

Why Join? How Civil Society Organizations' Attributes Signal Congruence and Impact Community Engagement: Supplementary Appendix^{*}

Simon Hoellerbauer[†]

September 14, 2021

^{*}This study was pre-registered with EGAP, ID: 20190201AA.

[†]PhD Candidate, University of North Carolina at Chapel Hill. Email: hoellers@unc.edu. Twitter: [@hoellerbauers](https://twitter.com/hoellerbauers).

A Detailed Experimental Design Information

This appendix describes the experimental design in detail. It also includes a description of the survey and sample.

Context of the Survey

The conjoint experiment and accompanying questions were embedded in the endline¹ survey of the Tax Decentralization Project (TAD) impact evaluation, which studies the effectiveness of a portion of the interventions associated with the Local Government Accountability and Performance (LGAP) activity, a large-scale, five-year, USAID-funded project that aims “to improve local government performance and transparency, increase citizen engagement, and strengthen the enabling environment for decentralization in Malawi”.² The project was carried out in 128 markets in eight districts between October 2017 and March 2019. The survey was fielded in the project sample markets between October and December 2018.

Sample

Because the target of the intervention are market vendors, the survey was carried out only among market vendors. The survey used in this study is therefore not a nationally-representative sample of Malawian citizens. In addition, due to the non-random way in which the 128 markets were selected for the study — the study favored large markets over small markets, with large markets seen as those with consistently more than 100 vendors on market days; small markets were only picked to make the total number of markets within a district divisible by four — and the fact that the study was only carried out in eight of Malawi’s twenty-eight districts, the sample is also not fully representative of all market vendors in Malawi. Market vendors in Malawi are, on average, wealthier than other Malawian

¹This is the after-treatment survey. There was a baseline —before treatment— survey carried out in July to September 2017. This baseline–endline survey format was designed to facilitate difference in difference estimates for the effectiveness of overall project, which is what the impact evaluation seeks to assess. The conjoint was only included in the endline survey, which means that all analysis is cross-sectional.

²The activity is being implemented by Development Alternatives, Inc. (DAI) — <https://www.dai.com/our-work/projects/malawi-local-government-accountability-and-performance-lgap>.

citizens. However, there is a wide range of incomes represented among market vendors, and market vendors can take on influential social positions. In additions, vendors are politically and socially active individuals in their communities and are not afraid to let their grievances be known. Vendors often boycott the paying of market fees as a way to get the government to address their concerns; this happened in several markets during the intervention period. Vendors are also used to being organized, with most markets having market committees that help represent vendor interests. Vendors often have a contentious relationship with the state as well (Riley, 2014; Tonda and Kepe, 2016). Also, the fact that all respondents are vendors makes it more straightforward to identify a profession with which the respondents should be familiar.

It is important to note that markets were not selected randomly for the study, which means that this sample cannot be taken as a fully representative sample of market vendors in these eight districts. Larger markets (defined as having more than 100 vendors during the largest market day of the week) were initially chosen for the project, although some small markets were included by necessity when drawing up treatment groups to have balanced groups within districts. The sample is therefore a representative of vendors at these 128 important markets.

TAD Project Survey Design

The survey was conducted in October, November, and December 2018. The survey was conducted by Innovations for Poverty Action (IPA).³ 20 vendors in each market selected by a modified random walk were asked to complete an extensive survey that included a series of tax compliance measures, tax morale assessments, political and social questions, a series of behavioral experiments, and the conjoint experiment, all of which lasted between 45 and 60 minutes.⁴ Due to issues that arose during data collection, a slightly smaller

³<https://www.poverty-action.org/>

⁴Roughly 100 vendors total were interviewed at each market after being selected by an adaptive random walk procedure (adaptive because the markets differ greatly in size). 80 of these respondents were asked a shortened form of the survey that only asked questions relevant to the overarching impact evaluation, not to this study, taking approximately 15 minutes. A pre-determined skip pattern was used to ensure that exactly 80 respondents would be asked this short version. The other vendors were asked a longer version of the

number than planned were interviewed, and a total of 2531 individuals completed the survey. Respondents completed the conjoint experiment last. Respondents completing this long version of the survey received either 300 or 600 MWK worth of airtime (about \$0.40 or \$0.80⁵) as a token of appreciation for their participation.⁶ The survey was administrated in a variety of local languages (Chichewa, Chitumbuka, and Chiyao). Enumerators entered information into tablets. While the implementing organization did not formally track refusals, field supervisors did not report having difficulty with refusals. Enumerators were told to move on to the next possible respondent if a vendor refused to be interviewed. In some cases, enumerators interviewed all vendors in a market.

