# 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 national 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 discuss their campaign platform with small groups of citizens. Keeping the parties' platform fixed, we find that this "deliberative" style of campaigning has a positive effect on parties' vote shares 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 and gender. We show that the larger effect of town-hall meetings on women and poor voters arises because deliberative campaigns increase voters' attention to parties' platforms and change their attitudes on gender discrimination and poverty.

## 1 Introduction

Normative proponents of a participatory approach to political decision making suggest that deliberation can lead to revelatory discussion (Gutmann and Thompson 1996; Habermas 1996; Macedo 2010). On purely instrumental grounds, deliberation may be an avenue through which individuals can reveal private information prior to collective decision making, helping voters to implement more informed choices. (Austen-Smith and Feddersen 2006; Coughlan 2000; Meirowitz 2006). Moreover, the opportunity of discussing relevant issues might provide the motivation for citizens to actively become more informed about policy and potentially act on this information (Esterling, Neblo and Lazer [2011]). In fact, laboratory and observational evidence has shown that policy choices can be more effective in changing attitudes, eliciting information and encouraging cooperation when they are chosen through deliberative settings (Ban, Jha and Rao 2012; Barabas 2004; Dal Bó, Foster and Putterman 2010; Goeree and Yariv 2011; Karpowitz and Mendelberg 2014).

In principle, if deliberative forums such as town hall meetings can increase citizens' capacity to become more informed and potentially change their political behavior, it might be in the interest of politicians to use them as an electoral strategy to persuade voters of the merits of a desired alternative. In addition, opening a debate about policy platforms could help both politicians and voters uncover common interests through the revelation of valuable information.

Empirically, assessing the potential benefits of a deliberative campaign on a politician's electoral prospects is challenging, as these could be confounded with other factors that might affect both the behaviors of politicians and citizens. Particularly, 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 the implementation of deliberative forums 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 town hall meetings to different areas, while keeping campaign platforms fixed.

The implementation of the experiment involved the cooperation of two national party-lists competing for representation in the legislative election of May, 2013 in the Philippines. Importantly, the two party-lists with which we collaborated claimed to represent and advocate for distinct societal groups—namely women in one platform and the urban poor in another —emphasizing distinct legislative policies favorable to each of these groups in their campaign platforms. This allows us to measure the impact of town hall meetings on the subset of voters that are more susceptible to the information contained in the campaign messages. Moreover, the Filipino party-list contest is ideal to assess the effect of deliberative forums on

electoral returns, as it permit us to focus on a type of party that distinguishes itself programatically from the mainstream political organizations that compete in the general legislative, presidential and local mayoral elections, where clientelistic practices, corruption, and vote buying have been widespread in the recent past (e.g., Hicken et al. [2014]).<sup>1</sup>

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

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.<sup>2</sup> We confirmed that party-lists delivered the same platform message in both treatment and control areas, but we allowed parties to follow their natural strategy in the latter. In this way, we ensure that our results are not driven by an artificial condition imposed on politicians that could differ greatly from the way they would usually campaign.

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.

Given the deliberative campaign strategy implemented in this experiment, we examine whether deliberating with a candidate about her policy platform affects voters' attitudes and voting behavior differently than in the "business-as-usual" condition, in which voters are not exposed to town hall meetings.

We posit that if town hall meetings have an impact on parties' electoral returns, it works through both

<sup>&</sup>lt;sup>1</sup>According to law, 20 percent of congressional seats are reserved for minority groups. To fill these seats, voters do not choose 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 for legislative representation, one for their candidate in their district and one for their preferred party-list at the national level.

<sup>&</sup>lt;sup>2</sup>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.

its effectiveness on changing attendees' attitudes and the indirect exposure of non-participants to the meetings' proceedings. On the one hand, the direct engagement with the candidate and other citizens facilitated in a deliberative setting can motivate attendees to better learn about the private benefits and externalities of programmatic policies proposed by candidates. This information in turn, might generate a better benchmark or focal point with which to evaluate politicians. The increase in voters' knowledge about the candidate's policies and its consequences on different societal groups 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 do not attend the meetings. In this scenario, non-participants could become better informed about the candidate's political platform by the more engaged attendees who are willing to share valuable 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. Conditioning on casting a vote, party-lists increased their official vote shares around 50 percent with respect to the control group when town hall meetings were implemented. In this context, we do not find that deliberative campaigns increase turnout, as other campaign strategies, such as face-to-face voter mobilization, appear to do (Gerber and Green 2000; Green, Gerber and Nickerson 2003). This is not surprising, however, as we measure turnout as casting a valid vote in the party-list election, which occurs concurrently with the election to other offices (e.g., House, senatorial, mayoral and provincial elections). To the extent these other races are the main forces driving voters to the polls, no effects on party-list turnout would be expected.

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, we find positive and significant electoral returns of the presence of town hall meetings only for women when the party-list that is campaigning is the one running a feminist platform (i.e., Akbayan party). Similarly, we find a positive and significant effect of town hall meetings only on the poor when the party-list that is campaigning is the one running the pro-poor platform (i.e., Umalab Ka party).

The conditional impact of town hall meetings on voters' behavior is consistent with an attitudinal change towards gender inequality and sexism for those voters exposed to the feminist platform in town hall meetings. Similarly, we observe a significant attitudinal change towards poverty and income inequality when voters are exposed to the pro-poor platform under the deliberative campaign.

In particular, voters exposed to the pro-poor platform in town hall meetings were more concerned about poverty, income inequality and the relevance of conditional cash transfers by 0.142 standard deviations units with respect to the control group. Similarly, voters increased their disagreement with gender

discrimination and sexism by 0.328 standard deviation units with respect to the control group when they were exposed to the feminist platform under deliberation.

