.[1] In particular, the two party-lists with which we collaborated claimed to represent and advocate for specific societal groups—namely women and the urban poor—emphasizing legislative policies favorable to these groups.

The treatment we implement manipulates the communication strategy for each party-list plat-

[1]For example, Hicken et al. (2014) provide experimental evidence from a mayoral election in the Philippines on the effect of anti-vote-selling strategies on the prevalence of vote-buying in this context.

form. First, we design a deliberative campaign in which the party-list message was communicated in town hall meetings, where voters and party representatives debated about the party-list platform and its potential implementation. The communication strategy in control villages was the "business-as-usual" campaign parties implemented elsewhere, according to which the same platforms were delivered through "one-way" communication technologies, such as the distribution of party propaganda and speeches in party rallies, with no audience participation or debate between representatives and voters.

In the control group, we explicitly did not introduce any restriction on the communication strategy of party-lists except that town hall meetings were not to be implemented.[2] By allowing parties to follow their natural strategy in control areas, we ensure that our results are not driven by an artificial condition imposed on politicians that could differ greatly from what they would usually implement.

Second, party-lists were randomly assigned to different areas and a treatment subset of these areas set up two or three town hall meetings with around 40 participants each. This random assignment allowed us to control for the effect that intrinsic party characteristics might have had on voting behavior. We do this by focusing only on the electoral prospects of a particular party-list in treatment versus control areas.

Our analysis is closely related to Fujiwara and Wantchekon (2013) and Wantchekon (2012), who provide experimental evidence, in the context of a presidential election in Benin, that programmatic platforms transmitted through a deliberative campaign reduce the perception of clientelism among voters and increase the electoral returns of the politicians who implement them.

Although these studies make an important contribution on the relevance of platform transparency and communication strategies, they are unable to isolate the effect of deliberation from that of the platform content itself. This is because, the platform content that politicians communicated to voters also changed by treatment status. Under deliberative campaigns, candidates and voters debated about a universalistic platform that emphasized the national benefits of policies, whereas under the "business-as-usual" campaign, candidates offered a mix of clientelistic goods (cash distribution, patronage, and discretionary spending), as well as universalistic policies.

By contrast, our experiment focuses on an electoral race where parties can only implement legislation in Congress and do not hold discretionary power to offer any type of particularistic spending. Thus, the legislative platform offered by parties' representatives remains fixed in both treatment and control areas, allowing us to measure the effect of deliberative campaigns while keeping the platform content fixed.

With a similar approach of using field experiments with the collaboration of political candidates, Casey, Glennester and Bidwell (2015) measure the impact of voters' exposure to candidates' debates on voting behavior, campaign spending, and politicians' performance in Sierra Leone. They find that exposure to debates results in a higher number of votes cast. Unlike our treatment that facilitates deliberation between parties' representatives and voters, they focus on the interaction between candidates from different parties and the subsequent exposure of these debates to voters.

[2] It is important to note here that deliberative campaigns, as the ones we designed for this experiment, were not part of the campaign strategy of any of the involved party-lists, either in past elections or prior to their agreement to cooperate with the experiment.

Given the above mentioned institutional setting, this paper uses the theoretical insights from the literature on deliberation (Fishkin (1997)), and on the effects of information on voting behavior (Austen-Smith and Feddersen (2006); Coughlan (2000); Meirowitz (2006)) to generate empirical results on the actual effects of deliberative campaigns on voting behavior. We posit that if town hall meetings have an impact on candidates' electoral returns, this impact functions through both the perceived effectiveness of the meeting on attendees and an indirect exposure on non-participants.

On the one hand, town hall meetings potentially allow attendees to learn about each other's preferences, beliefs, and expectations. With the information provided by both candidate and citizens during the meeting, a potential voter might update her prior beliefs about both the candidate's quality and also citizens' turnout and voting behaviors on Election Day. This revelation of information could help the treatment party-list if voters coordinate in their favor, which could happen in three ways. First, offering deliberation may distinguish the campaign strategy of treatment party-lists compared to their electoral competitors, which usually implement "one-way" communication strategies. Second, the dissemination of information in town hall meetings from both party representatives and citizens might facilitate a better understanding about the private benefits and externalities of programmatic policies. The information might also generate a better benchmark or focal point with which to evaluate candidates. Third, deliberation between candidates and voters could cause a change in attitudes and a higher degree of consensus towards those issues contained in the party's platform. This change in voters' opinions might translate into an increase in votes from those citizens whose most-preferred policy is closer to the party's platform.

On the other hand, the potential indirect exposure of town hall meetings works through its spillovers on those voters who did not attend the meetings. In this scenario, non-participants could become informed about the candidate's political platform and the posterior debate with voters by the more engaged attendees who are willing to share this information with members of their social network.

Our main results show that town hall meetings have a positive effect on both official and self-reported measures of electoral support for both treatment party-lists. While we do not find that deliberative campaigns drove voters to the polls as other campaign strategies, such as face-to-face voter mobilization, appear to do (Gerber and Green (2000); Green, Gerber and Nickerson (2003)), we do find that, conditioning on voting, party-lists doubled their official vote shares when town hall meetings were implemented.

When we analyze potential heterogeneity on the effect of town hall meetings by treatment party-list and socio-demographic characteristics using a post election survey on households, we find that the effect of town hall meetings is only positive and significant for women when the party-list that is campaigning is the one running a feminist platform. Similarly, we find a positive and significant effect of town hall meetings only on the poor and the least educated when the party-list that is campaigning is the one running the pro-poor platform.

The conditional impact of town hall meetings by party-list platform is consistent with the differential attitudes of voters towards poverty and gender inequality in treatment *versus* control barangays (electoral units equivalent to U.S. wards). We find that voters exposed to the pro-poor platform increased their negative opinion on poverty, corruption, and inequality by 0.271 standard deviations units when the party-list implemented a deliberative campaign compared to

the control condition. Similarly, voters increased their disagreement with gender discrimination by 0.189 standard deviation units when they were exposed to the feminist platform under deliberation.

These results confirm that deliberative campaigns are indeed an effective way of delivering a political platform content and persuading a specific group of voters by providing information that clarifies the message of the candidates and the consequences of their proposed policies.

The rest of the paper is organized as follows. Section 2 provides a brief background on the Filipino political system and on the party-list electoral system in which our experiment is embedded. Section 3 explains in detail the experimental design. Section 4 gives an overview of the data used to evaluate the experiment. Sections 5 and 6 report the results of the experiment on voting behavior using official aggregate and individual-level data, respectively. Section 7 concludes the paper.

2 Background and Context from the Philippines

2.1 Historical Background

Since the reinstatement of electoral democracy in 1986, the Philippines' political system has been formally composed of a presidential executive and a bicameral legislative body. Within this body, the Senate is composed of 24 members elected every six years, whereas the House of Representatives is composed of 292 members elected every three years.

The Philippines is currently divided into 80 provinces, headed by provincial governors. The next sub-national level of government is the city/municipality, which is equivalent to a U.S. city or town, headed by an elected mayor. Finally, municipalities and cities are subdivided into electoral barangays, which are the equivalent of U.S. wards, and are headed by barangay captains. These electoral units, "barangays", are the focus of our experiment's design.

In broad terms, the Philippines' historical evolution has been characterized by a legacy of extractive economic institutions and a very unequal distribution of political power. Under Spanish colonialism, the crown implemented a similar set of economic strategies as it did in the American colonies, such as the *encomienda*.[3] However, it did not establish a centralized rule as it did in Latin America, instead, leaving political control of the Philippines islands mainly to the Church.

In the early 20th century, when the U.S. replaced Spain as the colonial power, most of the Church estates were expropriated and auctioned to the local elite. As a result, the main economic institutions came to be dominated by large landowning families who controlled extensive patron-client networks in their geographic regions of influence.

The introduction of local elections starting in 1902 by the US administration only replicated the informal economic influence of the landowning oligarchy into the political arena. Given the disenfranchisement of the illiterate, public office was immediately filled by the educated elite, who were in the most advantageous positions to win elections. The subsequent introduction of elections at higher levels of government (e.g., congressional and gubernatorial), simply expanded the influence of the landed oligarchy at the national level, consolidating a system of patronage-oriented parties.

[3]This social and economic system consisted in granting a Spaniard with a certain number of indigenous people. The indigenous people were forced to give tribute and labor services, while the Spaniard was charged with converting them to Christianity (Acemoglu and Robinson (2012)).

As a consequence of oligarchical power, in both periods of Philippine democracy (i.e., from independence in 1946 to the declaration of martial law in 1972, and from the fall of the Marcos dictatorship in 1986 until the present), political parties have been little more than shifting coalitions of dynastic politicians and their followers (Hutchcroft and Rocamora (2003)). For example, in the 2010 election, approximately 50 percent of elected politicians had a relative who had previously served in office.[4] In fact, during the period between 1946 and 2010, dynastic candidates in the Philippines have enjoyed an electoral advantage of around 16 percentage points over non-dynastic candidates (Querubin (2013)).

The elite persistence in the Filipino case has not only been associated with a deficit of democratic quality, but also with harmful consequences in economic growth and income distribution. Hedman and Sidel (2000) argue that political dynasties have prevented the legislation and implementation of fundamental economic reforms, as these constitutional modifications endanger their economic interests. Furthermore, the prevalence of the status quo has prevented the emergence and consolidation of political parties associated with broader constituencies and the perpetuation of rent-seeking behavior by the political elite with narrow economic interests.

2.2 Party List Electoral System

In 1987, after the restoration of electoral democracy in the Philippines and during the tenure of the new President Corazon Aquino, a commission was appointed to draft a new Constitution to replace the prevalent one during President Marcos's regime.

The new constitution achieved many things, including reapportioning congressional districts, reducing the term lengths for members of the House of Representatives, and introducing term limits for all elected officials. In addition, and with the intention of strengthening the party system and reducing the elite monopoly of political power, the 1987 Constitution mandated that 20 percent of the lower House must be composed of representatives of marginalized societal groups such as "labor, peasant, urban poor, indigenous cultural communities, women, youth, and other such sectors as may be provided by law, except the religious sector." (Article VI; Section 5.2). However, it was not until 1995 that the Party-List System Act became law, with the mandate that "the state shall promote proportional representation in the election of representatives to the House of Representatives through a party-list system...which will enable Filipino citizens belonging to the marginalized and underrepresented sectors... to become members of the House of Representatives" (Sec. 2).

Under this system, a voter can choose one party-list via closed list and each party that receives 2 percent of the party-list vote is entitled to one seat and an additional seat for every 2 percent thereafter, for a maximum of three seats per party-list. Therefore, every three years at each House of Representatives election, voters cast two votes, one for their district representative by plurality rule and one for a national party-list.

[4]Probably the most famous contemporaneous example of this selective club is Benigno Aquino III, president of the Philippines since 2010. Aquino is member of one of the wealthiest and most powerful dynasties in the country. His father was a former governor and senator, and the most prominent figure of the opposition against Ferdinand Marcos' regime until his assassination in 1983. His mother, Corazon Cojuangco, was the first democratically elected president after the fall of Marcos and the assassination of her husband, Benigno Aquino II.

3 Experimental Design

The campaign experiment we analyze here focuses on the party-list election that took place on May 13, 2013. In this election, 58 out of 289 congress seats were allocated for party-list representatives among more than 130 registered parties. Two party-lists collaborated in the campaign field experiment: Akbayan, Citizens' Action Party and Umalab Ka.

Akbayan is one of the most prominent party-lists nationwide and the more established of the two participants in the experiment. It has consistently won at least one seat since its foundation in 1998, and has been one of the five most successful party-lists, out of the more than 100 registered at the national level.

Founded as a left pluralist national party, Akbayan is a multi-sectoral party comprised of labor, peasants, urban poor, women, LGBT, and youth organizations. In the 2013 campaign, however, Akbayan's message focused heavily on women. This was because Akbayan wanted to capitalize on a recent high-profile legislative victory concerning reproductive rights, as well as its candidate for Senator, a well-known feminist activist.[5] In the May 2013 election, Akbayan was able to secure around 2.9 percent of the popular vote at the national level, which translated into two seats in the House of Representatives.

In contrast, Umalab Ka, although formally founded in 2003, did not participate in a party-list election until 2013. This party-list is composed mainly of urban poor organizations and informal sector workers (i.e., drivers, street vendors, and house servants). As a political organization, Umalab Ka has dealt in the past with issues such as the demolition of informal settlers dwellings, discussions with government agencies affecting the plight of the urban poor and other peripheral issues that directly affect the lives of informal laborers and other marginalized sectors in society. The primary legislative agenda of Umalab Ka includes the creation of a Magna Carta to protect workers in the informal sector.[6] In the 2013 election, Umalab Ka won around 0.16 percent of the national vote and therefore was not able to secure any representatives in Congress.

3.1 Sample Selection

The evaluation of the campaign experiment focuses on electoral returns, looking at both official aggregate data for each barangay and self-reported voting behavior at the individual level, with information on 39 barangays randomly selected from 13 cities/municipalities following a two-stage cluster sampling. As shown on the map in Figure 1, we randomly selected 7 out of 17 available cities/municipalities from the National Capital Region (NCR), which comprises mainly Manila City and its suburbs, and 6 cities/municipalities out of 90 available from the neighboring Calabarzon region. On average, there are 58 and 25 barangays per city/municipality in NCR and Calabarzon, respectively.[7] The randomly selected cities from both regions are shown in the upper panel of figure 2.

Second, for each city/municipality selected in its respective region (i.e., either NCR or Calabar-

[5]The platform and constitution of the Akbayan party-list can be found at `www.akbayan.org.ph`.

[6]The entire legislative agenda of the Umalab Ka party-list can be found at `www.facebook.com/notes/umalab-ka-partylist`.

[7]NCR accounts for 49.54 percent of the population of both regions, while Calabarzon accounts for 51.46 percent.

zon), we randomly chose three barangays and assign one of these to the treatment group and the remaining two to the control group. At this second stage, and to avoid the risk of contamination between treatment and control groups, we replaced a selected barangay and resampled another from the universe of barangays at each city/municipality whenever the distance between any two selected barangays was less than 1.5 kilometers. This procedure is repeated until no proximate barangays are selected.