Experimental Design

Conjoint Design

In a choice-based conjoint experiment, respondents are shown a pair of profiles. These profiles are randomly constructed from a set list of attributes, each with a certain number of levels. Respondents are then asked to choose in some way between the profiles. Because these profiles are randomly constructed, the importance of individual levels within attributes can be determined relatively simply ⁷. In the context of organizational attributes and their influence on how individuals feel about and engage with organizations, it makes sense to use the conjoint approach. The alternative would be to use vignettes, but the number of vignette needed to represent the combinations of interest would lead to minuscule treatment groups (there are 240 possible unique civil society organizations possible with the attributes and levels specified). The design used here allows us to see whether respondents perceive organizations founded in Africa, but not in Malawi, differently from organizations founded

survey that lasted approximately 45 to 60 minutes.

⁵The median monthly household income in the sample was 50,000 MWK — approx. \$65, translating into roughly \$2.17 a day. 300 MWK represents 18% of the median daily wage in our sample, or about 1.4 hours of work.

⁶There was a delayed gratification experiment embedded in the long version of the survey. Respondents could either receive 300 MWK of airtime immediately, or 600 MWK in a week.

⁷See Hainmueller, Hopkins and Yamamoto (2014) for an introduction to conjoint survey analyses and their use in political science.

abroad, while also allowing us to investigate the affect of the other attributes of interest.

Before each pair of civil society organizations, respondents were told the following: *Imagine that there are two nongovernmental organization working in your area that are looking to promote free and fair elections in Malawi in 2019. Both organizations have a budget of 1,000,000 kwacha.*⁸ *Both organizations are working with the local chief.* The civil society organizations were identified as being nongovernmental in nature. This is because a focus group during piloting made it clear that respondents had difficulty understanding the term civil society organization or civil society, but had a clear concept of what a nongovernmental organization was. However, the initialism NGO was not used in the local language translations. Although citizen attitudes toward civil society organizations that work in different sectors (health, politics, economics) is a substantively interesting topic to which it would be important to return, limitations of the survey implementation tool made it necessary to keep the number of attributes low. I decided to specify that the organizations were focused on the election because elections were highly salient in Malawi at this time as campaigning for the May 2019 presidential elections had begun to pick up. The budget for each organization was fixed to avoid respondents making the assumption that organizations founded or funded from abroad would have more resources. It is still possible that respondents assumed that organizations with more foreign funding would have more resources. However, enumerators were instructed to make it very clear that all organizations had the same amount of funding — the introduction described above was repeated before each pair. Finally, it was specified that both organizations are working with the local chief because local tribal politics are very important in Malawi, especially in more rural areas, and respondents may have assumed tribal support based on certain attribute levels.

Table A1 shows attributes and their respective levels for the conjoint survey experiment.

⁸Approximately \$1370. This is a significant amount of money for Malawi, where the GDP per capita was \$486 in 2017 (Source: World Bank, <https://data.worldbank.org/indicator/NY.GDP.PCAP.KD?locations=MW>). At baseline, the average monthly income for vendors in the sample was approximately MWK 75,000 (about \$100). Discussions with the survey lead for the implementing organization confirmed that this was a significant budget for an organization in Malawi.

Cue - Attribute	Levels:
<i>Geographic Local Cue</i> - Founded in:	Capital of Western Donor, Capital of South Africa, Lilongwe, Your District Capital
<i>Descriptive Cue</i> - Leader used to be a:	Politician, Government bureaucrat, Business owner, Laborer, Carpenter, Market vendor
<i>Resource-Based Local Cue</i> - Funding for work in your district comes from:	Western Donor government, Chinese government, South African government, Malawian government, Contributions from Malawian citizens
<i>Control for Political Affiliation</i> - Political affiliation:	Connected to a political party, Independent of any political party

Table A1: Attributes and Levels for Conjoint Survey Experiment

Only four could be included due to space and time constraints. Three of the four attributes tap into distinct possible cues for congruence. Each attribute represents one possible piece of information that respondents might learn about an organization. The “founded” attribute captures the origin of an organization, with the assumption that organizations founded closer to an individual will seem more local. The levels in this attribute make reference to “capital” in order to maintain their comparability; Lilongwe is the capital of Malawi. No city or country name is specified for the the Western donor in order to prevent attitudes toward a particular country affecting the outcome of the experiment and to therefore get a more general perception of lack of geographic localness. The “leader” attribute captures a more descriptively representative cue for congruence. Organizations whose leader’s former occupation matches the social standing of the respondents more closely will be easier to identify with for vendors. The levels of each attribute are arranged generally from a weaker cue for congruence to a stronger cue for congruence. In some cases, there are levels that should be more or less equivalently easy for vendors to identify with, but in different directions. This is for example the case for the funding origin attribute, where both the “Western Donor government” and “Chinese government” represent funding from governments that are not African, and the “leader” attribute, where “laborer” and “carpenter” represent occupations that are different from that of vendor but are of slightly lower social standing and somewhat more comparable social standing, respectively.