These results confirm that deliberative campaigns are indeed an effective way of delivering a campaign message and affect voters' attitudes towards policy issues. More importantly, we find that the better understanding of the policy proposals in town hall meetings has relevant consequences on citizen's voting behavior.

Our analysis follows a burgeoning empirical literature implementing randomized field experiments in actual campaigns with the collaboration of politicians. In particular, our paper is closely related to Fujiwara and Wantchekon [2013], 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 a 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. The platform content that politicians communicated to voters in these experiments 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.

In 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 isolate the effect of deliberative campaigns while keeping the platform content fixed.

In the context of U.S. congressional elections, Esterling, Neblo and Lazer [2011] use a deliberative field experiment to assess whether debating with incumbent representatives increases participants' knowledge about policy issues. Consistent with the spirit of our analysis, the authors find that participating in a deliberating session with the politician motivate constituents to become more informed about policy-relevant issues.

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. The authors 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.

Finally, our paper is related to the works of Kendall, Nannicini and Trebbi [2015] and Dewan, Humphreys and Rubenson [2014] that, similar to our study, assess the effects of different informational campaign treatments on voting behavior. The work of Kendall, Nannicini and Trebbi [2015] randomized the messages of an electoral campaign in collaboration with an incumbent Italian mayor, while Dewan, Humphreys and Rubenson [2014] worked with a campaign to randomize the messages and the messengers in the context of a referendum in British Columbia. Unlike our paper, their messages did not involve a deliberative setting. Instead, they manipulated the content of the messages themselves, making them either about the candidate's valence or ideology.

# 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 subnational level of government is the 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 did not establish a centralized rule as in Latin America. Instead, it left political control of the Philippine 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.

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).3

The elite persistence in the Filipino case has not only been associated with a deficit of democratic quality, but also with harmful consequences for economic growth and income distribution (Hedman and Sidel [2000]). 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.

<sup>&</sup>lt;sup>3</sup>For example, in the 2010 election, approximately 50 percent of elected politicians had a relative who had previously served in office.

# 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 founding in 1998, and has been one of the five most successful party-lists, 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. 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.<sup>5</sup> 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 municipalities following a two-stage cluster sampling. As shown on the map in Figure 1, we randomly selected 7 out of 17 available municipalities from the National Capital

<sup>&</sup>lt;sup>4</sup>The platform and constitution of the Akbayan party-list can be found at www.akbayan.org.ph.

<sup>&</sup>lt;sup>5</sup>The entire legislative agenda of the Umalab Ka party-list can be found at www.facebook.com/notes/umalab-ka-partylist.

Region (NCR), which comprises mainly Manila City and its suburbs, and 6 municipalities out of 90 available from the neighboring Calabarzon region. On average, there are 58 and 25 barangays per municipality in NCR and Calabarzon, respectively.<sup>6</sup> The randomly selected cities from both regions are shown in the upper panel of figure 2.

Second, for each municipality selected in its respective region (i.e., either NCR or Calabarzon), 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 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 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 in treatment barangays. It is important to note that, from the initial random selection of municipalities and barangays, the research team of CPE made some adjustments in the sample selection due to logistic difficulties encountered in the field while implementing the town hall meetings.

First, in the selected municipalities of Marikina and Valenzuela, the town hall meeting organizers switched one of the originally selected control barangay for the treatment barangay.<sup>7</sup> 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

<sup>&</sup>lt;sup>6</sup>NCR accounts for 49.54 percent of the population of both regions, while Calabarzon accounts for 51.46 percent.

<sup>&</sup>lt;sup>7</sup>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.

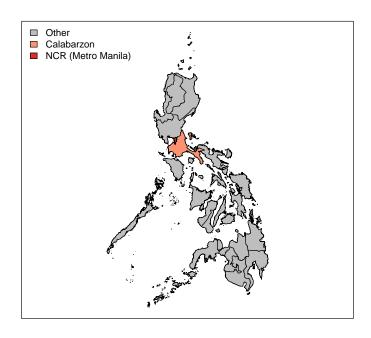
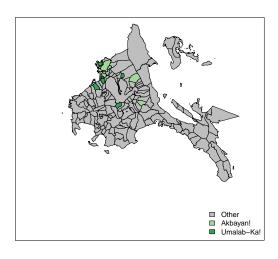


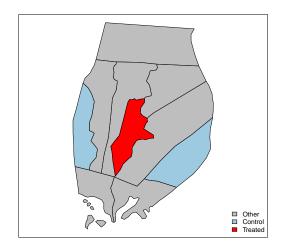
Figure 1: Philippines Regions: NCR and Calabarzon.

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 section 1 of the supplemental appendix, we show that the experiment's evaluation is robust to the observed selection of barangays. First, we present estimates of the complier average causal effect of town hall meetings (CACE), which uses the original random assignment as instrument for treatment status at the barangay level. The CACE is similar in magnitude to the average treatment effect (ATE) we present in the paper. We also show that the conclusions presented here remain unaltered when we exclude the municipalities of Luisiana, Marikina and Valenzuela from the analysis. Note that in this exclusion we delete the entire randomization stratum (e.g., control and treatment units of a municipality), so that this deletion maintains the randomization-induced balance in the sample.

# 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 meetings, each with





Selected Cities

Selected Barangays in Baras (Umalab Ka)

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

around 40 participants, during the period between April 21 and May 9.8 A staff of approximately four CPE staff members, 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 Ak-

<sup>&</sup>lt;sup>8</sup>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.