Finally, we randomly assigned the selected cities to each of the two party-lists involved in the experiment. The first three columns of Tables 1 and 2 present the sample of selected barangays for each city/municipality and the treatment status for both Akbayan and Umalab Ka, respectively. The lower panel of Figure 2 shows, as an example, the three randomized barangays selected in the city of Baras, which was randomly assigned to Umalab Ka.

In advance of the implementation of town hall meetings, one representative from the Center for Popular Empowerment (CPE), the NGO in charge of implementing the field experiment, conducted a series of meetings with the party-list representatives to instruct them on the specifications of the protocol they had to follow at the treatment barangays. It is important to note that, from the initial random selection of cities/municipalities and barangays, the research team of CPE had to make some adjustments in the field due to logistic difficulties encountered while implementing the town hall meetings.

First, in the cities/municipalities of Marikina and Valenzuela, the town hall meeting organizers switched one of the originally selected control brangay for the treatment barangay.[8] The reason behind this decision was that the incumbent officials associated with another party-list ("Alay Buhay") were hostile to the CPE research team and blocked the implementation of town hall meetings in the originally selected treatment units. This issue made it impossible to organize and announce scheduled meetings on time at other randomized selected barangays. In these cases, both party-lists used their presence at the originally selected controls to organize the series of town hall meetings. Second, in the municipality of Luisiana, the original treatment barangay, San Roque, could not be reached by the party-list Umalab Ka given the difficulties posed by the local authorities to implement the meetings. Instead, meetings were held in the barangay San Diego/San Antonio, chosen by the party-list representatives themselves.

In the main body of the paper, to avoid any potential distortion of the experiment's evaluation due to this selection of barangays, we have excluded the cities/municipalities of Luisiana, Marikina and Valenzuela from the main results across cities. The results, including these cities, are left to the Appendix in Tables 12 and 13, for aggregate and self-reported voting behavior, respectively. These results show that the conclusions presented here remain unaltered when we include these cities in the analysis.

3.2 Treatment Barangays

For the barangays assigned to the treatment group, a team of one organizer from CPE along with party-list members (mainly nominees and leading officers) implemented two or three town hall

[8] In Marikina, town hall meetings were implemented in the originally control unit, Barangka, instead of the selected treatment barangay Concepcion Dos. In Valenzuela, town hall meetings were implemented in Punturin instead of the originally selected treatment barangay Isla.

meetings, each with around 40 participants, during the period between April 21 and May 9.[9] A staff of approximately four CPE representatives, along with party-list representatives, deployed teams a week in advance of the scheduled meetings to inform potential voters door-to-door and in public areas about the location, date, and time of the town hall meetings. On average, the town hall meetings lasted between 90–120 minutes, and were divided in three stages: Introduction (10–15 minutes); deliberation (70–95 minutes); and resolution and commitment (10 minutes).

At the introduction stage, the CPE representative gave a brief explanation of the purpose of the party-list electoral system. In general, the audience was informed of the value of electing a party-list representative as differentiated from a district representative, mainly in that its objective is to give political representation to marginalized societal sectors.

Second, the party-list representative gave an introductory speech containing its platform and programmatic statement, following as a guideline a homogenous statement previously designed by the party-list officials and transmitted to its nominees. Akbayan's representative explained the services that the party provides to its members and its legislative accomplishments. The party-list representative highlighted Akbayan's role in passing the Responsible Parenthood Law, explaining how the law would help marginalized women. At this stage, Umalab Ka representatives stated that, if elected, they would push for the creation of laws aimed at protecting the urban poor, such as legislation to address price stabilizations on basic commodities during natural disasters and laws to give job security to informal workers.

The deliberation stage usually consisted of several rounds of questions/comments, in which participants were encouraged to propose amendments to the original proposals made by the party-lists and to give new proposals that could potentially be included in the party-list platform. Town hall meeting participants had no restrictions to debate the policy proposals among themselves and with the candidates. For example, at a meeting conducted by Akbayan in the barangay of San Diego in the city of Luisiana, a young participant raised the concern that it was common for parties to make a lot of promises, but he wanted to know exactly what, if elected, Akbayan would do. The party representative clarified that, as members of Congress, they would be involved in crafting meaningful policies and would be active in the budget process as it is determined by Congress at the national level. At another meeting conducted by Umalab Ka in the barangay Santo Rosario-Silangan, a woman raised the issue of land property that affected many households in that barangay. She shared her fear that her home would be demolished, as she did not have a property title. The Umalab Ka representative emphasized that one of their main objectives, if elected, was to reform the Urban Development and Housing Act to better regulate informal settling and help women like her.

At the resolution and commitment stage, the CPE representative summarized the main proposals of the party-list and the main issues raised at the deliberation stage. At this stage, the party-list representative made a commitment to the participants to transmit the summary report of the meeting to the party-list leaders and candidates with their suggestions and proposals.

[9] In the case of Akbayan, the National Secretary General Conrad Castillo coordinated the town hall meeting implementation with CPE and instructed the party's nominees about the protocols to follow. In the case of Umalab Ka, National Secretary General Rosel Vargas coordinated the town hall meeting implementation with CPE, but also personally led all the town hall meetings.

It is worth emphasizing that in each of the town hall meetings implemented in the treatment barangays, there was no cash or any other type of valuable gift distributed to the meeting attendees. Both party-lists only distributed flyers and attached posters and banners at the meeting locations.

3.3 Control Barangays

In those barangays assigned to the control group, there were no instructions to party-list representatives on what campaign strategy to follow. The only restriction was that town hall meetings were not to be implemented. In fact, both party-lists followed the "business-as-usual" strategy, which they have followed elsewhere to mobilize voters.

The only relevant distinction between control "barangays" and those not selected in the randomization protocol is that in the latter, we were able to monitor the presence and campaign efforts of both party-lists involved in the experiment. CPE engaged 4 field researchers to monitor the campaign strategy of party-lists at each control barangay. The reports from the field indicate that both parties deployed mobile propaganda teams using a sound system roving within the barangays asking people for their vote. In addition, party-lists followed a door-to-door campaign, in which party-lists distributed propaganda materials to households.

Finally, party-lists organized public events to mobilize voters, particularly mass mobilizations or rallies. The attendees of these events consisted mainly of party members. The average size of these rallies exceeded 100 participants, notably higher than any of the town hall meetings implemented in treatment barangays. In terms of the interaction between candidate and voters, party rallies are what we call "one-way communication" campaigns, in which only party-list leaders engaged the audience about the party's platform, without the possibility for attendees to speak directly to the candidate.

4 The Data

We use two types of data for the evaluation of the field experiment. First, to quantify the treatment effect of the presence of town hall meetings on voting behavior, we use official data reported by the Philippines' Commission of Elections (COMELEC) at the precinct level, a lower level electoral unit than the barangay. With these data, we constructed barangay-level measures of party-list turnout and vote shares for the party-lists involved in the experiment. Second, to estimate heterogenous treatment effects of town hall meetings, we analyze individual-level data for treatment and control barangays using a random survey that CPE implemented two weeks after the election in a subset of cities/municipalities where town hall meetings had been implemented.[10] This survey covers standard demographic characteristics, self-reported voting behavior, town hall meeting attendance, and political attitudes for a total of 711 Filipino voters.

For this survey, CPE followed a "random walk" and quota sampling procedure, in which 50 respondents were selected from each sampled barangay. In control and treatment barangays, enumerators followed a "random walk" household sampling procedure starting from the Barangay's

[10]The cities/municipalities that were included in the survey are: Imus, Los Banos, Malate, Paranaque, Pateros, Pasay, Quezon, and Santa Maria.

town hall in control areas and from the location where the meetings took place in treatment barangays. Additionally, in treatment barangays, 10 out of 50 respondents were randomly selected from the actual attendance sheets of town hall meetings and contacted directly on the cell-phone numbers they provided.

Given the quota sampling procedure, the individual survey is not representative of barangay-level electoral results. For instance, while the average proportion of meeting attendees to party-list voters is around 8 percent across barangays, the survey shows that, on average, 35 percent of citizens reported attending at least one town hall meeting in their barangays.

This over-representation of meeting attendees in the survey sample prevents us from comparing the aggregate treatment effects to the individual-level survey responses, as the latter will over-estimate any positive effect of town-hall meeting attendance on turnout and voting outcomes compared to aggregate outcomes. Nevertheless, the information we can extract from voter responses about their backgrounds ultimately makes the survey a valuable source of information to assess under what conditions deliberative campaigns were more effective for delivering a political platform to voters. In addition, the average differences between official and self-reported behavior across control and treatment conditions cannot be statistically distinguished from zero at conventional levels. These results can be seen in Table 11 in the Appendix, which shows the correlation between differences in outcomes from both sources and treatment status at the barangay level.

Tables 1 and 2 present the official information on turnout at the general and at the party-list elections for the barangays assigned to Akbayan and Umalab Ka, respectively. The turnout figures are calculated as the ratio of total voters in the election to registered voters at the barangay level. On average, turnout for the general election was around 75 percent, whereas the turnout for the party-list election was around 60 percent, which is equivalent to 80 percent of the national election.

Figure 3 presents the number of potential voters who attended any of the town hall meetings at treatment barangays as a proportion of both the number of registered voters and as a proportion of party-list voters for the 2013 election at the barangay level. On average, meeting attendees accounted for 5 percent of potential voters and 8 percent of party-list voters. There is considerable variation, however, in the number of meeting attendees across barangays. On areas such as the barangays of Payatas and Ususan, meetings attendees accounted for 0.5 percent of party-list voters, whereas in barangays like Barangay 738 or Lalakay, meeting attendees accounted for more than 25 percent of the total number of party-list voters.

5 Barangay Level Results

We evaluate the effect of the implementation of town hall meetings (i.e., treatment) on aggregate voting behavior at the barangay level on two main electoral outcomes: party-list turnout (as a proportion of registered voters) and vote shares (as a proportion of total party-list votes) obtained from official results provided by COMELEC.

The random assignment process of the campaign treatment makes identification of the average treatment effect (ATE) of the presence of town hall meetings on aggregate electoral returns very straightforward using the following regression of the observed electoral return Y for party $p \in \{\text{Akbayan}, \text{Umalab Ka}\}$ in barangay $j = 1, \ldots, J$, on a treatment dummy, T, that equals 1 if party

p implemented town hall meetings in barangay j and zero, otherwise:

$$Y_{p,j} = \beta_0 + \beta_1 T_{p,j} + \epsilon_{p,j}, \tag{1}$$

where β_1 is our coefficient of interest and ϵ is an idiosyncratic error term. To conduct inference, we present uncertainty estimates of the ATE under a non-parametric permutation test (Efron and Tibshirani (1994)). We focus on the statistical inference under randomization or permutation re-sampling, as it does not rely on random sampling from a known population or on any distributional assumption of the quantity of interest, making it less sensitive to the number of sampled barangays. Instead, we take advantage of the randomized design itself to recover the test statistic of interest directly from the data, while providing a measure about the internal validity of our experiment. This procedure computes the distribution for the null hypothesis of no effect for all barangays of town hall meetings and calculates a p-value for any permutation of the treatment status that we might have observed in the experiment.[11]

The estimates of the average treatment effects for turnout and vote shares for each treatment party-list are presented in Table 3 and graphically depicted in Figure 4. First, looking at the results on party-list turnout, we can see that the presence of deliberative campaigns does not seem to mobilize voters to turn out to vote in the party-list race. However, conditional on casting a ballot, the presence of town hall meetings has a positive and statistically significant effect (at the 95 percent confidence level) on aggregate vote shares when we pool both party-lists together. These results suggest that, when the entire sample of selected barangays is used, the vote shares for treatment parties increased around 1 percent in barangays in which party-lists implemented a deliberative campaign, compared to the baseline of around 2 percent with the "one-way" communication campaign. This result translates into an electoral return of a deliberative campaign of around 50 percent on average for both parties.

When we split the sample by treatment party-list, we can see that both treatment effects are positive, although statistically significant at conventional levels only in the case of Umalab Ka. In particular Akbayan was rewarded, on average, with a 1.6 percent higher vote share in treatment barangays than in control barangays. Similarly, Umalab Ka obtained an increase of 0.5 percent in its vote share in those barangays where town-hall meetings were implemented, compared to the control barangays, where its vote share was located around 0.2 percent. These results are not only considerable in magnitude, but also politically meaningful. In the case of Akbayan, this estimated return, if extrapolated at the national level, would directly translate into an additional seat in Congress, something this party-list was not able to secure in the past election.

The previous estimates, albeit informative of the aggregate effects of town hall meetings, do not allow us to control for the intrinsic characteristics of these barangays. To account for the potential heterogeneity on the ATE of town hall meetings across the selected cities/municipalities in our sample, we estimate the effect for each party within each city/municipality, which we denote with

[11] To compute the sampling distribution under the sharp null of no effect for all barangays, we draw a binary treatment assignment from the empirical distribution of the original assigned barangays without replacement. Then, we compute the difference-in-means between treated and untreated barangays. We repeat this procedure on 1000 samples, randomly shuffling the treatment status within each city/municipality. In this way, we can estimate the fraction of simulated difference-in-means that exceeds the observed difference-in-means (i.e., permutation p-values).

subscript $k = 1, \ldots, K$. That is, we estimate the expected difference in potential outcomes under deliberative campaigns with respect to the "business-as-usual" campaign, $E[Y_{p,j,0,[k]} - E[Y_{p,j,1,[k]}]$ through the following regression,

$$Y_{p,j,k} = \alpha_{p,j[k]} + \beta_{j[k]} T_{p,j,k} + \epsilon_{p,j,k}, \tag{2}$$

where $\beta_{j[k]}$ is our coefficient of interest that varies by city and ϵ denotes again an idiosyncratic error term. To provide a measure of uncertainty around each city/municipality effect, we estimate a random effects model where $\alpha_{p,j[k]} \sim N(\mu_\alpha, \sigma_\alpha)$, and $\beta_{j[k]} \sim N(\mu_\beta, \sigma_\beta)$. Under this framework, we are allowing varying treatment effects across cities/municipalities modelled as normal draws with common mean μ_β and variance σ_β.

The varying effects of the presence of town hall meetings on vote shares by city/municipality are presented in Table 4 and graphically depicted in Figure 5. The left panel of this figure shows the results for Akbayan cities/municipalities, whereas the right panel shows the results for Umalab Ka cities/municipalities. The black dashed line in each plot represents the average treatment effect across cities/municipalities estimated from equation (1).