The political attribute was originally included as a way of testing a political cue for congruence, but the question asking about the respondent’s party preference, which had been included in the baseline survey, was unfortunately dropped from the endline survey by the main survey administrators due to length constraints. It then did not make sense to vary the party affiliation of the organization. This attribute was then retooled to see more broadly whether political affiliations in general may harm an organization. Concurrently, it helps control for assumptions respondents might make about each hypothetical organization, as certain attributes could cue signal affiliation if not stated explicitly. For example, the fact that the leader used to be a politician or government bureaucrat could lead respondents to assume an organization would be linked with a political party. Further, funding from the government could have led respondents to thinking the organization would be linked to the ruling party.

All combinations of these attributes were equally likely. Eliminating certain combinations can lead to biased effect estimates, and the estimator used relies on the random assignment of attributes with non-zero probability (Hainmueller, Hopkins and Yamamoto, 2014, 18). Although it would be possible to assign some combinations a negligible, near-zero probability, there is no theoretic reason to believe that certain combinations here would be completely unrealistic. While it may be somewhat unlikely for a current market vendor, laborer, or carpenter to be the leader of an organization founded in the capital of a Western donor, focusing on the *former* profession of the leader of the hypothetical organization circumvents this problem.

The two profiles were presented to respondents side by side. Although in low-literacy environments conjoints are often accompanied by pictures designed to represent the various levels, this was deemed impractical because of the abstract nature of some of the attributes. Instead, enumerators presented the conjoint attributes and levels as a type of quasi-vignette, where they described each organization in turn, making sure that the respondent was clear on the attributes of each organization.

Primary Outcome Variables

After each pair of civil society organizations, respondents were asked two forced-choice questions. First, they were asked *If each organization were to hold a meeting in your village, which would you be more likely to attend?* This question gets at the issue of engagement. Few empirical works tackle the subject of engagement with development-oriented civil society organizations in a systematic way. Carroll (1992, 78) does discuss “participation” on behalf of individuals: “the direct face-to-face involvement of citizens, usually the disadvantaged, in decisions that affect their own welfare.” For the sake of this study, I conceive of engagement in a similar way: individuals interacting directly and more-or-less of their own volition with an organization or its members in their official capacity as representatives of the organization.⁹ This can involve attending organization meetings or seeking out organizational support.

Engagement does not automatically signal approval, and lack of engagement does not have to imply approval. Attitudes about organizations can certainly influence engagement, but positive evaluations of an organization may not automatically imply engagement. Therefore, respondents were also asked *Regardless of whether you would attend a meeting or not, which organization do you think would be most likely to be involved with a domestic scandal?* This question focuses on a more general evaluation of these organizations and does not require respondents to signal any desire for engagement.¹⁰ The question asks about a *domestic* scandal because of the possibility that respondents could assume that scandals would be in the country of origin of the aid donor, in which case respondents would be led to choose foreign organizations over local ones when funding was also foreign, or choosing local organizations with foreign funding over local organizations with local funding. In Chichewa, Chitumbuka, and Chiyao, the languages in which the survey was fielded, there is no direct

⁹Although Nelson-Nuñez (2019) does not discuss in depth engagement with NGOs in her article, she *does* operationalize it in a similar way: attendance of meetings held by an NGO.

¹⁰This second question initially asked which organization respondents thought would be more successful at ensuring free and fair elections, but focus group discussions during piloting made it apparent that respondents had difficulty determining what success meant and separating this question from the previous question.

translation for the word domestic, and so this part of the question was translated as "in Malawi," which makes the interpretation much clearer. In addition, the type of scandal is not specified because the purpose of the question is to get at underlying beliefs about the competency and trustworthiness of the organization, not about a particular aspect of the job performed by this organization.¹¹ Piloting of this question did not seem to indicate problems with it.¹² The intro to this second question "*Regardless of whether you would attend a meeting or not*" was added in order to separate the two questions by priming respondents to exclude the previous answer during the response formation process (Schwarz, Strack and Mai, 1991). The scandal question was designed to get at a type of quality - how well the organization was likely to be run.