Table 1: Turnout for the National and Party-List Elections (Umalab Ka Barangays)

City	Barangay	Status	Turnout (National)	Turnout (PL)	Vote
Baras	Concepcion	Control	80.30	62.51	1.70
Baras	San Juan	Treated	76.13	54.83	0.78
Baras	Santiago	Control	79.98	58.81	0.00
Imus	Anabu II-F	Treated	62.30	52.75	0.13
Imus	Alapan II-A	Control	77.16	64.00	0.00
Imus	Mariano Espeleta II	Control	55.88	47.92	0.00
Los Banos	Lalakay	Treated	81.32	69.98	0.94
Los Banos	Putho	Control	83.93	68.50	0.00
Los Banos	Bayog	Control	83.64	66.86	0.00
Paranaque	Baclaran	Treated	68.04	55.55	0.16
Paranaque	San Dionisio	Control	72.81	59.81	0.06
Paranaque	B.F Homes	Control	72.75	58.54	0.18
Pasay	Barangay 191	Control	78.13	64.11	0.00
Pasay	Barangay 183	Control	72.12	62.22	0.00
Pasay	Barangay 178	Treated	73.92	59.76	0.00
Pateros	San Pedro	Control	76.66	69.79	0.00
Pateros	San Roque	Control	77.34	62.87	0.07
Pateros	San Rosario-Silangan	Treated	73.76	59.61	2.25
Valenzuela	Karuhatan	Control	77.82	68.14	0.09
Valenzuela	Isla	Control	57.91	50.10	0.00
Valenzuela	Punturin	Treated	79.63	68.83	1.36
Mean			74.36	61.21	0.37
S.D.			7.68	6.43	0.65

bayan'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 suggest amendments to the original policies presented 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

Table 2: Turnout for the National and Party-List Elections (Akbayan Barangays)

City	Barangay	Status	Turnout (National)	Turnout(PL)	Vote
Luisiana	Barangay Zone VI	Control	-	65.05	11.57
Luisiana	San Salvador	Control	78.17	55.28	1.59
Luisiana	San Diego/San Antonio	Treated	82.47	62.19	10.79
Malate	Barangay 738	Treated	76.62	67.82	6.83
Malate	Barangay 190	Control	72.39	60.83	3.51
Malate	Barangay 609	Control	75.84	63.32	3.45
Marikina	Parang	Control	74.34	64.42	4.85
Marikina	Barangka	Treated	73.62	64.80	3.75
Marikina	Concepcion Dos	Control	73.83	63.99	3.91
Quezon City	Escopa 4	Control	82.25	66.86	10.56
Quezon City	Tatalon	Control	69.79	60.61	8.22
Quezon City	Payatas	Treated	72.76	59.98	4.34
Sta Maria	Cabooan	Control	-	55.24	2.68
Sta Maria	Tungkod	Treated	79.63	54.86	5.91
Sta Maria	Masinao	Control	83.92	53.33	1.47
Taguig	Hagonoy	Control	-	55.28	4.28
Taguig	Upper Bicutan	Control	55.96	45.85	3.10
Taguig	Ususan	Treated	60.36	47.92	8.06
Mean			74.13	59.31	5.49
S.D.			7.7	6.35	3.15

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

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 during deliberation. 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.

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-list volunteers distributed flyers to households.

Finally, party-lists organized around one public event in each control barangay to mobilize voters. These events took the form of marches that culminated in rallies. The attendees consisted mainly of party members. The average size of these rallies usually 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 with a message containing the party's policy platform, without the possibility for attendees to speak directly to the candidate.

#### 4 Data

We use two types of data for the evaluation of the field experiment. 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. We aggregate this data to construct barangay-level measures of party-list turnout and vote shares for each of the party-lists involved in the experiment.

Tables 1 and 2 present the official information on turnout and vote shares 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 at least one town hall meeting in treatment barangays as a proportion of both the number of registered voters and the party-list voters for the 2013 election at the barangay level, which were obtained from the town-hall meetings' proceedings. 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 highly populated areas such as the barangays of Payatas and Ususan, meetings attendees accounted for just 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.

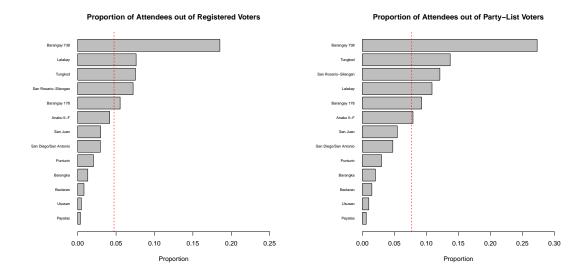


Figure 3: Proportion of Town Hall Meetings' Attendees. Number of meeting attendees is obtained from the attendance sheets CPE collected at every town-hall meeting. The number of registered voters is obtained from the COMELEC official statistics of the 2010 legislative election. The number of party-list voters is also obtained from COMELEC, for the 2013 election. The red dashed lines depict the mean attendance proportion across barangays.

Second, to estimate heterogenous treatment effects of town hall meetings and potential mechanisms, we analyze individual-level data for treatment and control barangays using a post-electoral survey that CPE implemented two weeks after the election in a subset of municipalities where town hall meetings were implemented. This survey covers standard demographic characteristics, self-reported voting behavior, town hall meeting attendance, and political attitudes for a total of 1200 Filipino citizens of voting age (40 citizens in each of 30 barangays). 10

For this survey, CPE followed a "random walk" and quota sampling procedure, in which 40 respondents were selected from each sampled barangay. In control and treatment barangays, enumerators sampled households following a "random walk" starting from the Barangay's town hall in control areas and from the location of the town-hall meetings in treatment barangays.

Given its non-representative sampling procedure, the post-electoral survey does not reflect the sociodemographic characteristics of potential voters at the barangay-level. While 9 percent of survey respondents

<sup>&</sup>lt;sup>9</sup>The municipalities that were excluded from the survey analysis because CPE did not sample respondents in both treatment and control barangays are Imus, Pateros and Santa Maria.

<sup>&</sup>lt;sup>10</sup>The effective sample that we use in the analysis is of 902 citizens, which excludes those respondents who did not give a valid response for the turnout and town hall meeting attendance questions.

in treatment barangays reported having attended at least one town hall meeting, which is almost identical to the 8 percent of party-list voters who actually attended at least one town hall meeting, there is significant variation in self-reported attendance, going from zero percent in Payatas to around 50 percent in San Juan.