As can be observed from these results, in all 13 cities/municipalities except one, Quezon City, the effect of deliberative campaigns is positive. Nonetheless, there seems to be important differences on the uncertainty of these effects across cities/municipalities.

For Akbayan, the presence of town hall meetings is associated with a positive and statistically significant effect (at the 10%) on its vote shares in 2 out of the 6 cities/municipalities in which this party-list implemented town hall meetings (i.e. Malate and Santa Maria). For the cities of Luisiana, Marikina, Taguig, and Quezon, the effect of town hall meetings on vote shares is not statistically significant at conventional levels.

In the case of Umalab Ka, the results from this exercise seem to indicate that the presence of town hall meetings is associated with a statistically significant increase in its vote shares in 4 of the 7 cities where this party campaigned implementing town hall meetings (i.e., Baras, Los Banos, Pateros, and Valenzuela). For the remaining 3 cities (i.e., Imus, Paranaque, and Pasay), the positive effect of town hall meetings on vote shares is not statistically distinguishable from zero at the 10 percent significance level.

6 Individual-Level Results

Data at the aggregate level, even if it gives us an estimate of the aggregate causal effect of deliberative campaigns on electoral returns, does not allow us to estimate their differential effects across individual voters. Furthermore, by looking at aggregate effects of town hall meetings, we cannot disentangle which portion of the total effect comes from meeting attendees and which portion is due to spillover effects from non-attendees.

In the remainder of the paper, we use the post-election survey to estimate treatment heterogeneity across different subsets of respondents and provide some evidence on the causal mechanisms driving the effects of deliberative campaigns on aggregate voting behavior.

One important concern regarding the individual-level data is the potential presence of pre-

treatment covariate imbalance. This problem could be a source of selection bias in our analysis that arises from different characteristics between respondents from treatment barangays with respect to those in control barangays, characteristics that might affect their voting behavior, other than through the presence of town hall meetings.

To assess whether there exists potential heterogeneity in the characteristics of our selected barangays, we implement a matching estimation of survey respondents between treatment and control groups using pre-treatment characteristics obtained from the survey questionnaire such as *gender*, *income*, *education*, *age*, *religion*, marital *status*, and *linguistic* group.[12]

Table 5 shows balanced statistics from the empirical distribution of pre-treatment covariates such as mean and standard deviation by treatment status. It also presents the difference between the median values of the empirical distributions for each of these covariates. As one can see from this summary information, the socio-demographic characteristics included do not seem to differ between respondents in treatment and control barangays.

Figure 6 summarizes the above results by estimating a propensity score of the treatment status conditional on the pre-treatment covariates.[13] This technique is helpful because if treatment and control groups have identical propensity score distributions, the pre-treatment covariates will be balanced between the two groups (Ho et al. (2007)). The balance of our post-election survey can be confirmed by looking at Figure 6, which compares the distribution of the estimated propensity score by treatment status.

6.1 Intention-to-Treat Effect of Town Hall Meetings on Voting Behavior.

The randomization of the campaign strategy makes campaign assignment, T, independent of any pre-treatment characteristics of voters from treatment and control groups. Unfortunately, compliance behavior to attend the meetings is not randomly assigned and could be affected by the treatment itself. For example, it seems reasonable to imagine a voter in a treatment barangay whose unobserved interest in the political campaigns might influence both her decision to attend a town hall meeting and her propensity to cast a vote for one of the treatment parties. In fact, for this subset of voters, attendance does not give us a measure of the informational effect of the town hall meeting as a deliberative institution.

In addition, as we already mentioned in the introduction, voters who did not attend any town hall meetings could still be influenced by their assignment if they obtain information about the

[12] *gender* is a dummy variable that takes the value of 1 if the respondent is female. *income* is a categorical variable with 4 brackets, [below 10K pesos], [Up to 60K pesos], [Up to 100K pesos], [Over 100K pesos]. *education* is a categorical variable with 5 brackets, [No formal education], [Elementary education], [High school diploma], [College degree], [Graduate education]. *age* is a categorical variable with 4 brackets, [18-29 years old], [30-39 years old], [40-49 years old], [50 years old and older]. *religion* is a dummy variable that takes the value of 1 if the respondent is Roman Catholic. *status* is a dummy variable that takes the value of 1 if the respondent is married. *linguistic* is a dummy variable that takes the value of 1 if the respondent is from the Tagalog linguistic group.

[13] We match individuals in treatment and control barangays using a "nearest-neighbor" matching technique with replacement and a probit model for the probability of treatment. That is, $Pr(T_{i,j} = 1|X_{i,j}) = \Phi(X_{ij}\beta)$, where $Pr(T_{i,j} = 1|X_{i,j})$ denotes the probability that respondent i in barangay j lives in a treatment barangay ($T_{i,j} = 1$) conditional on the vector of pre-treatment covariates $X_{i,j}$. $\Phi(\cdot)$ denotes the c.d.f. of the normal distribution.

meeting proceedings from engaged voters who participated in at least one meeting and decided to share this political knowledge.

Given self selection of meeting attendees and spillover effects to non-compliers, in this section we focus on identifying the reduced-form intention-to-treat effect (ITT), as well as heterogeneous treatment effects of the presence of town hall meetings using the post-electoral survey of voters.

Let $i = 1, \ldots, N$ denote a voter in barangay j where party-list p is campaigning. Then, each voter i is characterized by binary potential meeting attendance by treatment status $t \in \{0, 1\}$, $A_{p,j,i,t}$ given the presence of town hall meetings, captured by an indicator variable T that equals one if the barangay j received the town hall meeting treatment and zero, otherwise. Thus, we have $A_{p,j,i,1} = \{0, 1\}$ and $A_{p,j,i,0} = \{0, 1\}$.

Given the random assignment of town hall meetings, we can identify the ITT effect with the following regression:

$$Y_{p,j,i} = \beta_{0,p,k} + \beta_1 T_{p,j} + \mathbf{X}'_{p,j,i}\Gamma + \delta_k + \epsilon_{p,j,i}, \tag{3}$$

where

$$\begin{aligned}\beta_1 &= E[Y_{p,j,i}|T_{p,j} = 1] - E[Y_{p,j,i}|T_{p,j} = 0] \\ &= E[Y_{p,j,i}(A_{p,j,i,1}, 1) - Y_{p,j,i}(A_{p,j,i,1}, 0)],\end{aligned}$$

is the coefficient of interest; $\mathbf{X}$ is the set of pre-treatment controls (i.e., *gender*, *income*, *education*, *age*, *religion*, marital *status*, and *linguistic* group); δ is a set of city/municipality fixed effects; and ϵ is the error term clustered at the barangay level. All versions of equation (3) are fit using weighted least squares, where the weighting accounts for each individual's probability of attending a meeting in treatment barangays, given observed meeting attendance and self-responded attendance.

Table 6 presents the results from estimating equation (3) with the individual level data. Although the magnitudes of treatment effects are not comparable between aggregate and individual results, given that the survey is not representative of barangay level population, we can see that the individual results are consistent with the aggregate results using official statistics, as in the previous section. First, we find that the propensity to turn out to vote was not notably affected by the presence of deliberative campaigns. Second, the presence of town hall meetings affects vote choice positively when we pool both treatment party-lists.

When we split the results by party-list, the positive effects of town hall meetings are statistically significant in those barangays assigned to Umalab Ka, whereas the ITT effect is not significant at conventional levels for those barangays assigned to Akbayan.

Overall, the propensity to vote for the party lists increases around 7 percent in treatment villages relative to control barangays. In the case of barangays assigned to Umalab Ka, the magnitude of this effect is around 8 percent in the survey, whereas for Akbayan, it is around 3 percent, although it is not statistically significant at conventional levels.

6.2 Heterogeneous Treatment by Income, Education, and Gender.

As we mentioned in Section 1, by fixing the platform that parties delivered at treatment and control barangays, we are able to assess the effectiveness of deliberation as a persuasion strategy conditional on a fixed campaign platform. To do this, we test for the presence of heterogeneous effects of town hall meetings, where the presence of town hall meetings is conditioned on the characteristics of the subset of voters at whom these platforms are aimed at.

First, as both treatment party-lists platforms targeted the urban poor, we use respondents income to check whether town hall meetings had a differential effect on low-income respondents.

Second, we assess whether there is a differential effect of deliberation on the informal sector workers, for which Umalab Ka's platform was designed. Unfortunately, the post-electoral survey did not ask respondents to provide information on their employment status. Instead, we use the level of education as a crude proxy for informality by relying on the labor economics literature, which has consistently found that in developing countries, such as the Philippines, workers employed in the untaxed, unregulated sector, tend to have less education and lower income than their counterparts in the formal sector (Amaral and Quintin (2006); Maloney (1999)). In this way, we assess whether the presence of town hall meetings had a differential impact on the least-educated respondents.

Finally, we condition the effect of town hall meetings on respondents' gender to assess whether the effect of deliberation is different for women, the primary focus of Akbayan's platform.

To obtain a differential ITT effect of town hall meetings, we estimate an interaction model of the form:

$$Y_{p,j,i} = \beta_{0,p,k} + \beta_1 T_{p,j,i} + \beta_2 Z_{j,i} + \beta_3 (T_{p,j} \times Z_{j,i}) + X_{j,i}^{\intercal}\gamma + \epsilon_{p,j,i}, \tag{4}$$

where $X_{j,i}$ is the matrix of pre-treatment covariates (i.e., education, income, gender) and $Z_{j,i}$ denotes the pre-treatment conditioning variable. Then, the estimated heterogeneous treatment effect is given by

$$\frac{\partial Y_{p,j,i}}{\partial T_{j,i}} = \beta_1 + \beta_3 Z_{p,j,i}. \tag{5}$$

The standard errors of the marginal effects are calculated as

$$s.e.\left(\frac{\partial Y_{p,j,i}}{\partial T_{p,j}}\right) = \sqrt{var(\beta_1) + Z_{j,i}^2 var(\beta_3) + 2Z_{j,i} cov(\beta_1, \beta_3)}. \tag{6}$$

Figures 7, 8, and 9 graphically depict the marginal effects of the town hall meetings conditioned by education, income, and gender, respectively, obtained from estimating equation (4) with 90 percent and 95 percent confidence intervals.[14]

In terms of income, we can see in Figure 7 that the turnout decision shows no heterogeneous treatment effect. Thus, as in the unconditional case, we find a null effect of the presence of deliberative campaigns throughout the income range of sampled voters. However, conditional

[14] All the results are robust to other non-linear specifications of the outcome variables such as probit and logit; however, the interactive effects in these nonlinear models are less clear cut and harder to interpret visually.

on voting, the effect of town hall meetings on electoral returns is positive only for low income respondents. This effect is driven by Umalab Ka, which is the party-list, from the two involved in the experiment, that emphasized a platform in favor of the urban poor. In fact, for voters with incomes higher than $60K$ pesos, the presence of deliberative campaigns does not seem to have a statistically significant effect on their propensity to vote for Umalab Ka.

The results of this exercise using education as the conditioning variable are presented in Figure 8. These results are similar to the ones using income. Consistent with the platform of Umalab Ka, the effect of town hall meetings is larger for the least educated voters. In fact, the presence of town hall meetings do not seem to exert any effect on the propensity to vote for Umalab Ka for voters who obtained more than a high school diploma. Once more, there does not seem to be a differential treatment effect by education on Akbayan's electoral returns.

The results of estimating differential treatment effects by gender are shown in Figure 8. We can see that, consistent with Akbayan's main message, the impact of deliberative campaigns was in fact positive and statistically significant among women. It is worth noting that this differential effect by gender is not only statistically significant, but also important in magnitude. Compared to the average effect of the campaign on vote choice of around 3 percent, when we differentiate by gender, we observe that the effect of town hall meetings for men is slightly negative (i.e., around -3 percent), while the effect for women is approximately 11 percent. When we observe the results for those barangays where Umalab Ka was the treatment party, we observe no statistically significant differential effect by gender.

Overall, the conditional effects of town hall meetings are consistent with the fact that the main recipients of the proposed policies, namely women and the urban poor, rewarded the party-lists that proposed these policies to a higher extent when these platforms were delivered through a deliberative campaign. As the platform content is the same across treatment conditions, these results imply that the consequences of programmatic policies are better understood in a context where voters debate with candidates compared to the case where voters just listen passively to the politician's message.

6.3 Causal Mechanisms: The Impact of Deliberation on Attitudes about Income and Gender Inequality

Having found conditional effects of deliberative campaigns on voting behavior for the main beneficiaries of party-lists' platforms, we turn to explore whether these effects are driven by a change in citizens' attitudes regarding the issues emphasized by party-lists during the campaign. For this purpose, we use voters' responses to questions on poverty and income inequality, as well as gender discrimination and sexism, to assess whether party-lists' messages induced a higher awareness about these issues and a differentiated change in voters' attitudes when platforms are transmitted in town hall meetings *versus* "one-way" communication devices.

To measure voters' attitudes on poverty-related issues we use a set of questions on poverty, graft and corruption, as well as information about the income gap between the rich and poor, to capture how intensely voters agree with the statement that each of these issues is one of the Philippines' most important problems in need of a solution.

Voters' attitudes on gender discrimination come from a set of questions on the importance of gender equality, gender discrimination in the labor market, and harassment towards women.

To measure average treatment effects, we follow Anderson (2008) and first orient each individual outcome, so that the positive direction implies more agreement or higher coordination on the relevance of each of these issues. Next, we demean all outcomes and standardize them with respect to the control group mean and standard deviation to use a comparable scale. Since we have multiple measures for each issue, we also construct summary indices in the form of standardized inverse-covariance-weighted averages of the outcomes.

These indices estimate an optimal linear combination of the individual measures to reflect a common latent factor. By pooling several measures of an issue into a single index, we obtain several advantages from this methodology: these indices are robust to overtesting; they also test for whether an issue has a "general effect"; and finally, they have more statistical power than individual-level tests.