Subgroup Questions

In order to help me identify respondents who were members of a civil society organization, I use a question on the survey that asked *Are you a member of a community organization?*. Responses were *Yes/No*. Enumerators were told in the *Tax Decentralisation Project Field Work Handbook*, prepared by IPA, that

"Community organizations include community-based development organizations such as the Village Development Committees, Village Civil Protection Committees, Village Sector Specific Committees (i.e. agriculture, health etc.), and ADC among others. They also include non-religious and non-community-based development organizations, such as VSLAs, football clubs, women's clubs, youth clubs or other community groups. They do not include religious organizations, so belonging to a mosque or a church does not count."

Thus, "community organization" encompasses a wide variety of organizations. Enumerators

¹¹At the same time, there have been a few high profile corruption scandals in Malawi in the past years, including the infamous Cashgate scandal that was uncovered in 2013. This scandal involved embezzlement of government funds.

¹²I worked closely with the translation team in order to ensure that the meaning of the question was conveyed more than the direct text of the question. Translation was checked via back-translation for all questions in the survey.

were told not to include religious organizations because the baseline survey showed that almost all respondents reported belonging to a religious organization (religion is very important in Malawi). Greater variation was gained under this direction, with 616 respondents (24.4%) reporting being a member of a community organization.

In order to identify respondents who believed that they themselves would not have to act if an organization was committed to doing work on their behalf, I use a question that asked *When nongovernmental organizations work on our behalf, we need to do less work ourselves to get the government to listen to us*. Responses were *Strongly Agree/Somewhat Agree/Somewhat Disagree/Strongly Disagree*. Individuals who respond *Strongly Agree* or *Somewhat Agree* to this question signal that they believe that they do not need to engage with civil society organizations in order to still get desirable outcomes.

Analysis Sample Size

2531 respondents completed the survey. As each respondent saw 2 profile-pairs, this should have corresponded to 10,124 organization-level observations. Due to some non-response and also errors in how the survey software *recorded* attribute levels for some of the profiles, however, some observations had to be dropped, leading to a total of 10,067 observations for the meeting question and 10,007 observations for the scandal question.¹³

¹³There was a non-response rate of .434 percent on the meeting question, and a non-response rate of 1.03 percent for the scandal question. There is no evidence that survey respondents actually saw an incomplete profile.

B Changes from Pre-Analysis Plan

The main change from the pre-analysis plan (PAP) is in the framing of the theory and the main hypotheses. My theory has stayed largely the same, although additional work has allowed me to refine it since I first proposed the project. On page 12 of my PAP, I wrote “Synthesizing these insights with the fact that qualitative studies of foreign founded organizations are disconnected from their societies leads to the reasonable hypothesis that organizations that are “different” in some way will be viewed less favorably than organizations that represent less “different” organizations.” In my PAP, I then went on to specify hypotheses with respect to the “more” different organizations, rather than the “less” different ones. In other words, I claimed that more foreign organizations (foreign in the same sense that I use congruent in this paper, that is, an organization that does not reflect an individual, either geographically or in terms of descriptive identity) would be less likely to elicit engagement from respondents. However, it became clear to me that “congruence” is a more theoretically coherent term than “foreignness,” and that it is easier to frame testable hypotheses around “congruence.”¹⁴ After all, which is more foreign, a Western donor country or China? Or even South Africa, given some of the animosity between South Africa and Malawi? Therefore, I decided to refocus the analysis so that the level that cues congruence was the baseline for each attribute. This then led me to change my hypotheses to be that the most congruent level would be preferred over the other levels. I stress that this is not a new hypothesis; it is implied by the theory I present in the PAP, the core of which has not changed. The title of the project has subsequently also changed throughout the process.

Also, I had specified that results would be different for the scandal question, and that individuals would see quality as different from engagement. There is some evidence of this latter point, which I do discuss in the paper.

Another major change is the use of linear probability models instead of logit models, as had been specified in the PAP. I do this because linear model coefficients are easier to

¹⁴I thank Lucy Martin for pointing this out.

interpret. I do however present logit results, which are virtually identical, in appendix F.

In addition, in order to save space, the pre-specified subgroup and interaction analyses have been moved to the appendix (D and E, respectively). I find little support for either hypothesis.

A final change to the analysis itself was the use of marginal means to investigate heterogeneous effects by the two subgroups specified in the PAP instead of simply repeating the main analysis. This is because recent work has shown that looking at subgroup AMCEs or the difference between them can be misleading if the baseline probabilities are different (Leeper, Hobolt and Tilley, 2020).