The presence of sampling biases, along with the lack of census data at the barangay level, prevents us from directly comparing the aggregate electoral returns to the individual-level survey responses. Nevertheless, the information we can extract from voter responses about their socio-economic and demographic characteristics, as well as about their political attitudes and behavior ultimately makes the post-electoral survey a valuable source of information to assess under what conditions deliberative campaigns were more effective for delivering a political platform to 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 straightforward using the following regression of the observed electoral return Y in barangay j = 1, ..., J, within municipality k = 1, ..., K, on a treatment dummy,  $T_p$ , that equals 1 if party  $p \in \{Akbayan, Umalab Ka\}$  implemented town hall meetings and zero, otherwise:

$$Y_{i,k} = \beta_0 + \delta_k + \beta_1 T_p + \epsilon_{i,k},\tag{1}$$

where  $\beta_1$  is our coefficient of interest, as it captures the ATE. The parameter  $\delta_k$  captures strata fixed effects and  $\epsilon$  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 resampling, 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 small 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 "deliberation" effect for all barangays and calculates a p-value for any within-city permutation of the treatment status that

we might have observed in the experiment. 11

Before presenting the aggregate results for turnout and vote shares, Table 3 shows that the randomization of town-hall meetings successfully achieved balance in available pre-treatment official statistics at the barangay level. As can be seen from the large *p*-values under randomization, treatment and control barangays are well balanced according to barangays' population, the proportion of registered and female voters, as well as to whether the barangay is classified as urban or rural. Although ideally we would like to show balance on a broader set of pre-treatment covariates, such as turnout and vote shares in previous elections, the COMELEC does not have publicly available electoral data at the barangay level for past party-list elections. Similarly, census data besides population is not available for lower units of dissagregation than municipalities.

Table 3: Pre-treatment Balance Test at the Barangay Level

	Dependent variable:							
	Population	Population Registered Voters Female Voters Urban Baran						
	(1)	(2)	(3)	(4)				
ATE	2.201	-0.054	-0.028	-0.154				
	p = 0.782	p = 0.370	p = 0.371	p = 0.181				
Control	16.838***	$0.534^{***}$	0.277***	0.846***				
	p = 0.003	p = 0.000	p = 0.000	p = 0.000				
Observations	39	39	39	39				
$\mathbb{R}^2$	0.002	0.021	0.021	0.032				

*Note:*  $*p \le 0.05$ .

Inference for the ATE under randomization of the treatment.

Permutation p-values for ATE.

 $<sup>^{11}</sup>$ To compute the sampling distribution under the sharp null of no effect, 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 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).

<sup>&</sup>lt;sup>12</sup>Barangay population is in thousands. Balance for registered and female voters is estimated as a proportion of barangay population. *urban* is a dummy variable that takes the value of one if the 2010 Philippines Census denotes the barangay as urban and zero as rural.

The estimates of the average treatment effects for turnout and vote shares for each treatment party-list are presented in Table 4 and graphically depicted in Figure 4 with respect to the empirical null distribution. First, looking at the results on party-list turnout, we can see that the presence of town hall meetings does not 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 on aggregate vote shares when we pool both party-lists together. These results suggest that the vote shares for treatment parties increased around 1.13 percent in barangays in which party-lists implemented a deliberative campaign, compared to the baseline of around 2.36 percent with the "one-way" communication campaign. This result translates into an overall electoral return of a deliberative campaign of around 50 percent.

When we split the sample by treatment party-list, we can see that both treatment effects are positive, although statistically significant only in the case of Umalab Ka. In particular, Akbayan was rewarded, on average, with a 1.7 percent higher vote share in treatment barangays than in control barangays. Similarly, Umalab Ka obtained an increase of 0.65 percent in its vote share in those barangays where town-hall meetings were implemented, which represents more than a fourfold increase with respect to its vote share in control barangays (i.e., 0.15 percent). These results are not only considerable in magnitude with respect to baseline scenarios, 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.<sup>13</sup>

The previous ATE estimates, albeit informative of the aggregate effect of town hall meetings on electoral returns, do not allow us to account for potential heterogenous effects across our sample of municipalities. We capture differential effects across municipalities by computing the within-municipality expected difference in potential outcomes under the presence of town hall meetings,  $E[Y_{j,0,[k]} - E[Y_{j,1,[k]}]$ . We estimate this effect with the following hierarchical regression:

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

Here,  $\beta_{j[k]}$  is our coefficient of interest that varies by city and  $\epsilon$  denotes again an idiosyncratic error term. Inference for the within-municipality effects is provided assuming they are normally distributed around

<sup>&</sup>lt;sup>13</sup>In section 1 of the supplemental appendix, we estimate the CACE, which account for the deviation in the treatment status from the original sampling design in three barangays. We find that Umalab Ka obtained a similar electoral return of 0.62 percent in those barangays that complied with the original randomization protocol. When we exclude the three municipalities with deviations from the original randomization protocol, the ATE for Umalab Ka is 0.54 percent (see also section 1 in the appendix).

Table 4: Average Treatment Effect on Electoral Returns at the Barangay Level

		Dependent variable:						
	Turnout	Turnout Vote (Overall) Vote (Akbayan) Vote (Umalab						
	(1)	(2)	(3)	(4)				
ATE	-0.635	1.126*	1.680	$0.651^{*}$				
	p = 0.657	p = 0.050	p = 0.140	p = 0.018				
Control	60.549*	$2.357^*$	$4.932^{*}$	0.150				
	p = 0.000	p = 0.002	p = 0.0001	p = 0.351				
Observations	39	39	18	21				
$\mathbb{R}^2$	0.002	0.025	0.067	0.231				

*Note:*  $^*p \le 0.05$ .