Table 9 presents the results regarding the effects of town hall meetings on attitudes towards poverty for both Akbayan and Umalab Ka barangays. The results for Akbayan, presented in the upper panel of this table, show that voters' attitudes towards poverty are largely unchanged when Akbayan implements town hall meetings compared to control areas. These null results hold based on the index that combines information from the three indicators (column (1)), as well as based on the individual outcomes on poverty and corruption attitudes. In the case of attitudes towards the income gap, voters seem to be more aware of this issue and coordinate better when Akbayan implemented town hall meetings. This evidence is consistent with the platform content of Akbayan's campaign, which relegated poverty to a second-order issue, and instead, emphasized the empowerment of women and the reduction of gender inequality as their main messages.

By contrast, we find evidence of strong positive treatment effects for all individual poverty-related attitudes, as well as their summary index, when Umalab Ka is the party-list campaigning. Column (1) of the lower panel of Table 9 suggests that the presence of town hall meetings increases coordination of voters on poverty-related issues by 0.271 standard deviations with respect to the control average of -0.079 (p-value < 0.01). As we can see from the individual outcomes themselves, all indicators, namely poverty, corruption, and the income gap, contribute positively to the observed effects.

The above results, together with the positive treatment effects on voting behaviors of the poor and least educated set of voters, suggest that deliberative campaigns were more successful in transmitting the message of Umalab Ka, based on the welfare of the poor and the informal workers, than "one-way" communication technologies, whereas overall attitudes towards poverty were not significantly influenced when Akbayan used deliberative campaigns to communicate its platform.

Table 10 displays the results of estimating the effect of town hall meetings on attitudes towards gender discrimination. As in the case of poverty-related issues we split the sample into Akbayan and Umalab Ka barangays. In this case, if deliberative campaigns increase voter coordination on gender-related issues we should expect a positive effect. As we can see in the upper panel of this table, the results for Akbayan agree with this hypothesized effect. Based on the evidence of the summary index (column (1)), this estimate suggests that the presence of town hall meetings increases coordination on gender-related issues by 0.189 standard deviation units with respect to

an average of 0.057 in the control group (p-value$<$ 0.1). The attitudes that contribute most to the observed positive effects are discrimination towards women and harassment. When we look at differential attitudes by treatment status in those barangays where Umalab Ka campaigned, we can see that there is no impact of town hall meetings on voters attitudes towards gender-related issues based both on the summary index and on any of its individual components.

This evidence, along with the electoral returns from women's votes for Akbayan, is consistent with the fact that, when compared to communication strategies based on the delivery of party propaganda and rally speeches, deliberative campaigns, in the form of town hall meetings, were better able to coordinate voters on gender-related issues. This attitudinal change, in turn, increased the voting numbers of women, who were the main beneficiaries of Akbayan's proposed policies.

In contrast, the null effects of town hall meetings on gender attitudes in cities/municipalities where Umalab Ka campaigned are expected given that Umalab Ka presented and discussed a platform focused exclusively on the class divide, in particular on the income gap between the rich and the poor and the security of informal sector workers, without any distinction on the basis of gender.

Together, these results suggest that exposure to town hall meetings led to substantial improvements in voter knowledge and coordination on those issues emphasized by party-lists during the campaign. Voters acted on Election Day based on this increased knowledge and attitudinal change by selecting the candidate that offered a platform closer to their preferred policy.

6.4 Attendance Effects

The endogeneity of the individual decision to attend town hall meetings does not allow us to disentangle the effect of deliberative campaigns on meeting attendees with respect to other voters. Furthermore, the potential communication of meetings' proceedings from attendees to other voters prevents us from giving a causal interpretation to 2SLS estimates. This is because the exclusion restriction in our experiment,

$$Y_{p,j,i}(a,0) = Y_{p,j,i}(a,1) = Y_{p,j,i,a} \text{ for } a \in \{0,1\}, \tag{7}$$

will be violated whenever the assigned treatment $T_{p,j}$ has an effect on non-attendees. For this reason, in this section we measure attendance effects through a matching estimator. In this way, we can construct the counterfactual values that attendees' electoral returns would take if they had not attended the meetings, $Y_{p,j,i}(0,1)$. We simulate these potential outcomes using the realized electoral returns of voters in the control group who are as "similar" as possible to meeting attendees, where the degree of "similarity" is measured using a propensity score.

We match attendees in treatment and non-attendees in control barangays using "exact" and "nearest-neighbor" matching techniques with replacement and a probit model for the probability of attendance. That is, we estimate $Pr(A_{p,j,i} = 1|X_{j,i}) = \Phi(X_{j,i}\beta)$, where $Pr(A_{p,j,i} = 1|X_{j,i})$ denotes the probability that a respondent i in barangay j where party p is campaigning attended at least one town hall meeting ($A_{p,j,i} = 1$) conditional on a vector of pre-treatment covariates $X_{j,i}$. $\Phi(\cdot)$

denotes the c.d.f. of the normal distribution.[15]

Table 7 shows balanced statistics from the empirical distribution of pre-treatment covariates, such as mean and standard deviation, by treatment status. It also presents the difference between the median values of the empirical distributions for each of these covariates. As we can see from this summary information, the differences between socio-demographic characteristics included between respondents from both groups are reduced when we go from the raw to the matched sample. Figure 10 summarizes the above results by plotting the propensity score of the attendance status conditional on the pre-treatment covariates.

With a matched dataset, we estimate the ATT on electoral returns as follows:

$$ATT = \frac{1}{\sum_{i=1}^{N} A_{p,j,i}} \sum_{i:A_{p,j,i}=1}^{N} \{Y_{p,j,i}(1,1) - E[Y_{p,j,i}(0,1)]\}. \tag{8}$$

To simulate the expected outcome under non-attendance, $E[Y_{p,j,i}(0,1)]$, we estimate the following regression on voters in the control group:

$$Y_{p,j,i}|(0,0) = X_{j,i}|(0,0)\beta + \epsilon_{p,j,i}|(0,0). \tag{9}$$

Next, we use the coefficients estimated from equation (9), and combine them with the values of the covariates set to the values of the attendees in the treatment group ($T_{p,j,i} = 1$).[16] That is,

$$E[Y_{p,j,i}(0,1)] = X_{j,i}|(1,1)\hat{\beta}. \tag{10}$$

Notice, that all the variation in these simulations comes from the uncertainty in simulating $E[Y_{p,j,i}(0,1)]$, the counterfactual expected value of $Y_{p,j,i}$ for attendees in the treatment group, under the assumption that everything is fixed, except the attendance status, $A_{p,j,i}$.

The results from this exercise are presented in Table 7 and Figure 11 for turnout and overall voting for treatment party-lists.[17] As we can see, the conditional effect of attending a town hall meeting on turnout, although positive in magnitude, is not statistically different from zero, consistent with the ITT effects previously estimated. However, in the case of voting behavior, we can see that the causal effect of town hall meetings on those voters who actually attended at least one town-hall meeting translates into a 22 percent increase in the probability of voting for the treatment party-lists. This effect is three times larger than that from town-hall assignment at

[15]The vector of pre-treatment covariates include socio-demographic characteristics obtained from the survey questionnaire such as *gender*, *income*, *education*, *age*, *religion*, marital *status*, and *linguistic* group.*gender* is a dummy variable that takes the value of 1 if the respondent is female. *income* is a categorical variable with 4 brackets, [below 10K pesos], [Up to 60K pesos], [Up to 100K pesos], [Over 100K pesos]. *education* is a categorical variable with 5 brackets, [No formal education], [Elementary education], [High school diploma], [College degree], [Graduate education]. *age* is a categorical variable with 4 brackets, [18-29 years old], [30-39 years old], [40-49 years old], [50 years old and older]. *religion* is a dummy variable that takes the value of 1 if the respondent is Roman Catholic. *status* is a dummy variable that takes the value of 1 if the respondent is married. *linguistic* is a dummy variable that takes the value of 1 if the respondent is from the Tagalog linguistic group.

[16]We impute these values by performing 5,000 simulations of the estimated parameters $\hat{\beta}$. To do this, we assume that $\beta \sim N(\hat{\beta}, \hat{\Omega})$, where $\hat{\Omega}$ is the robust variance-covariance matrix estimated from equation (9)

[17]We were not able to disaggregate the voting behavior by party, as we have very few matched observations to estimate equation (9).

the barangay level (i.e., ITT effect), which was estimated around 7 percent for the entire survey sample. These results are evidence that political platforms under deliberation are effective mainly to persuade meeting attendees, besides any additional spillover effect through channels other than attendance.

7 Conclusion

We present deliberative campaigns as a political strategy that can provide higher electoral returns to self-interested politicians. This practical impact is in addition to the normative arguments about deliberative institutions, such as their effect on the quality of democracy through the active engagement of citizens in decision making.

We show that, when it comes to the polls, the average voter rewards the deliberative campaign with a 50 percent increase in electoral returns. We find that deliberative campaigns can be an effective way of communicating a political platform, making it more persuasive to voters. The mechanism behind these positive effects is that voters in deliberative town hall meetings are better able to coordinate on the issues emphasized by politicians compared to "one-way" communication campaigns. The attitudinal change brought about by deliberating over the platform content in town hall meetings influences the voting choices of the main beneficiaries of this platform.

Future work should focus on understanding the informational effects of town hall meetings by looking at meeting proceedings. We need to disentangle whether the informational effects of deliberative campaigns arise because voters acquire meaningful political knowledge from debating with politicians about the platform content (i.e., vertical communication) or because voters engage each other and acquire information that persists until election day (i.e., horizontal communication).

In addition, further research should trace more carefully the process of information sharing and voting contagion from attendees to other voters and, more precisely, attempt to understand the channels through which meeting attendees share this information. Finally, we need to identify the social networks of attendees and estimate the differential indirect effects of town hall meetings as a function of the characteristics of these active meeting participants.

References

Acemoglu, Daron and James Robinson. 2012. *Why nations fail: the origins of power, prosperity, and poverty.* Random House Digital, Inc.

Amaral, Pedro S and Erwan Quintin. 2006. "A competitive model of the informal sector." *Journal of Monetary Economics* 53(7):1541–1553.

Anderson, Michael L. 2008. "Multiple inference and gender differences in the effects of early intervention: A reevaluation of the Abecedarian, Perry Preschool, and Early Training Projects." *Journal of the American statistical Association* 103(484).

Austen-Smith, David and Timothy J Feddersen. 2006. "Deliberation, preference uncertainty, and voting rules." *American Political Science Review* 100(02):209–217.

Casey, Katherine, Kelly Glennester and Kelly Bidwell. 2015. "Debates: The Impact of Voter Knowledge Initiatives in Sierra Leone." *Stanford GSB Working Paper No. 3066* .

Coughlan, Peter J. 2000. "In defense of unanimous jury verdicts: Mistrials, communication, and strategic voting." *American Political Science Review* pp. 375–393.

Dal Bó, Pedro, Andrew Foster and Louis Putterman. 2010. "Institutions and Behavior: Experimental Evidence on the Effects of Democracy." *The American Economic Review* 100(5):2205–29.

Efron, Bradley and Robert J Tibshirani. 1994. *An introduction to the bootstrap.* Vol. 57 CRC press.

Fishkin, James S. 1997. *The voice of the people: Public opinion and democracy.* Yale university press.

Fujiwara, Thomas and Leonard Wantchekon. 2013. "Can Informed Public Deliberation Overcome Clientelism? Experimental Evidence from Benin." *American Economic Journal: Applied Economics, forthcoming* .

Gerber, Alan S and Donald P Green. 2000. "The effects of canvassing, telephone calls, and direct mail on voter turnout: A field experiment." *American Political Science Review* pp. 653–663.

Goeree, Jacob K and Leeat Yariv. 2011. "An experimental study of collective deliberation." *Econometrica* 79(3):893–921.

Green, Donald P, Alan S Gerber and David W Nickerson. 2003. "Getting out the vote in local elections: results from six door-to-door canvassing experiments." *Journal of Politics* 65(4):1083–1096.

Gutmann, Amy and Dennis Frank Thompson. 1996. *Democracy and disagreement.* Harvard University Press.

Habermas, Jurgen. 1996. *Between Facts and Norms: Contributions to a Discourse Theory of Law and Democracy.* Cambridge, MA: MIT Press.

Hedman, Eva-Lotta and John Thayer Sidel. 2000. *Philippine politics and society in the twentieth century: colonial legacies, post-colonial trajectories.* Vol. 26 Psychology Press.

Hicken, Allen, Stephen Leider, Nico Ravanilla and Dean Yang. 2014. "Temptation in Vote-selling: Evidence from a Filed Experiment in the Philippines.".

Ho, Daniel E, Kosuke Imai, Gary King and Elizabeth A Stuart. 2007. "Matching as nonparametric preprocessing for reducing model dependence in parametric causal inference." *Political analysis* 15(3):199–236.

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.

Macedo, Stephen. 2010. "Why Public Reason? Citizens Reasons and the Constitution of the Public Sphere." *Unpublished Manuscript* .

Maloney, William F. 1999. "Does informality imply segmentation in urban labor markets? Evidence from sectoral transitions in Mexico." *The World Bank Economic Review* 13(2):275–302.

Meirowitz, Adam. 2006. "Designing institutions to aggregate preferences and information." *Quarterly Journal of Political Science* 1(4):373–392.

Querubin, P. 2013. "Family and Politics: Dynastic Incumbency Advantage in the Philippines." *Unpublished Manuscript* .

Rawls, John. 1997. "The Idea of Public Reason Revisited." *University of Chicago Law Review* 64:765.

Wantchekon, Leonard. 2012. "How Does Policy Deliberation Affect Voting Behavior? Evidence from a Campaign Experiment in Benin.".

8 Tables and Figures

City	Barangay	Status	Turnout (National)	Turnout (Party-list)	Proportion (Party-list)
Luisiana	Barangay Zone VI	Control	-	0.65	-
Luisiana	San Salvador	Control	0.78	0.55	0.71
Luisiana	San Diego/San Antonio	Treated	0.82	0.62	0.75
Malate	Barangay 738	Treated	0.77	0.68	0.89
Malate	Barangay 190	Control	0.72	0.61	0.84
Malate	Barangay 609	Control	0.76	0.63	0.83
Marikina	Parang	Control	0.74	0.64	0.87
Marikina	Barangka	Treated	0.74	0.65	0.88
Marikina	Concepcion Dos	Control	0.74	0.64	0.87
Quezon City	Escopa 4	Control	0.82	0.67	0.81
Quezon City	Tatalon	Control	0.70	0.61	0.87
Quezon City	Payatas	Treated	0.73	0.60	0.82
Sta Maria	Cabooan	Control	-	0.55	-
Sta Maria	Tungkod	Treated	0.80	0.55	0.69
Sta Maria	Masinao	Control	0.84	0.53	0.64
Taguig	Hagonoy	Control	-	0.55	-
Taguig	Upper Bicutan	Control	0.56	0.46	0.82
Taguig	Ususan	Treated	0.60	0.48	0.79
Mean			0.74	0.59	0.81
S.D.			0.08	0.06	0.08

Note: No available general election figures for the barangays of Cabooan, Zone VI and Hagonoy.