C Scandal and Meeting Question Results Compared

I recoded the scandal question so that an organization received a 0 if a respondent thought it would be involved with a scandal, and a 1 if not. This makes it easier to compare to the meeting question; a 1 in both cases is now a “positive” outcome. In 33% of cases respondents chose a different organizations for the two outcome questions. This is despite the fact that the experimental design complicated matters, as all respondents were asked both questions. Although the lead-in to the scandal question included the phrase “Regardless of whether you would attend a meeting or not,” the attitudes evoked by the meeting question might have affected the subsequent scandal question.

Table C1: Linear Probability Models Used For Figure 1 in Main Text. Baseline for ‘Founded’ variable is *District Capital*. Baseline for ‘Leader’s Former Profession’ variable is *Vendor*. Baseline for ‘Organization’s Funding Is From’ variable is *Contributions from Malawian Citizens*. Baseline for ‘Organization’s Party Connections’ variable is *Independent*.

	<i>Dependent variable:</i>	
	meeting_yn (1)	scandal_yn (2)
Intercept	0.654* (0.018)	0.615* (0.018)
Org. Founded: Lilongwe	−0.032* (0.014)	−0.038* (0.014)
Org. Founded: Capital of South Africa	−0.063* (0.014)	−0.057* (0.014)
Org. Founded: Western Donor Capital	−0.027 (0.014)	−0.025 (0.014)
Leader Former: Carpenter	−0.113* (0.017)	−0.041* (0.018)
Leader Former: Laborer	−0.098* (0.017)	−0.048* (0.017)
Leader Former: Business Owner	0.014 (0.017)	−0.017 (0.017)
Leader Former: Bureaucrat	−0.059* (0.017)	−0.053* (0.018)
Leader Former: Politician	−0.116* (0.017)	−0.103* (0.017)
Funding From: Malawian Government	0.004 (0.015)	−0.004 (0.016)
Funding From: South African Government	−0.019 (0.016)	0.002 (0.016)
Funding From: Chinese Government	−0.013 (0.016)	0.018 (0.015)
Funding From: Western Government	−0.015 (0.016)	0.002 (0.016)
Org. Connected to Pol. Party	−0.105* (0.010)	−0.089* (0.010)
Observations	10,067	10,007
R ²	0.024	0.014
Adjusted R ²	0.023	0.013
Residual Std. Error	0.494 (df = 10053)	0.497 (df = 9993)
F Statistic	18.994* (df = 13; 10053)	10.772* (df = 13; 9993)

Note:

*: $p < 0.05$

Scandal and Meeting Question Comparison Plot

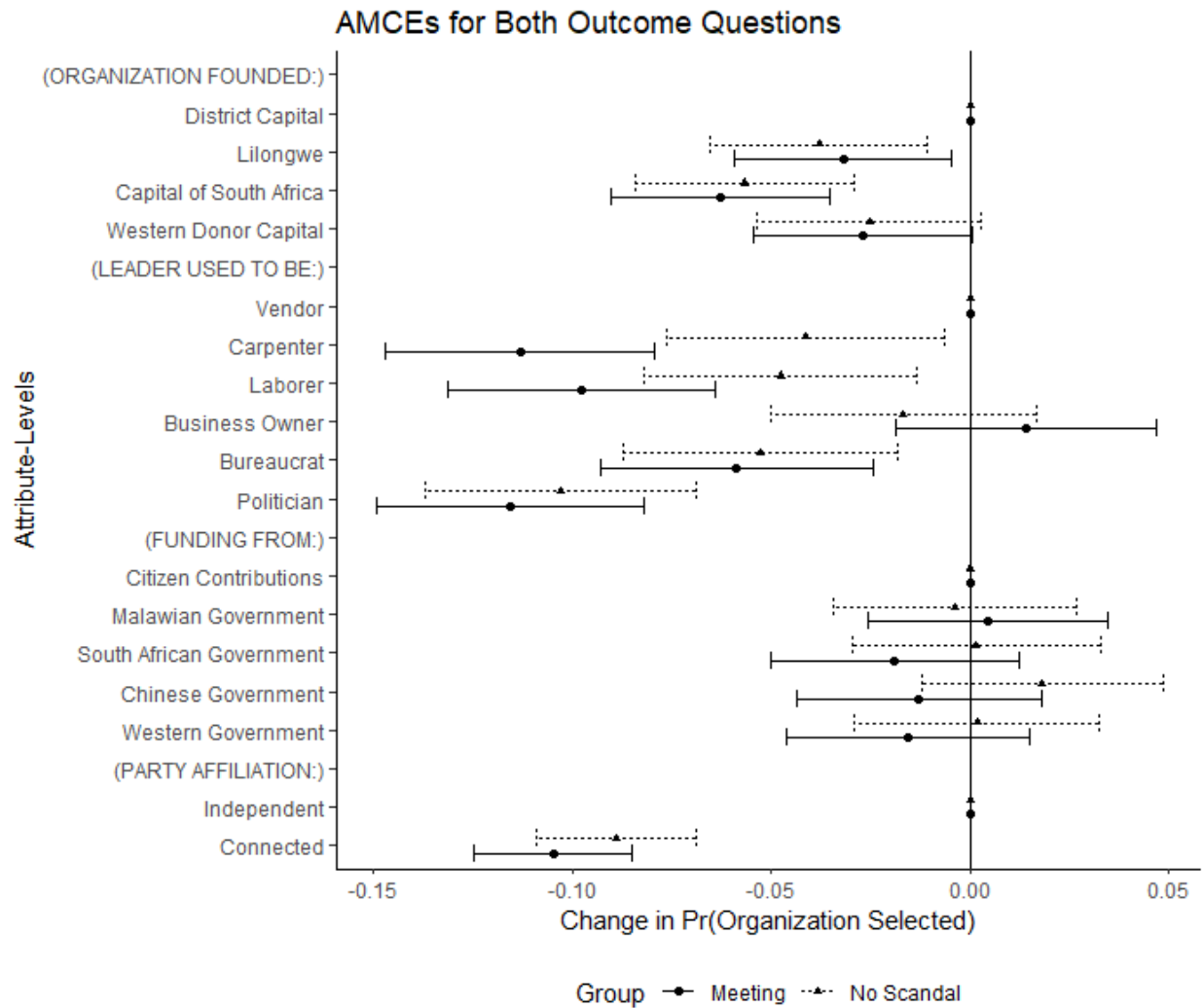


Figure C1: AMCE Plots for Both Outcome Measures. Models 1 and 2 from the above table were used for this plot. Dots without error bars represent the baseline level for that attribute.

D Subgroup Analyses

I performed subgroup analysis using marginal means (Leeper, Hobolt and Tilley, 2020; Leeper, 2018). I find little support that there is heterogeneity by NGO apathy or community organization membership. The hypotheses specified in my pre-analysis plan are thereby not supported by these data.

Community Organization Member

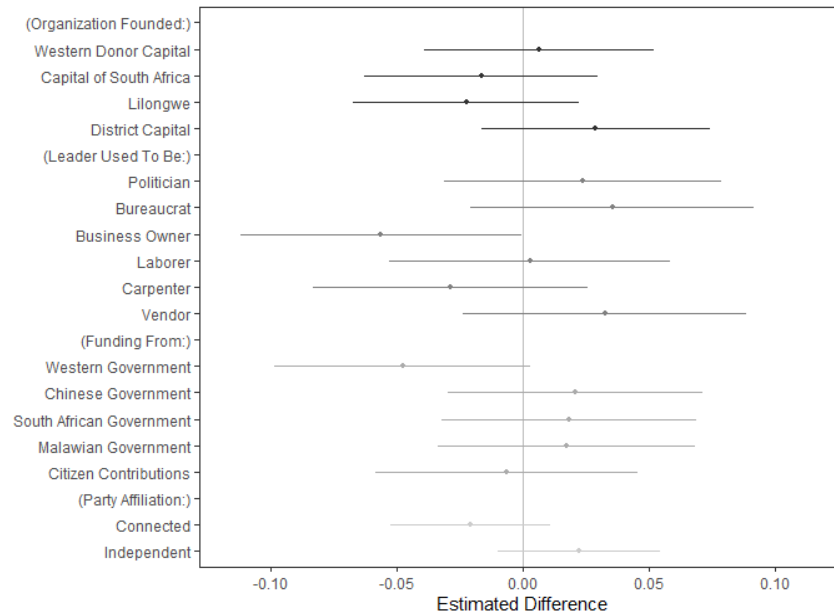
Table D1: Community Organization Membership: Are you a member of a community organization?