*Inference for the ATE under randomization of the treatment.* 

Permutation p-values for ATE.

the ATE (i.e.,  $\beta_1$  in equation (1)) with variance  $\sigma_{\beta}^2$ .

The varying effects of the presence of town hall meetings on vote shares by municipality are presented in Table 5.

Table 5: Treatment Effect on Electoral Returns by Municipality

Akbayan	Control	Treatment	Difference	Umalabka	Control	Treatment	Difference
Luisiana	5.55	6.55	1.01	Baras	0.15	0.78	0.63*
Malate	4.31	6.67	2.36*	Imus	0.15	0.34	0.18
Marikina	4.76	6.63	1.87	Los Banos	0.15	0.90	$0.75^{*}$
Quezon City	6.87	6.42	-0.45	Paranaque	0.15	0.36	0.20
Santa Maria	3.73	6.73	3.00*	Pasay	0.15	0.25	0.09
Taguig	4.37	6.67	2.29	Pateros	0.14	1.80	1.66*
				Valenzuela	0.15	1.19	$1.04^{*}$
Mean	4.93	6.61	1.68	Mean	0.15	0.80	0.65
S.D.	1.12	0.11	1.23	S.D.	0.01	0.56	0.56

*Note:*  $^*p \le 0.05$ .

*Inference for the within-city effect assuming normally distributed effects.* 

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

For Akbayan, although the overall effect of town hall meetings is not statistically significant, the presence of town hall meetings on vote shares is statistically different from zero in 2 out of the 6 municipalities

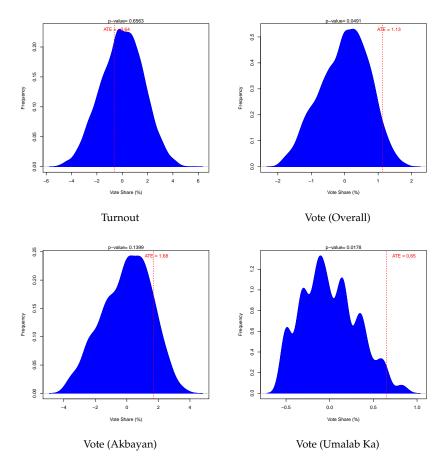


Figure 4: Permutation Distribution for the Average Treatment Effect. The dashed red line indicate the observed ATE. The distribution is constructed from 1000 within-municipality resamples from the observed outcomes.

(i.e. Malate and Santa Maria). In Santa Maria, for example, Akbayan's vote share in the treatment barangay was 1.8 times larger than in control barangays.

In the case of Umalab Ka, the results from this exercise 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). In Valenzuela, deliberative campaigns were the most effective for Umalab Ka, where its vote share in the treatment barangay was almost 7 times larger than in the control group.

# 6 Individual-Level Results

The estimates obtained from the previous analysis at the aggregate level indicate that the presence of deliberative campaigns, here in the form of town-hall meetings, is indeed an effective way to appeal to voters on Election Day, as it provides political parties with better electoral returns than traditional "business-as-usual" strategies, in which voters are mere observers of the politician's behavior during the campaign. However, these results do not give us an understanding of the type of voters who are most persuaded by the implementation of town-hall meetings, nor of the specific channels that drive these voters to support parties that implement a "deliberative" campaign.

In the remainder of the paper, we use the post-electoral survey that contains turnout and vote declarations, as well as other political and socio-demographic characteristics in treatment and control barangays to estimate heterogeneity in causal effects across different subsets of respondents and provide some evidence on the causal mechanisms behind aggregate voting behavior.<sup>14</sup> The price we pay by using individual data besides the un-representativeness of the survey at the barangay-level, is the fact that individual outcomes are self-reported, which might misrepresent actual choices.

An important concern we are able to address regarding the individual-level data is the potential presence of pre-treatment covariate imbalance between treatment and control barangays. 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, which might affect voting behavior, other than through the presence of town hall meetings.

To assess balance on the individual respondents of the post-electoral survey, we implement a matching estimation of respondents between treatment and control groups using sociodemographic characteristics obtained from the survey questionnaire, as detailed in section 2 of the supplemental appendix, such as *gender*, *income*, *education*, *age*, *religion*, marital *status*, and *linguistic* group. <sup>15</sup>

Table 6 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, it is reassuring that the socio-demographic characteristics included do not seem to differ between respondents

<sup>&</sup>lt;sup>14</sup>The survey questions used to generate all the individual-level outcomes can be found in section 5 of the supplemental appendix.

<sup>&</sup>lt;sup>15</sup>gender is a dummy variable that takes the value of 1 if the respondent is female. *income* is a dummy variable that takes a value of 1 if the monthly income is above 10K pesos, and zero otherwise. *education* is a dummy variable that takes the value of 1 if education is above a high school diploma, and zero otherwise. *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 group.

in treatment and control barangays.

Table 6: Balanced Statistics of Pre-Treatment Covariates to Predict Treatment at the Individual Level

	Means Treated	Means Control	SD Control	Mean Diff	eQQ Med
distance	0.39	0.38	0.04	0.01	0.01
gender	0.61	0.60	0.49	0.01	0.00
income	0.08	0.10	0.30	-0.02	0.00
age	2.63	2.73	1.10	-0.10	0.00
religion	0.89	0.90	0.30	-0.01	0.00
status	0.65	0.72	0.45	-0.07	0.00
linguistic	0.89	0.87	0.34	0.02	0.00
education	1.31	1.30	0.46	0.01	0.00

Note: The cities of Imus, Pateros and Santa Maria were not included.

*The variables gender, religion, status, and linguistic are matched exactly.* 

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.