Table 1: Turnout for the National and Party-list Elections (Akbayan Barangays)

City	Barangay	Status	Turnout (National)	Turnout (Party-list)	Proportion (Party-list)
Baras	Concepcion	Control	0.80	0.63	0.78
Baras	San Juan	Treated	0.76	0.55	0.72
Baras	Santiago	Control	0.80	0.59	0.74
Imus	Anabu II-F	Treated	0.62	0.53	0.85
Imus	Alapan II-A	Control	0.77	0.64	0.83
Imus	Mariano Espeleta II	Control	0.56	0.48	0.86
Los Banos	Lalakay	Treated	0.81	0.70	0.86
Los Banos	Putho	Control	0.84	0.68	0.82
Los Banos	Bayog	Control	0.84	0.67	0.80
Paranaque	Baclaran	Treated	0.68	0.56	0.82
Paranaque	San Dionisio	Control	0.73	0.60	0.82
Paranaque	B.F Homes	Control	0.73	0.59	0.80
Pasay	Barangay 191	Control	0.78	0.64	0.82
Pasay	Barangay 183	Control	0.72	0.62	0.86
Pasay	Barangay 178	Treated	0.74	0.60	0.81
Pateros	San Pedro	Control	0.77	0.70	0.91
Pateros	San Roque	Control	0.77	0.63	0.81
Pateros	San Rosario-Silangan	Treated	0.74	0.60	0.81
Valenzuela	Karuhatan	Control	0.78	0.68	0.88
Valenzuela	Isla	Control	0.58	0.50	0.87
Valenzuela	Punturin	Treated	0.80	0.69	0.86
Mean			0.74	0.61	0.83
S.D.			0.08	0.06	0.04

Table 2: Turnout for the National and Party-list Elections (Umalab Ka Barangays)

	Dependent variable:			
	(1)	(2)	(3)	(4)
	Turnout	Vote (Overall)	Vote (Akbayan)	Vote (Umalab-Ka)
ATE	-2.059	0.974^{**}	1.625	0.541^{**}
	(1.554)	(0.619)	(1.438)	(0.294)
	[0.636]	[0.044]	[0.136]	[0.037]
Control	60.364^{***}	1.963^{***}	4.657^{***}	0.168
	(1.454)	(0.679)	(1.169)	(0.147)
Observations	30	30	12	18
R^2	0.024	0.025	0.087	0.159

Note: *p<0.1; **p<0.05; ***p<0.01

Note: Inference for the ATE under randomization of the treatment.

Note: Standard deviation of the sampling distribution in parentheses.

Note: Permutation p-values in squared brackets.

Table 3: Average Treatment Effect on Electoral Returns at the Barangay Level (Excluding Luisiana, Marikina and Valenzuela).

Akbayan	Control	Treatment	Difference	Umalab Ka	Control	Treatment	Difference
Luisiana	5.546	6.552	1.006	Baras	0.151	0.778	0.6271
	(3.405,7.687)	(3.373,9.731)	(-1.344,3.356)		(0.145,0.156)	(0.157,1.398)	(0.007,1.248)
Malate	4.309	6.673	2.3638	Imus	0.154	0.338	0.1836
	(2.168,6.45)	(3.494,9.851)	(0.014,4.713)		(0.149,0.16)	(-0.283,0.958)	(-0.437,0.804)
Marikina	4.756	6.629	1.8728	Los Banos	0.149	0.901	0.7517
	(2.615,6.897)	(3.45,9.808)	(-0.477,4.222)		(0.144,0.155)	(0.281,1.522)	(0.131,1.372)
Quezon City	6.873	6.423	-0.4497	Paranaque	0.154	0.356	0.2019
	(4.732,9.014)	(3.244,9.602)	(-2.799,1.9)		(0.149,0.159)	(-0.265,0.977)	(-0.419,0.822)
Sta Maria	3.733	6.729	2.9962	Pasay	0.155	0.25	0.0949
	(1.592,5.874)	(3.55,9.908)	(0.647,5.346)		(0.15,0.16)	(-0.371,0.87)	(-0.526,0.715)
Taguig	4.373	6.666	2.2937	Pateros	0.142	1.8	1.6577
	(2.232,6.514)	(3.488,9.845)	(-0.056,4.643)		(0.137,0.147)	(1.179,2.42)	(1.037,2.278)
				Valenzuela	0.147	1.186	1.0394
					(0.142,0.152)	(0.566,1.807)	(0.419,1.66)
Mean	4.932	6.612	1.68	Mean	0.15	0.801	0.651
S.D.	1.124	0.109	1.233	S.D.	0.005	0.559	0.563

Note: 90% confidence intervals in parentheses.

Table 4: Treatment Effect on Electoral Returns by City.

	Means Treated	Means Control	SD Control	Mean Diff	eQQ Med
Propensity Score	0.36	0.35	0.05	0.01	0.01
Gender	0.65	0.57	0.49	0.07	0.00
Income	1.12	1.12	0.42	0.00	0.00
Age	2.64	2.57	1.16	0.07	0.00
Religion	0.89	0.88	0.32	0.01	0.00
Status	0.69	0.71	0.45	-0.02	0.00
Linguistic	0.93	0.91	0.29	0.02	0.00
Education	3.17	3.16	0.70	0.01	0.00

Note: The cities included are Imus, Los Banos, Malate, Paranque, Pasay and Santa Maria.
Note: The variables gender, religion, status, and linguistic are matched exactly.

Table 5: Balanced Statistics of Pre-Treatment Covariates to Predict Treatment at the Individual Level. Values of eQQ Med around zero mean that the median empirical distribution of the variable in the treated group does not differ from the median empirical distribution of the variable in the control group.

	Dependent variable:			
	(1)	(2)	(3)	(4)
	Turnout	Vote (Overall)	Vote (Akbayan)	Vote (Umalab-Ka)
ITT	−0.364	6.905***	3.225	8.231***
	(4.706)	(2.189)	(7.126)	(2.257)
Control	74.295***	1.327***	2.703***	0.000
	(1.783)	(0.467)	(0.946)	(0.000)
City FE	Yes	Yes	Yes	Yes
Pre-treatment Vars.	Yes	Yes	Yes	Yes
Observations	711	711	246	465
R^2	0.049	0.062	0.041	0.121

Note: *p<0.1; **p<0.05; ***p<0.01
Note: The cities included are Imus, Los Banos, Malate, Paranaque, Pateros, Pasay, Quezon, and Santa Maria.
Note: Pre-treatment controls include gender, income, age, religion, marriage status, linguistic group, and education.
Note: WLS by the proportion of town hall meeting attendees.

Table 6: Intention to Treat Effect on Electoral Returns at the Individual Level (Excluding Luisiana, Marikina and Valenzuela).

	Means Treated	Means Control	SD Control	Mean Diff	eQQ Med
Propensity Score	0.18	0.16	0.04	0.01	0.01
Gender	0.65	0.57	0.49	0.07	0.00
Income	1.08	1.12	0.42	-0.04	0.00
Age	2.37	2.57	1.16	-0.19	0.00
Religion	0.89	0.88	0.32	0.01	0.00
Status	0.70	0.71	0.45	-0.01	0.00
Linguistic	0.96	0.91	0.29	0.05	0.00
Education	3.24	3.16	0.70	0.08	0.00

Note: The cities included are Imus, Los Banos, Malate, Paranque, Pasay and Santa Maria.
Note: The variables gender, religion, status, and linguistic are matched exactly.

Table 7: Balanced Statistics of Pre-Treatment Covariates to Predict Attendance at the Individual Level. Values of eQQ Med around zero mean that the median empirical distribution of the variable in the treated group does not differ from the median empirical distribution of the variable in the control group.

	Dependent variable:	
	Turnout	Vote (Overall)
	(1)	(2)
attendance	1.065	22.614***
	(5.466)	(3.867)
gender	5.638	8.992**
	(5.982)	(4.147)
income	−8.572	4.539
	(11.484)	(6.820)
age	1.104	0.274
	(2.946)	(1.954)
religion	−12.999*	−2.781
	(7.561)	(6.438)
status	5.651	−3.763
	(6.782)	(4.451)
linguistic	22.925	10.731
	(16.939)	(8.929)
education	1.772	−4.392*
	(3.204)	(2.623)
Constant	63.143**	−0.707
	(25.594)	(16.012)
Observations	228	228
R^2	0.042	0.169
Note:	*p<0.1; **p<0.05; ***p<0.01	

Table 8: ATT on Turnout and Overall Vote using Matched Data.

	(1)	(2)	(3)	(4)
	Index	Poverty	Corruption	Income Gap
		Akbayan Treatment:		
Control Mean	0.089	1.472***	1.621***	1.787***
	(0.055)	(0.050)	(0.063)	(0.064)
ITT	0.173	0.168	−0.149	0.526***
	(0.111)	(0.154)	(0.119)	(0.146)
City FE	Yes	Yes	Yes	Yes
Pre-treatment Vars.	Yes	Yes	Yes	Yes
Observations	244	245	245	246
R^2	0.165	0.140	0.130	0.136
		Umalab Ka Treatment:		
Control Mean	−0.079**	1.358***	1.483***	1.566***
	(0.039)	(0.044)	(0.047)	(0.052)
ITT	0.271***	0.182*	0.288***	0.297***
	(0.087)	(0.096)	(0.100)	(0.112)
City FE	Yes	Yes	Yes	Yes
Pre-treatment Vars.	Yes	Yes	Yes	Yes
Observations	449	454	455	456
R^2	0.155	0.083	0.132	0.112

Note: *p<0.1; **p<0.05; ***p<0.01
Note: The cities included are Imus, Los Banos, Malate, Paranaque, Pateros, Pasay, Quezon, and Santa Maria.
Note: Pre-treatment controls include gender, income, age, religion, marriage status, linguistic group, and education.
Note: WLS by the proportion of town hall meeting attendees.

Table 9: Intention to Treat Effect on Attitudes on Poverty

	(1)	(2)	(3)	(4)
	Index	Equality	Discrimination	Harassment
		Akbayan Treatment:		
Control Mean	0.057**	0.173***	−0.035	0.091
	(0.025)	(0.054)	(0.055)	(0.062)
ITT	0.189*	−0.731***	0.616***	0.460**
	(0.106)	(0.176)	(0.197)	(0.231)
City FE	Yes	Yes	Yes	Yes
Pre-treatment Vars.	Yes	Yes	Yes	Yes
Observations	238	241	242	242
R^2	0.109	0.226	0.161	0.294
		Umalab Ka Treatment:		
Control Mean	−0.012	−0.125*	0.203***	−0.230***
	(0.025)	(0.064)	(0.060)	(0.056)
ITT	0.025	0.077	−0.041	0.059
	(0.044)	(0.118)	(0.108)	(0.097)
City FE	Yes	Yes	Yes	Yes
Pre-treatment Vars.	Yes	Yes	Yes	Yes
Observations	436	461	460	438
R^2	0.024	0.031	0.065	0.037

Note: *p<0.1; **p<0.05; ***p<0.01
Note: The cities included are Imus, Los Banos, Malate, Paranaque, Pateros, Pasay, Quezon, and Santa Maria.
Note: Pre-treatment controls include gender, income, age, religion, marriage status, linguistic group, and education.
Note: WLS by the proportion of town hall meeting attendees.