	Yes	No	Refused to Answer
Number of Respondents	1914	616	1
Proportion of Respondents	.756	.243	.000395

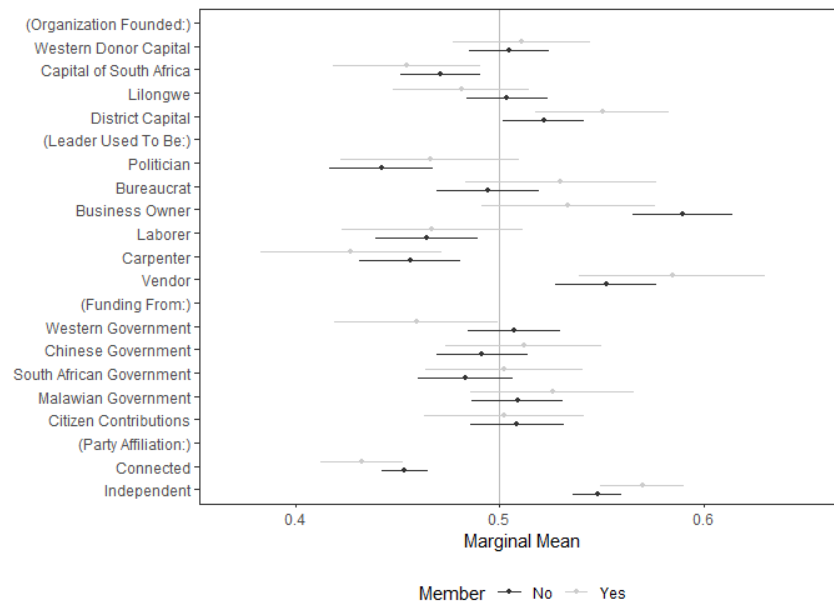
Meeting Question

Figure D1: Marginal Means Plots for Members and Non-Members of Community Organization, Meeting Question. ANOVA test: $F = 1.4921$, $p = 0.1047$.

(a) Difference between Members and Non-Members



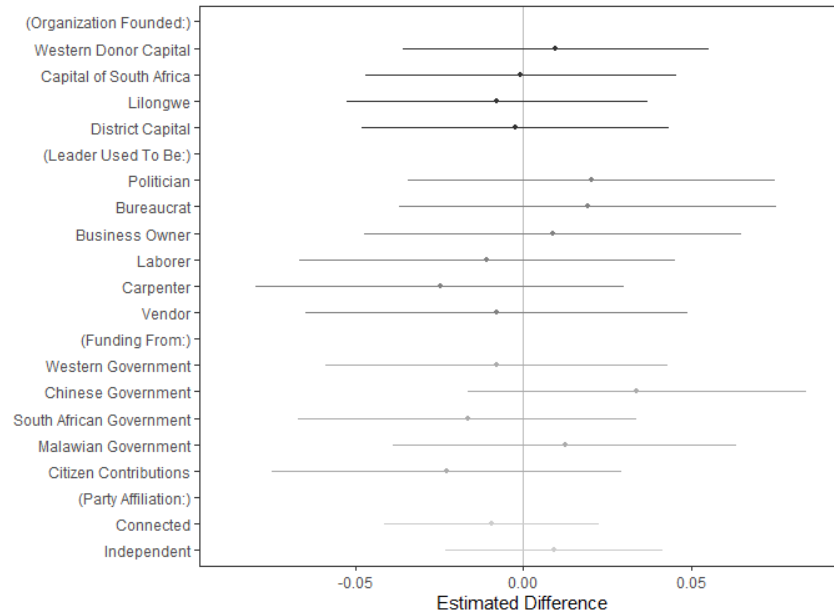
(b) Marginal Means by Members and Non-Members



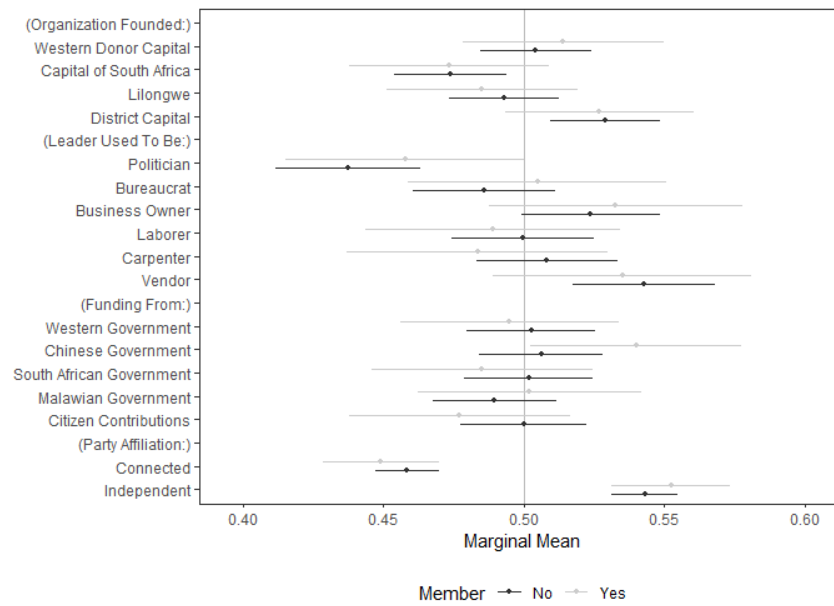
Scandal Question

Figure D2: Marginal Means Plots for Members and Non-Members of Community Organization, Scandal Question. ANOVA test: $F = 0.4465$, $p = 0.9597$.