Figure 5 summarizes the above results by estimating a propensity score of the treatment status conditional on the pre-treatment covariates. <sup>16</sup> 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 5, which shows a very similar density of the estimated propensity score by treatment status. In section 2 of the supplemental appendix, we show that our results are robust to adjusting for the set of pre-treatment covariates contained in the individual survey.

<sup>&</sup>lt;sup>16</sup>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.

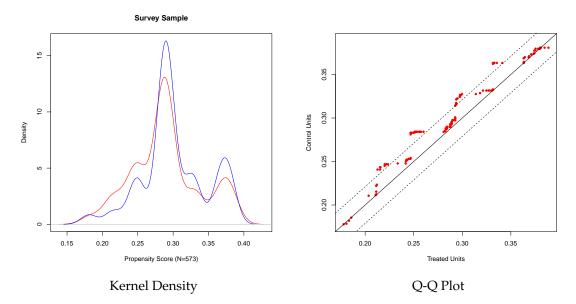


Figure 5: Kernel Density and Q-Q Plot of the Survey Sample. On the left panel, the red line depicts the density of the propensity score for individuals in control barangays, whereas the blue line depicts the density of the propensity score for individuals in treatment barangays. On the right panel, the 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.

#### 6.1 Intent-to-Treat Effect of Town Hall Meetings on Voting Behavior

The randomization of the campaign strategy makes campaign assignment, *T*, independent of any pretreatment characteristics of voters from treatment and control groups. However, 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 meeting proceedings from engaged voters who participated in at least one meeting and decided to share this political knowledge.

Given the self selection of meeting attendees and potential spillover effects to non-compliers, we use the post-electoral survey to estimate the identified reduced-form intent-to-treat effect (ITT), as well as heterogeneous treatment effects of the presence of town hall meetings using citizens' characteristics contained in the post-electoral survey.

Let i = 1, ..., N denote a voter in barangay j within municipality k where party-list p is campaigning. Analogous to equation (1) for the aggregate effect, the ITT effect with individual data can be identified with the following regression:

$$Y_{v,i,i} = \beta_{0,v,k} + \beta_1 T_{v,i} + \epsilon_{v,i,i},\tag{3}$$

where  $\epsilon_{p,j,i}$  is the error term clustered at the barangay level. All of the individual ITT effects adjust for the over-sampling of meeting attendees via inverse probability weighting, where the adjustment in treatment barangays is given by the proportion of survey (self-reported) attendees to actual barangay attendees, obtained from town hall meetings' attendance sheets. As reference, section 3 of the supplemental appendix presents the unadjusted individual results, which over-represent self-reported attendees. As with aggregate data, inference over the ITT effects is done under a non-parametric permutation test that uses the two-stage cluster randomization design to estimate empirical p-values for the ITT effects.

Table 7 presents the results from estimating equation (3) with the individual level data. Although absolute magnitudes of treatment effects are not comparable between aggregate and individual results, we can see that, consistent with the aggregate results, the individual propensity to turn out to vote was not notably affected by the presence of deliberative campaigns. In contrast, the presence of town hall meetings affected overall vote choice positively (although the overall effect does not achieve statistical significance p = 0.098), increasing the probability of voting for the party around 60% with respect to the control group. When we split the results by party, we find, as with the aggregate data, that the positive electoral returns of town hall meetings are statistically significant only for Umalab Ka. In the survey, the propensity to vote for Umalab Ka is around 4.5 times larger under the presence of town hall meetings than in control barangays. 18

## 6.2 Heterogeneous Treatment by Income, Education, and Gender.

As we mentioned in the introduction, by fixing the platform's content that parties delivered in treatment and control barangays, we are able to assess the effectiveness of deliberation conditional on a particular campaign message. This feature of the experiment allows us to test the effectiveness of town hall meetings for the subset of voters at whom the campaign platforms are aimed at.

<sup>&</sup>lt;sup>17</sup>In comparison with a 50% increase in vote share using official aggregate data.

<sup>&</sup>lt;sup>18</sup>Using the official aggregate data, vote shares in treatment barangays are 4.3 larger than in control barangays.

Table 7: Intention to Treat Effect on Electoral Returns at the Individual Level

		Dependent variable:						
	Turnout	Turnout Vote (Overall) Vote (Akbyan) Vote (Umalab						
	(1)	(2)	(3)	(4)				
ATE	-3.172	6.126	3.479	3.594*				
	p = 0.664	p = 0.098	p = 0.140	p = 0.025				
Control	81.994*	$10.345^*$	18.092*	0.810				
	p = 0.000	p = 0.031	p = 0.019	p = 0.305				
Observations	902	739	417	322				
$\mathbb{R}^2$	0.001	0.006	0.001	0.012				

*Note:*  $^*p \le 0.05$ .

Inference for the ITT under randomization of the treatment.

Permutation p-values.

The cities of Imus, Pateros and Santa Maria were not included.

First, we assess whether there is a differential effect of town hall meetings on informal sector workers and the urban poor, for which Umalab Ka's platform was designed. Although the post-electoral survey did not ask respondents to provide information on their employment status, we use their self-reported level of income 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 lower income than their counterparts in the formal sector (Amaral and Quintin 2006; Maloney 1999).

Second, we condition the effect of town hall meetings on respondents' gender to test whether the effect of the deliberative strategy is different for women, who are the primary focus of Akbayan's platform, as it emphasized primarily the rights of women in the labor force.

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

$$Y_{i,j,k} = \beta_0 + \delta_k + \beta_1 T_p + \beta_2 Z_{i,j,k} + \beta_3 (T_p \times Z_{i,j,k}) + \epsilon_{i,j,k}, \tag{4}$$

where  $Z_{j,i}$  denotes the pre-treatment conditioning variable (either income or gender).<sup>19</sup>  $\delta_k$  are city fixed effects and  $\epsilon_{i,j,k}$  is an idiosyncratic error clustered at the barangay level. Figure 6 graphically depicts the

<sup>&</sup>lt;sup>19</sup>Section 2 in the supplemental appendix shows that estimates of equation 4 are robust to adding additional pre-treatment covariates.

marginal effects of town hall meetings conditioned by income and gender, along with 95% confidence intervals.