Table 10: Intention to Treat Effect on Attitudes on Gender

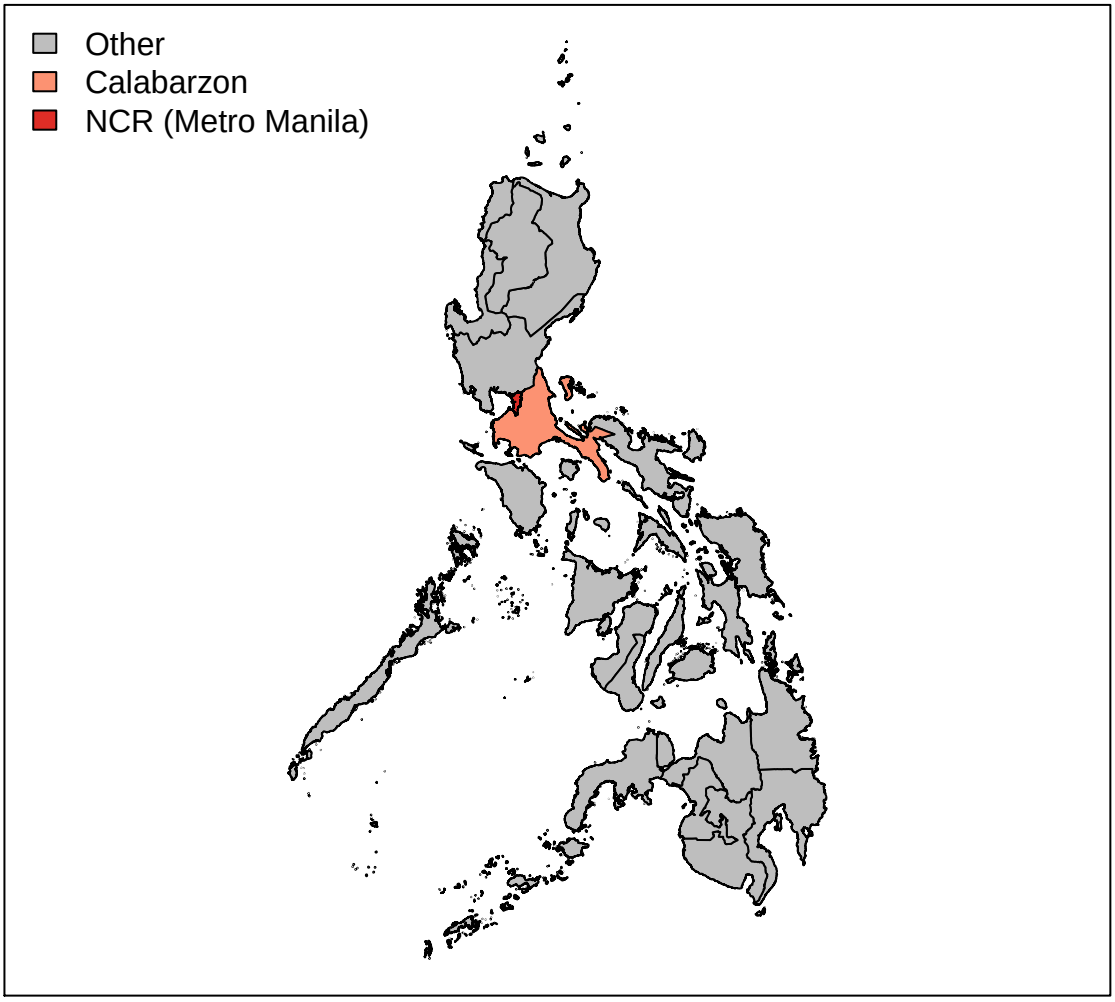
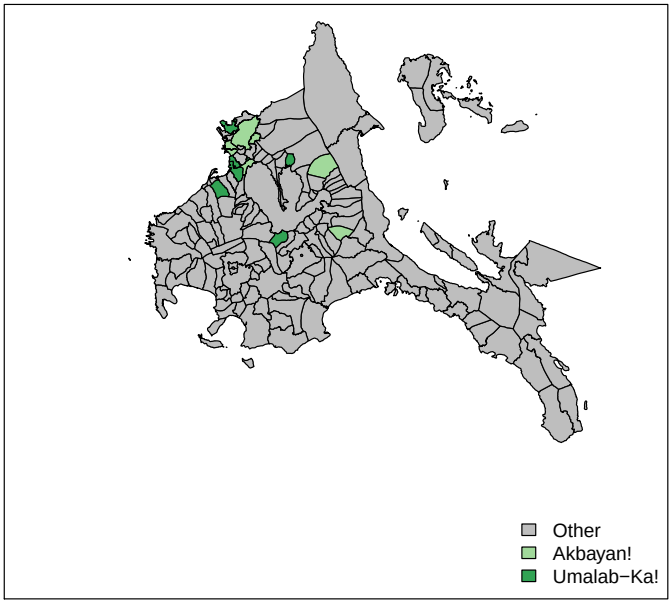
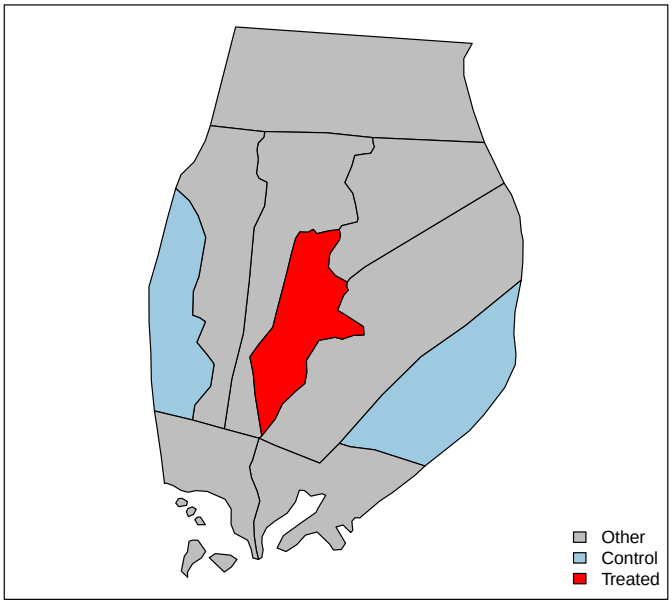


Figure 1: Philippines Regions: NCR and Calabarzon.



Selected Cities



Selected Barangays in Baras Municipality (Umalab Ka)

Figure 2: Experiment's Design. Sample Selection of Cities and Barangays.

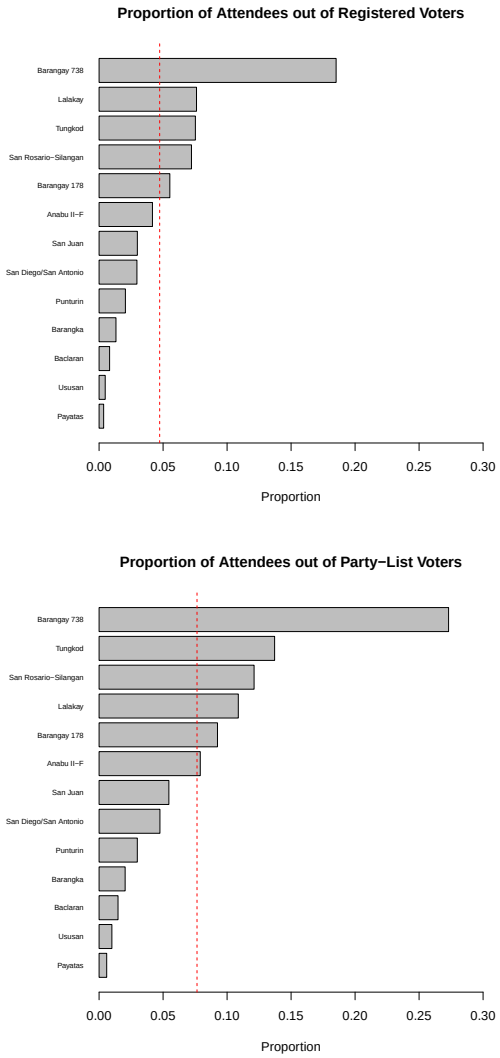


Figure 3: Proportion of Town Hall Meetinga Attendees out of Number of Registered Voters and Number of Party-List Vters at the Barangay Level. Number of meeting attendees is obtained from the attendance sheets CPE collected at every town hall meeting. The number of registered voters is obtained from the COMELEC official statistics of the 2010 legislative election. The number of party-list voters is also obtained from COMELEC, for the 2013 election. The red dashed line at 0.047 depicts the mean proportion of potential voters across barangays.

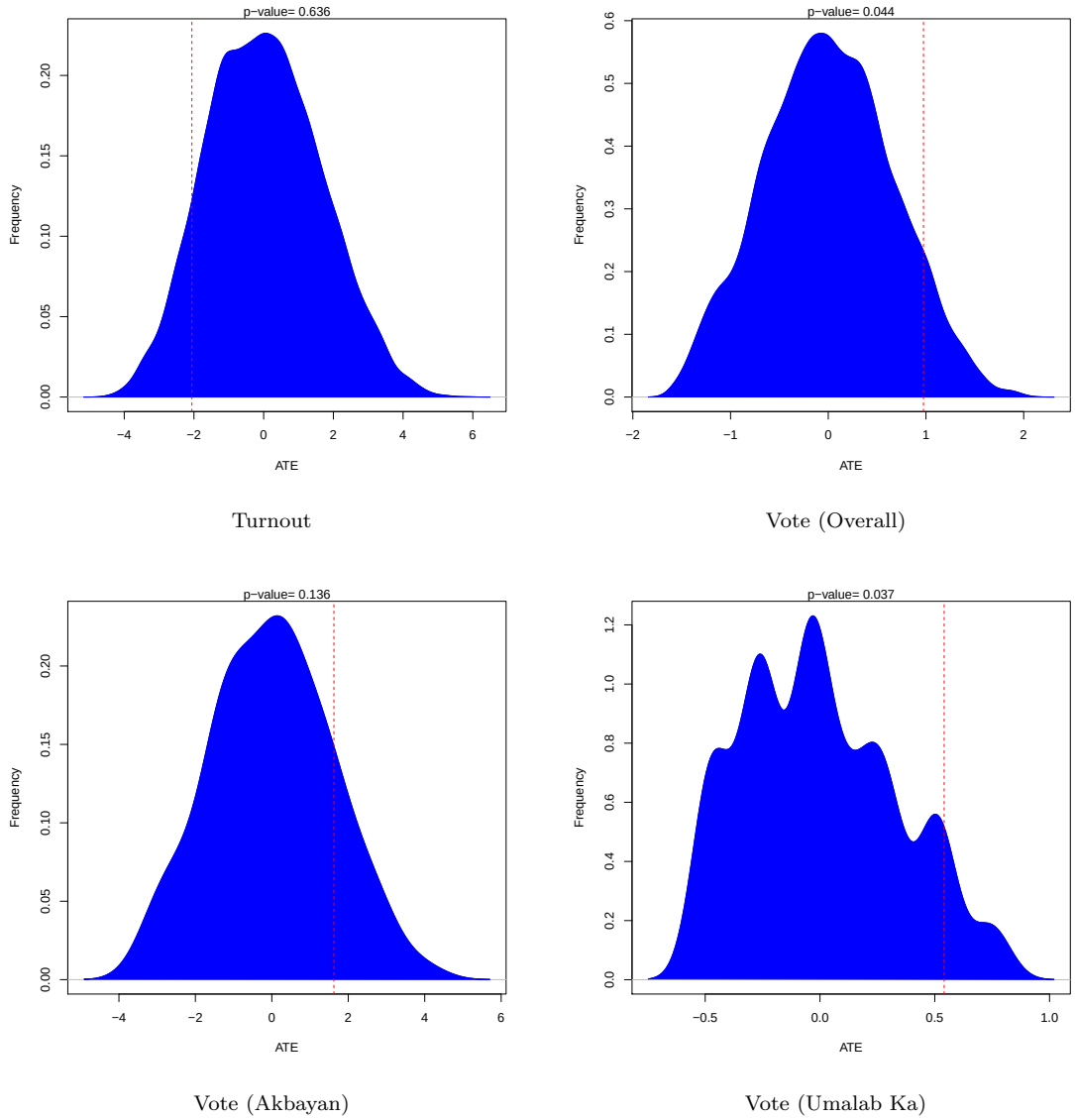
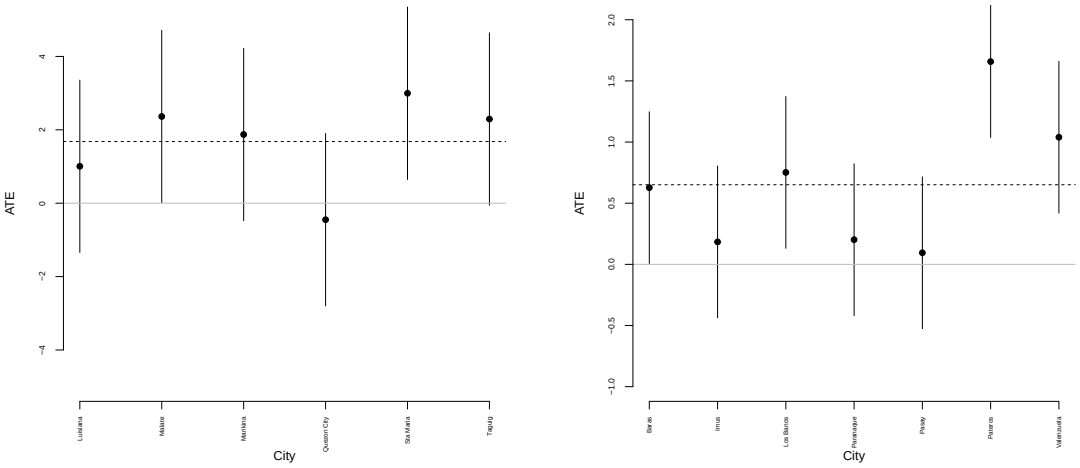


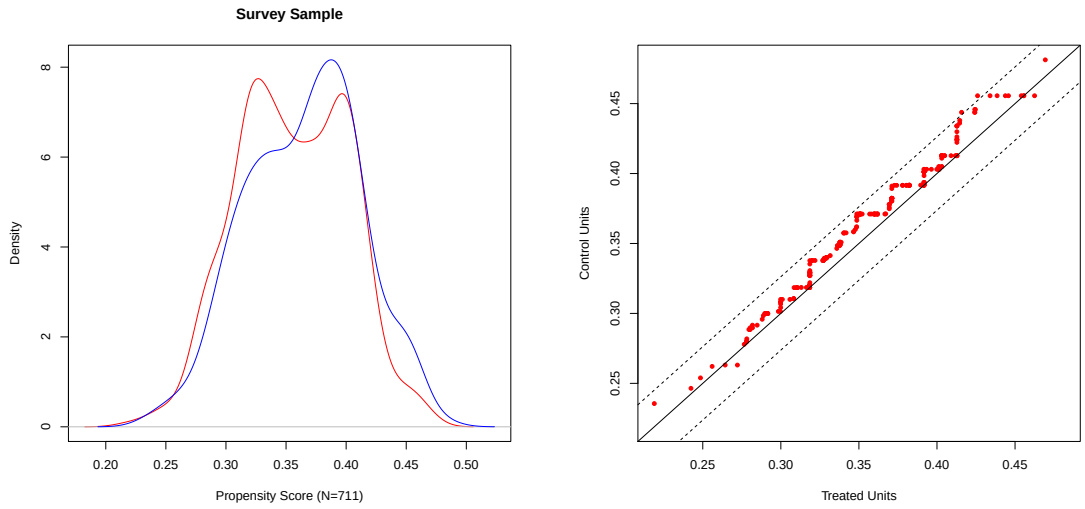
Figure 4: Permutation Distribution for the Average Treatment Effect. The dashed red line indicate the observed ATE. The distribution is constructed from 1000 within-city/municipality resamples from the observed outcomes. The cities/municipalities of Luisiana, Marikina and Valenzuela are excluded.



ATE (Akbayan Barangays)

ATE (Umalab-Ka Barangays)

Figure 5: ATE of Town Hall Meetings on Electoral Returns by City. The black lines around each point estimate indicate 95% confidence intervals pooling uncertainty across cities/municipalities. The black dashed line depicts the ATE across cities/municipalities.



Kernel Density

Q-Q Plot

Figure 6: Kernel Density and Q-Q Plot of the Survey Sample. On the left panel, the red line depicts the density of the propensity score for individuals in control barangays, whereas the blue line depicts the density of the propensity score for individuals in treatment barangays. On the right panel, the red dots represent empirical Q-Q estimates for the survey sample. The 45-degree line indicates identical distribution and the dotted lines indicate the width of the propensity score range.