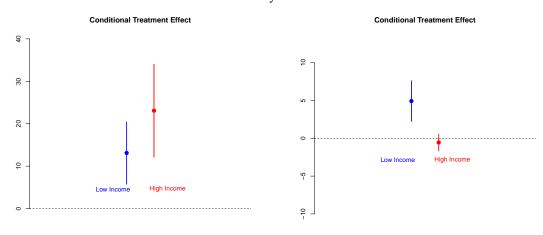
The upper panel of Figure 6 shows that, consistent with the platform of Umalab Ka, which emphasized policy legislation in favor of the urban poor, the effect of town hall meetings is positive and statistically significant exclusively for low-income respondents (p-value < 0.001). In fact, the presence of town hall meetings does not seem to exert any effect on the propensity to vote for Umalab Ka for voters with an income larger than 10,000 pesos. In the case of Akbayan's platform, as expected from their platform message, we find no differential treatment effect by income on their electoral returns, as we cannot reject the null hypothesis that the treatment effect is the same for low and high income voters when Akbayan uses a deliberative campaign to communicate its platform (p-value = 0.17).

The results of estimating differential treatment effects by gender are shown in the lower panel of Figure 6. We can see that, consistent with Akbayan's main message, the positive impact of deliberative campaigns on electoral returns is driven by women, as the ITT effect is only positive among female voters (p - value < 0.001). When we look at the results for those barangays where Umalab Ka was the treatment party, we find, unexpectedly, the opposite result, as positive electoral returns of "deliberative" campaigns are found only among men (p - value < 0.01), even though Umalab Ka's platform did not emphasize gender differences.

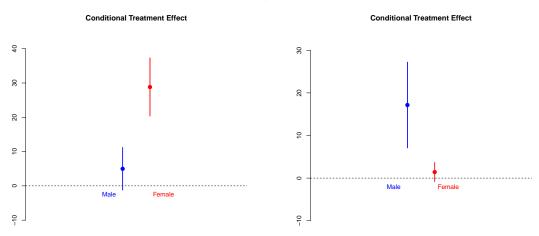
Overall, the conditional effects of town hall meetings are consistent with the fact that the main recipients of the proposed policies, namely women and the urban poor, directly rewarded the party-lists that proposed these policies to a higher extent when these platforms were delivered through a deliberative campaign.<sup>20</sup> As the platform content is the same across treatment conditions, these results imply that the consequences of programmatic policies are better understood when voters debate with candidates compared to the case where voters just listen passively to the politician's message.

<sup>&</sup>lt;sup>20</sup>Consistent with the null average treatment effects for party-list turnout, section 4 in the supplemental appendix shows that party-list turnout is not affected by the presence of town hall meetings, irrespective of respondents' level of income or gender.

#### Effect by Income



#### Effect by Gender



#### Vote for Akbayan

#### Vote for Umalab Ka

Figure 6: Marginal effect of town hall meetings on outcomes by income and gender. All estimates are based on a linear probability model with city fixed effects and clustered standard errors at the barangay level. Marginal effects are calculated as  $\frac{dY_{ijk}}{dT_p} = \beta_0 + \beta_1 T_p Z_{ijk}$ . Standard errors are calculated as  $s.e.(\frac{dY_{ijk}}{dT_p}) = [var(\beta_1) + Z_{ijk}^2 var(\beta_2) + 2Z_{ijk} cov(\beta_1, \beta_2)]^{\frac{1}{2}}$ .

# 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. In the case of Umalab Ka, we compute differences in attitudes by treatment using the entire battery of survey responses to questions on poverty and income inequality. In this way, we get closer to measuring the main policy issue emphasized in Umalak Ba's platform. Similarly for Akbayan, we compute attitudinal differences by treatment on the whole set of survey responses to questions related to gender discrimination and sexism. In this way, we assess whether Akbayan's message induced a higher awareness of gender inequalities and changed voters' attitudes when platforms are transmitted in town hall meetings *versus* "one-way" communication devices.

To measure voters' attitudes on issues emphasized by Umalab Ka in their platform, we found three questions that measure the relevance of poverty, the income gap between the rich and poor, and a poverty-reducing policy. For poverty and income gap the survey captures how intensely voters agree with the statement that each of these issues is one of the Philippines' most important problems. For the poverty-reducing policy, the survey asks to rank the policy they would like to be impemented the most among a conditional cash transfer program, an anti-corruption policy or an increase in public investment.<sup>21</sup>

Voters' attitudes on gender discrimination and sexism come from five survey questions where respondents were asked to show their degree of agreement or disagreement with respect to statements involving gender differences in quality of House representatives, female representation in politics, gender inequality, gender discrimination in the labor market, and sexual harassment towards women.<sup>22</sup>

To measure average treatment effects, we follow Anderson [2008] and first orient each individual outcome, so that the positive direction implies more agreement. 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 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, these indices are robust to overtesting; they also test for whether an issue has a "general effect"; and

<sup>&</sup>lt;sup>21</sup>Section 5 in the supplemental appendix shows the questions used to extract the poverty-related attitudinal variables.

<sup>&</sup>lt;sup>22</sup>The five statements used to generate gender-related attitudinal variables can also be seen in section 5 of the supplemental appendix.

finally, they have more statistical power than individual-level tests.

Table 8 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 and corruption are largely unchanged when Akbayan implements town hall meetings compared to control areas. This null effect is summarized based on the index that combines information from the three indicators (column (1)), as well as from each individual indicator. This result is consistent with the platform content of Akbayan's campaign, which relegated poverty to a second-order issue, and instead, stressed women empowerment and gender equality as their main messages.