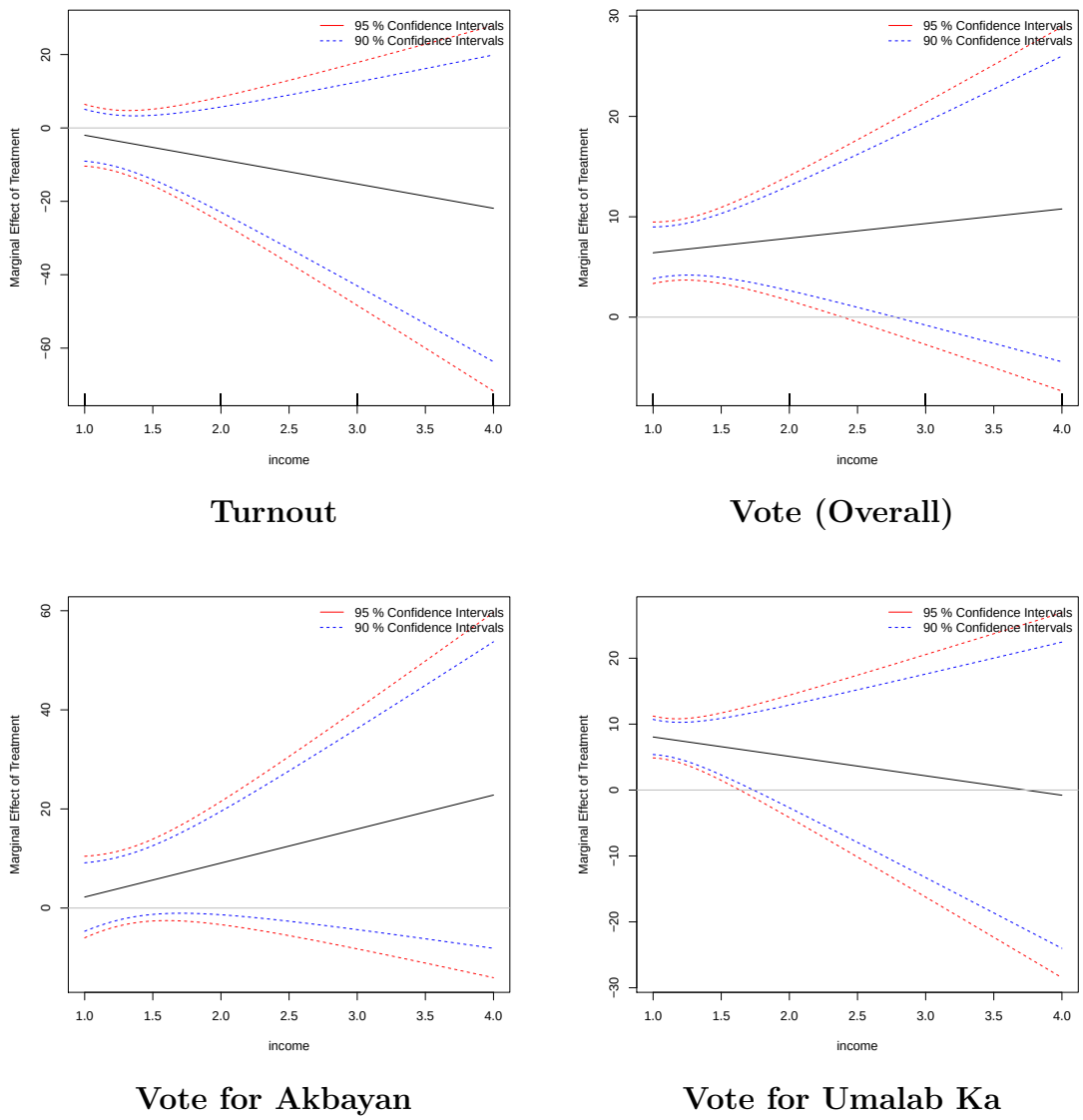


Figure 7: Marginal effect of town hall meetings on outcomes for different values of $income$**, where** $income = 1$ **for monthly income below** 10**K pesos,** $income = 2$ **for for monthly income up to** 60**K pesos,** $income = 3$ **for monthly income up to** 100**K pesos,** $income = 4$ **for monthly income up over** 100**K pesos. All estimates are based on a linear probability model,** $y_{ijk} = \alpha + \beta_0 t_{ijk} + \beta_1 t_{ijk} z_{ijk} + X^{\intercal}\gamma + \epsilon_{ijk}$**, with city fixed effects and clustered standard errors at the city level.** y_{ijk} **is the outcome of interest for individual** i **in barangay** j **and city** k**,** t_{ijk} **is the treatment status,** z_{ijk} **is the conditioning variable and** X **is a matrix of covariates that include education, income, and gender. Marginal effects are calculated as** $\frac{dy_{ijk}}{dt_{ijk}} = \beta_0 + \beta_1 t_{ijk} z_{ijk}$**. Standard errors are calculated as** $s.e.(\frac{dy_{ijk}}{dt_{ijk}}) = [var(\beta_0) + z_{ijk}^2 var(\beta_1) + 2 z_{ijk} cov(\beta_0, \beta_1)]^{\frac{1}{2}}$**.**

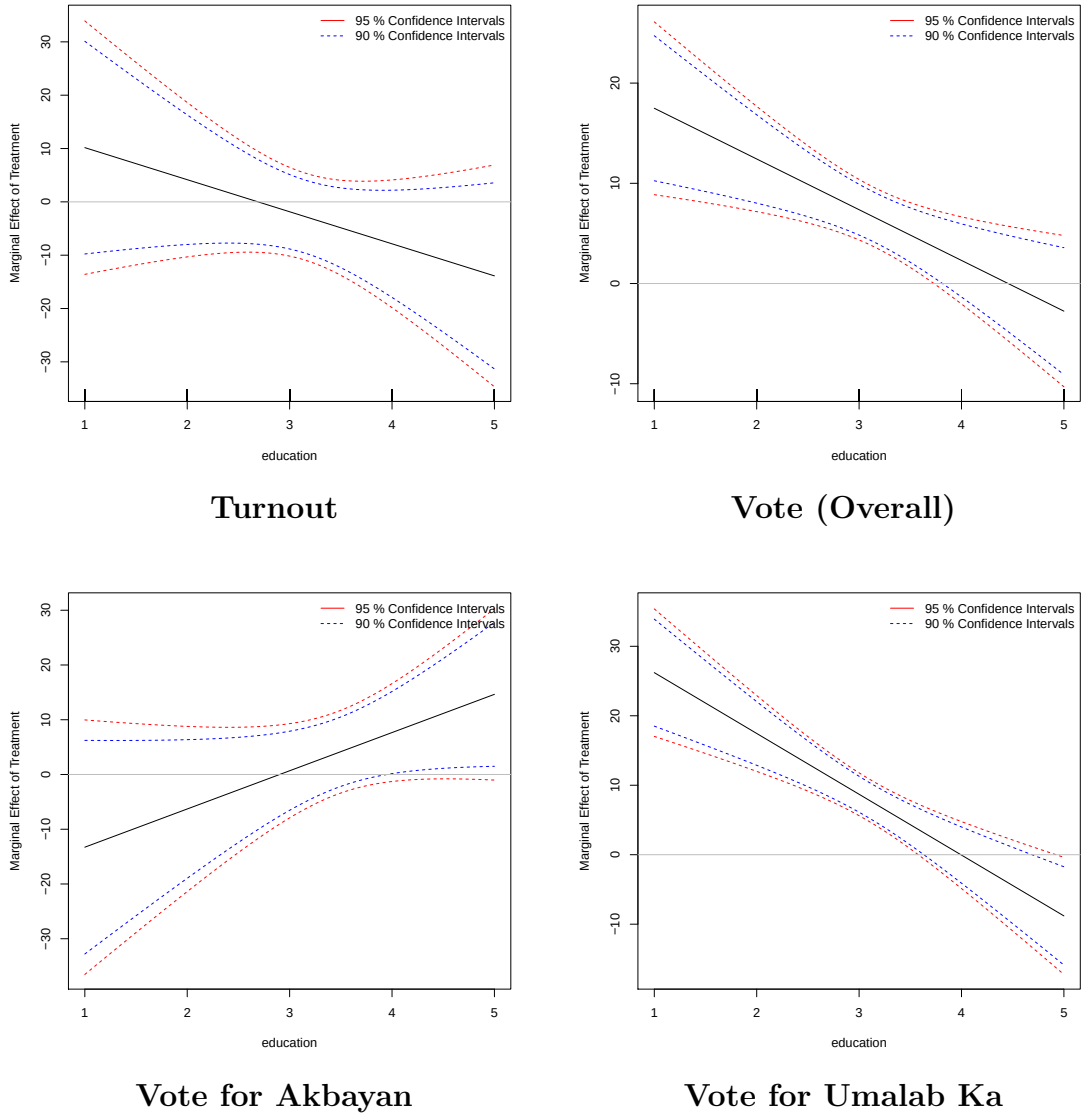


Figure 8: Marginal effect of town hall meetings on outcomes for different values of $education$**, where** $education = 1$ **for no education,** $education = 2$ **for elementary education,** $education = 3$ **for high-school education,** $education = 4$ **for college education,** $education = 5$ **for graduate education. All estimates are based on a linear probability model,** $y_{ijk} = \alpha + \beta_0 t_{ijk} + \beta_1 t_{ijk} z_{ijk} + X^{\intercal}\gamma + \epsilon_{ijk}$**, with city fixed effects and clustered standard errors at the city level.** y_{ijk} **is the outcome of interest for individual** i **in barangay** j **and city** k**,** t_{ijk} **is the treatment status,** z_{ijk} **is the conditioning variable and** X **is a matrix of covariates that include education, income, and gender. Marginal effects are calculated as** $\frac{dy_{ijk}}{dt_{ijk}} = \beta_0 + \beta_1 t_{ijk} z_{ijk}$**. Standard errors are calculated as** $s.e.(\frac{dy_{ijk}}{dt_{ijk}}) = [var(\beta_0) + z_{ijk}^2 var(\beta_1) + 2z_{ijk} cov(\beta_0, \beta_1)]^{\frac{1}{2}}$**.**

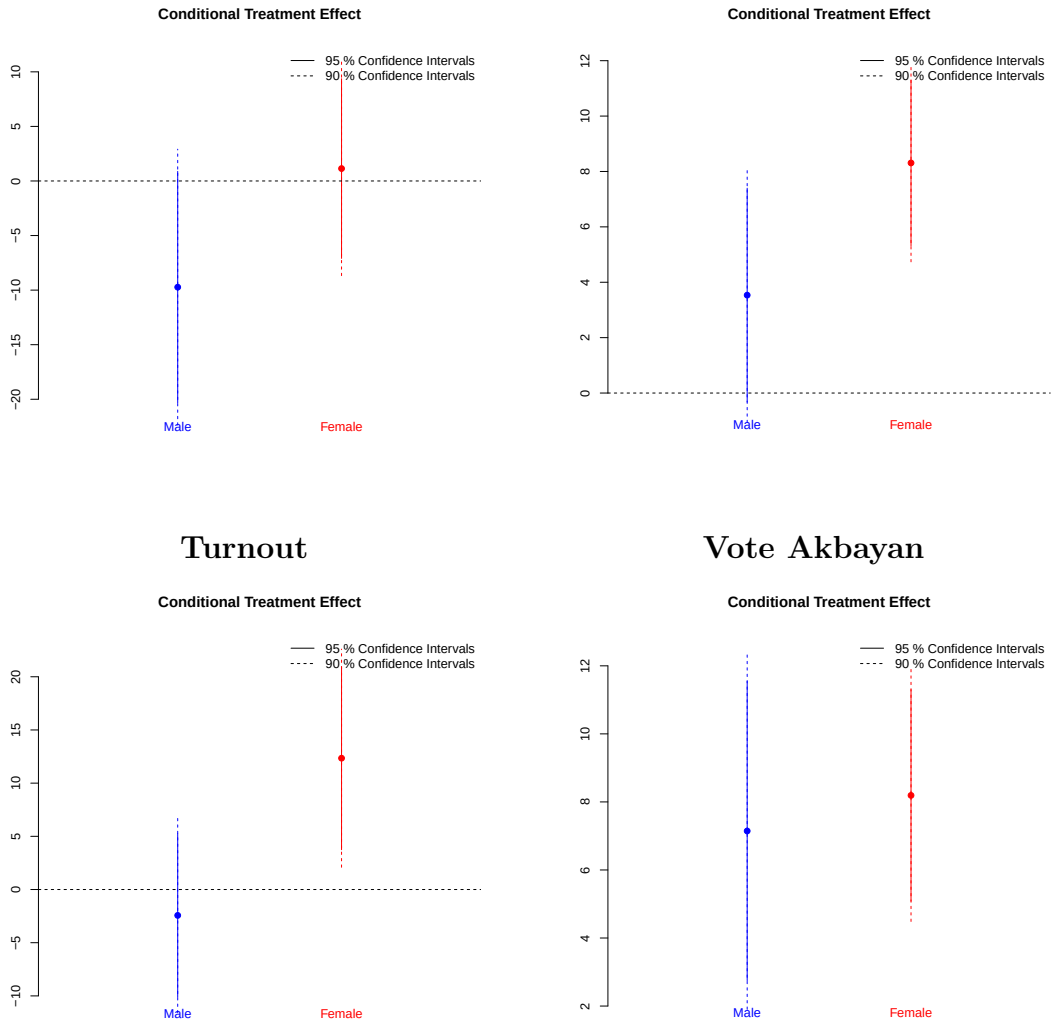


Figure 9: Marginal effect of town hall meetings on outcomes by gender. All estimates are based on a linear probability model, $y_{ijk} = \alpha_i + \beta_1 T_{ijk} + \beta_2 Z_{ijk} + \beta_3 T_{ijk} Z_{ijk} + X^{\intercal}\gamma + \epsilon_{ijk}$, with city fixed effects and clustered standard errors at the city level. y_{ijk} is the outcome of interest for individual i in barangay j and city k, t_{ijk} is the treatment status, Z_{ijk} is the conditioning variable and X is a matrix of covariates that include education, income, gender, marital status, religion, and linguistic group. Marginal effects are calculated as $\frac{dy_{ijk}}{dT_{ijk}} = \beta_0 + \beta_1 T_{ijk} Z_{ijk}$. Standard errors are calculated as $s.e.(\frac{dy_{ijk}}{dT_{ijk}}) = [var(\beta_1) + Z_{ijk}^2 var(\beta_2) + 2Z_{ijk} cov(\beta_1, \beta_2)]^{\frac{1}{2}}$.