**Table 8: Intention to Treat Effect on Attitudes on Poverty** 

	Dependent variable:							
	Index	Poverty CCT		Income Gap				
	(1)	(2)	(3)	(4)				
		Akbayar	ı Treatment:					
ATE	0.018	0.019	-0.008	-0.019				
	p = 0.334	p = 0.420	p = 0.486	p = 0.412				
Control	-0.133	-0.070	-0.191	-0.076				
	p = 0.173	p = 0.696	p = 0.135	p = 0.676				
Observations	382	400	400	388				
$\underline{\mathbb{R}^2}$	0.142	0.140	0.156	0.110				
		Umalab I	Ka Treatment:					
ATE	0.142*	0.184	0.210	-0.006				
	p = 0.050	p = 0.075	p = 0.186	p = 0.235				
Control	0.093	0.056	0.105	0.115				
	p = 0.134	p = 0.549	p = 0.354	p = 0.093				
Observations	434	439	439	441				
$\mathbb{R}^2$	0.118	0.117	0.117	0.116				

*Note:* p < 0.05.

*Inference for the ITT under randomization of the treatment.* 

Permutation p-values.

The cities of Imus, Pateros and Santa Maria were not included.

In contrast, we find evidence of a positive general effect of town-hall meetings on poverty-related attitudes when Umalab Ka is the party-list campaigning. Column (1) of the lower panel of Table 8 suggests

that the presence of town hall meetings increases citizens' awareness on poverty-related issues by 0.142 standard deviations with respect to the control. This effect is mainly driven by respondents in treatment barangays stating that poverty is the main problem in the Philippines.

The above results, together with the positive treatment effects on voting for low-income voters, suggest that deliberative campaigns were more effective than "one-way" communication technologies in delivering Umalab Ka's platform and affecting the behavior of poor voters. whereas, as expected, overall attitudes towards poverty were not significantly influenced when Akbayan used deliberative campaigns to communicate its feminist platform.

Table 9: Intention to Treat Effect on Attitudes on Gender

			Depend	ent variable:			
	Index	Female Rep.	Female Pol.	Equality	Discrimination	Harassment	
	(1)	(2)	(3)	(4)	(5)	(6)	
			Akbayaı	ı Treatment:			
ATE	0.328*	-0.843	0.286	0.679*	0.481*	0.608*	
	p = 0.005	p = 1.000	p = 0.132	p = 0.005	p = 0.000	p = 0.000	
Control	-0.004	0.099	0.040	-0.145	$-0.178^*$	0.116*	
	p = 0.946	p = 0.234	p = 0.796	p = 0.232	p = 0.000	p = 0.019	
Observations	543	567	558	566	564	567	
R <sup>2</sup>	0.101	0.116	0.018	0.083	0.045	0.058	
	Umalab Ka Treatment:						
ATE	0.057	0.158	-0.171	0.141	0.194	-0.063	
	p = 0.396	p = 0.371	p = 0.902	p = 0.420	p = 0.132	p = 0.613	
Control	-0.022	-0.041	-0.088	0.055	0.085	-0.119*	
	p = 0.419	p = 0.683	p = 0.441	p = 0.629	p = 0.088	p = 0.015	
Observations	423	449	446	447	446	437	
$\mathbb{R}^2$	0.002	0.001	0.003	0.003	0.005	0.001	

*Note:* p < 0.05.

Inference for the ITT under randomization of the treatment.

Permutation p-values.

The cities of İmus, Pateros and Santa Maria were not included.

Table 9 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 opposition towards gender inequality and sexism, we should expect a positive treatment effect. As we can see in the upper panel of this table, the results for Akbayan are consistent with this expected effect. Based on the evidence of the summary index (column (1)), the presence of town hall meetings increases awareness on gender-related issues by 0.328 standard deviation units. This attitudinal change on gender-related issues is mainly driven by a positive and significant increment in three individual components: gender inequality, discrimination, and harassment.

When we look at differential gender attitudes by treatment status in those barangays where Umalab Ka campaigned, we find a null effect of town hall meetings on the summary index, as well as on each of

its individual components. This is consistent with Umalab Ka's priority on poverty and income inequality, regardless of gender differences.

This evidence, along with the electoral returns from women's votes for Akbayan and from the poor for Umalab Ka, is consistent with the fact that, when compared to communication strategies based on the delivery of party propaganda and rally speeches, the "deliberative" campaign is better able to change voters' attitudes on gender and poverty issues for Akbayan and Umalab Ka, respectively. This attitudinal change, in turn, increased the voting numbers of the main beneficiaries of the party-lists' proposed policies.

Together, these results suggest that exposure to town hall meetings led to substantial improvements in voter knowledge 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.

#### 7 Conclusion

We present deliberative campaigns as a political strategy that can provide higher electoral returns to self-interested politicians in comparison to "one-way" communication technologies. Beyond the electoral returns of implementing town hall meetings, we have shown that the presence of deliberative forums are helpful in increasing voters' knowledge regarding relevant policy issues. The practical impact of deliberative forums, like the one presented in this paper, adds to the existing normative arguments in favor of deliberative institutions, which encourage the active engagement of citizens in the decision-making process.

We show that, when it comes to the polling booth, the average voter rewards the deliberative campaign with a meaningful increase in electoral returns. This result is conditional on the observed strategies of the remaining parties that did not participate in the experiment. However, even if other parties switch to deliberative town hall meetings in the future to gain an electoral edge and change the vote distribution across parties, still we have shown that deliberative campaigns seem to be more effective in accurately delivering the content of a campaign platform to voters compared to "one-way" communication strategies.

Future work should focus on understanding the informational effects of town hall meetings by systematically analyzing its meeting proceedings. We need to disentangle whether the informational effects of deliberative campaigns arise mainly 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 from other voters 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 potential 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.

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