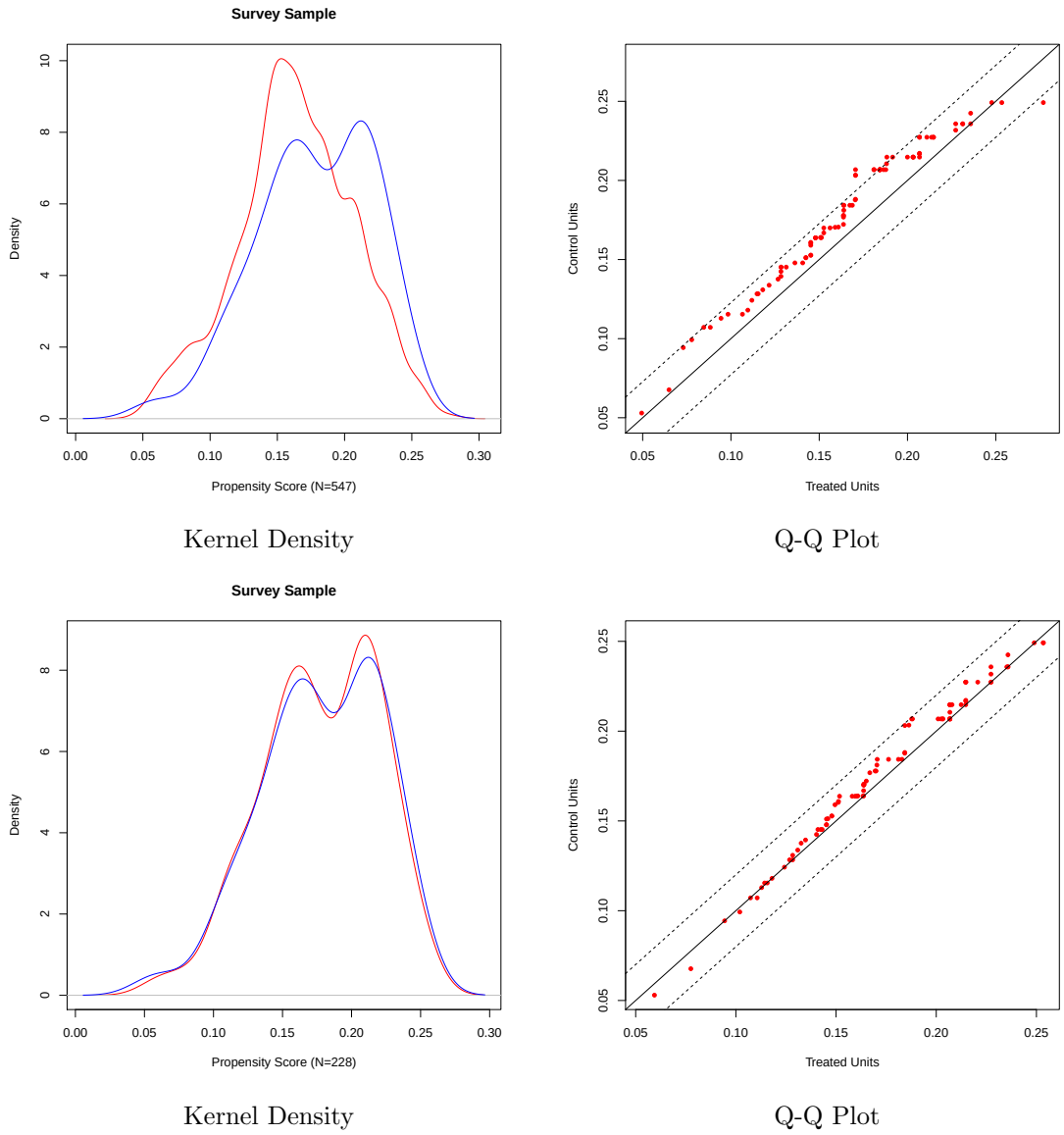
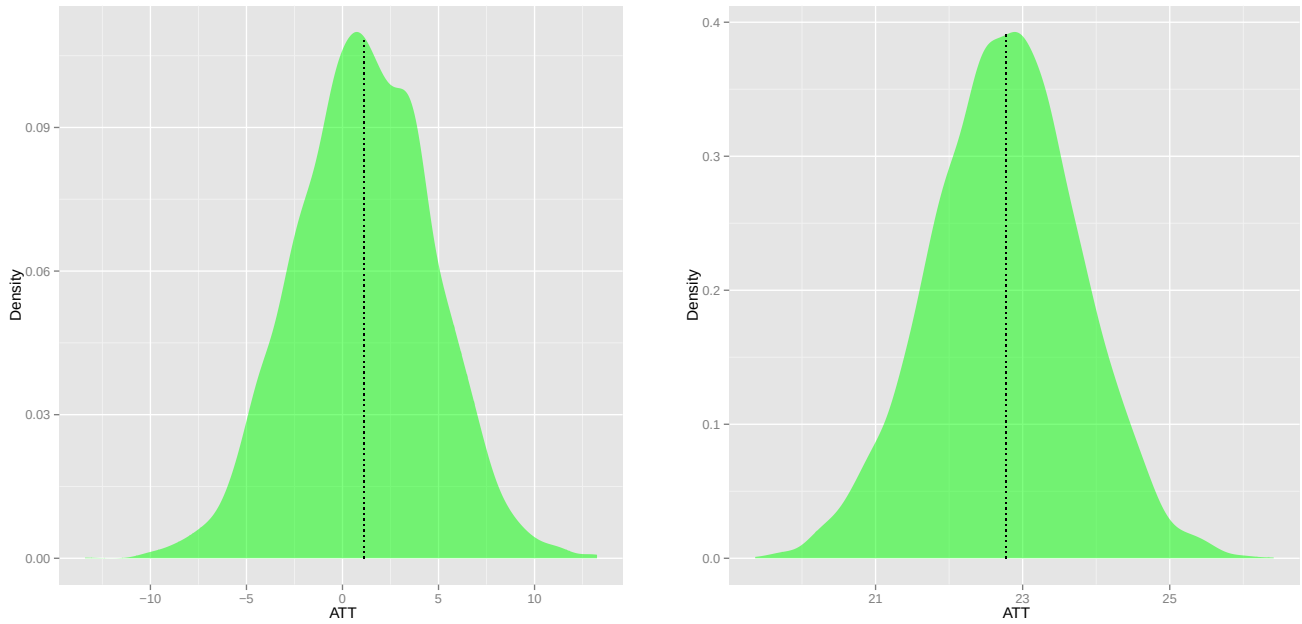


Figure 10: Kernel Density and Q-Q Plot of the Survey Sample. On the left panel, the red line depicts the density of the propensity score for individuals in control barangays, whereas the blue line depicts the density of the propensity score for individuals in treatment barangays. On the right panel, the red dots represent empirical Q-Q estimates for the survey sample. The 45-degree line indicates identical distribution and the dotted lines indicate the width of the propensity score range.



ATT on Turnout

ATT on Vote

Figure 11: Simulated ATT on Turnout and Aggregated Vote for Akbayan and Umalab Ka party-lists. Black dotted lines represent median values for each distribution

9 Appendix

Table 11: Difference between Official Results and Individual Responses

	Dependent variable:			
	(1)	(2)	(3)	(4)
	Turnout	Vote (Overall)	Vote (Akbayan)	Vote (Umalab-Ka)
Treatment	−0.767	9.310	8.096	10.228
	(12.720)	(6.548)	(20.301)	(7.710)
Constant	6.359	0.612	1.235	−0.011
	(7.809)	(2.475)	(5.429)	(0.012)
Observations	18	18	8	10
R^2	0.0002	0.173	0.081	0.319
F Statistic	0.004 (df = 1; 16)	3.342* (df = 1; 16)	0.527 (df = 1; 6)	3.755* (df = 1; 8)
Note:	*p<0.1; **p<0.05; ***p<0.01			

	Dependent variable:			
	(1)	(2)	(3)	(4)
	Turnout	Vote (Overall)	Vote (Akbayan)	Vote (Umalab-Ka)
ATE	−0.635	1.126**	1.680	0.651**
	(1.656)	(0.696)	(1.459)	(0.263)
	[0.660]	[0.046]	[0.140]	[0.018]
Control	60.549***	2.357***	4.932***	0.150
	(1.268)	(0.662)	(1.011)	(0.125)
Observations	39	39	18	21
R^2	0.002	0.025	0.067	0.231

Note:*p<0.1; **p<0.05; ***p<0.01
Note: Inference for the ATE under randomization of the treatment.
Note: Standard deviation of the sampling distribution in parentheses.
Note: Permutation p-values in squared brackets.

Table 12: Average Treatment Effect on Electoral Returns at the Barangay Level.

	Dependent variable:			
	(1)	(2)	(3)	(4)
	Turnout	Vote (Overall)	Vote (Akbayan)	Vote (Umalab-Ka)
ITT	−1.275	7.039***	8.737*	6.526***
	(3.482)	(1.977)	(4.577)	(1.713)
Control	76.960***	5.343***	9.756***	0.000***
	(1.407)	(0.751)	(1.340)	(0.000)
City FE	Yes	Yes	Yes	Yes
Pre-treatment Vars.	Yes	Yes	Yes	Yes
Observations	1,031	1,031	444	587
R^2	0.053	0.351	0.379	0.101

Note: *p<0.1; **p<0.05; ***p<0.01
Note: The cities included are Imus, Los Banos, Malate, Paranaque, Pateros, Pasay, Quezon, and Santa Maria.
Note: Pre-treatment controls include gender, income, age, religion, marriage status, linguistic group, and education.
Note: WLS by the proportion of town hall meeting attendees.

Table 13: Intention to Treat Effect on Electoral Returns at the Individual Level.

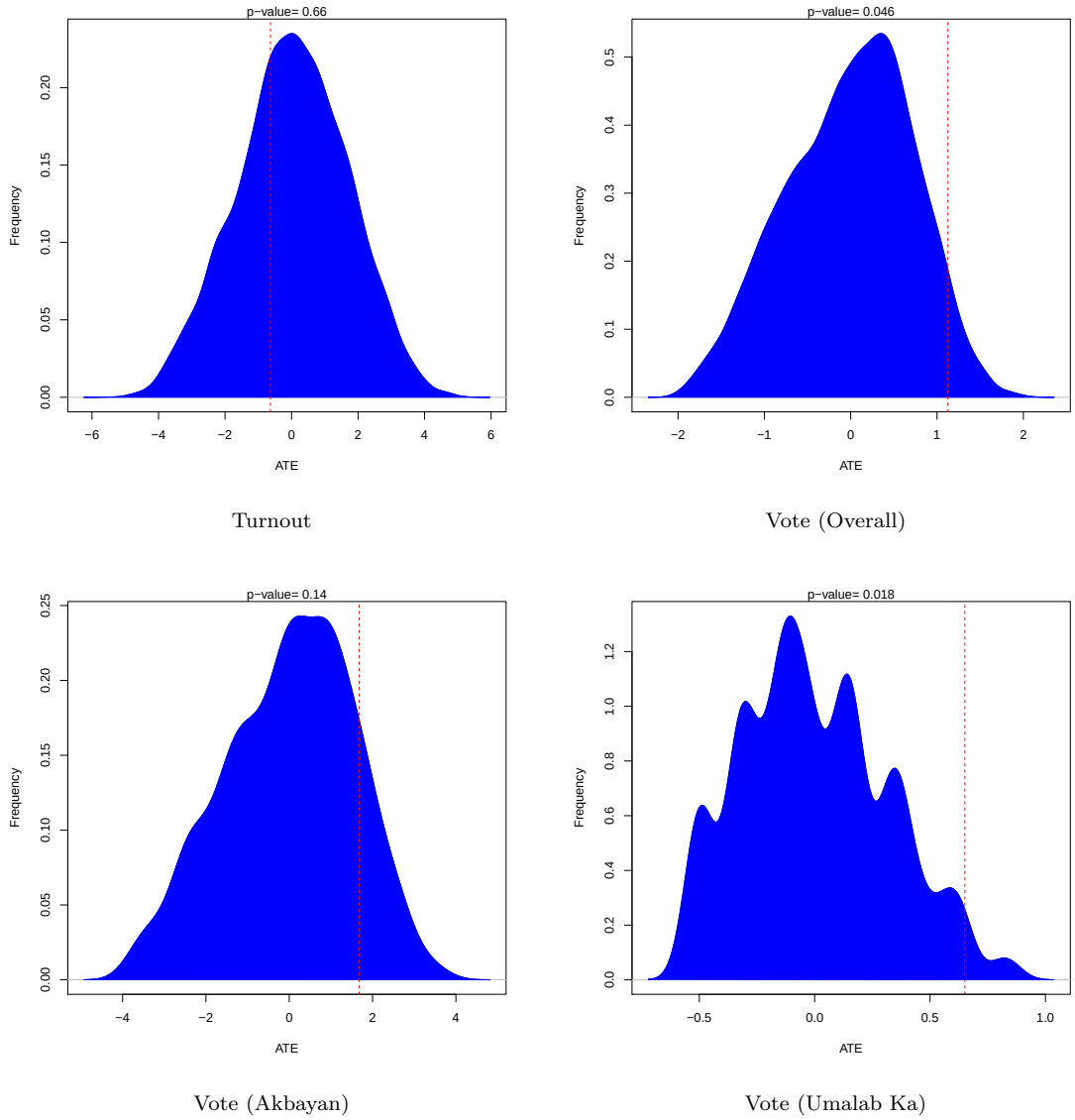


Figure 12: Permutation Distribution for the Average Treatment Effect. The dashed red line indicate the observed ATE. The distribution is constructed from 1000 within-city/municipality resamples from the observed outcomes.