(a) Difference between Members and Non-Members



(b) Marginal Means by Members and Non-Members



NGO Apathy

Table D2: NGO Apathy: When nongovernmental organizations work on our behalf, we need to do less work ourselves to get the government to listen to us.

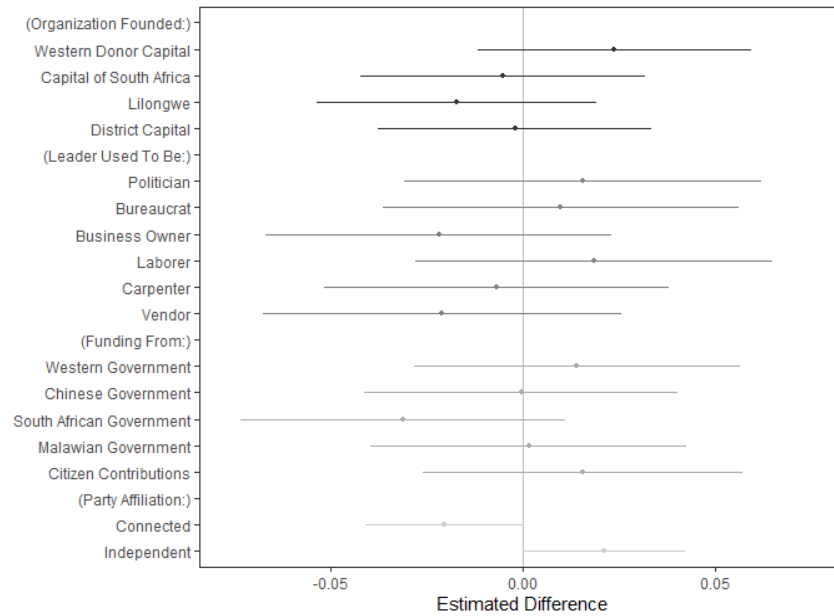
	Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree	Refused to Answer
Number of Respondents	502	370	658	996	5
Proportion of Respondents	.198	.146	.260	.393	.00198

For the purposes of this subgroup analysis, individuals were divided into “Agree” and “Disagree” (interpreted as ”Not Apathetic” and ”Apathetic”).

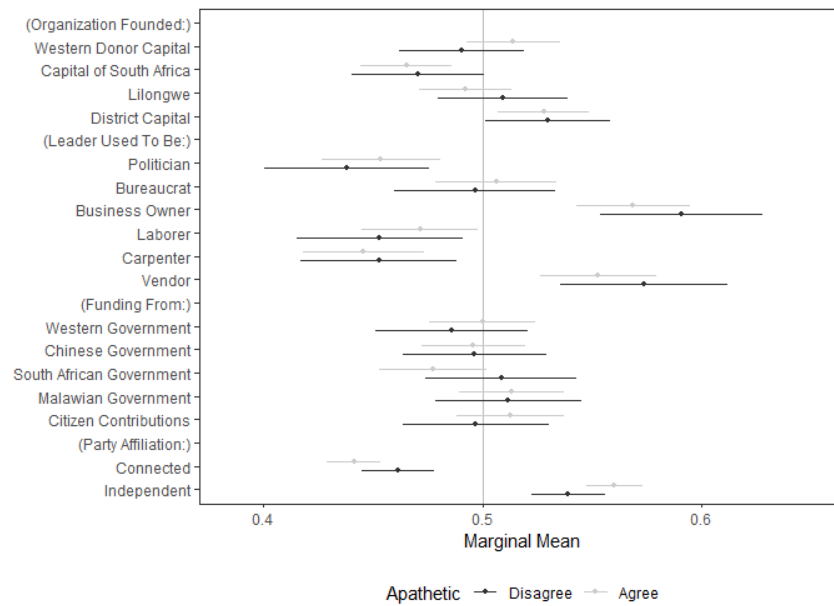
Meeting Question

Figure D3: Marginal Means Plots for Agree and Disagree to NGO Apathy Question, Meeting Question. ANOVA test: $F = 0.7148$, $p = 0.7616$.

(a) Difference between Disagree and Agree



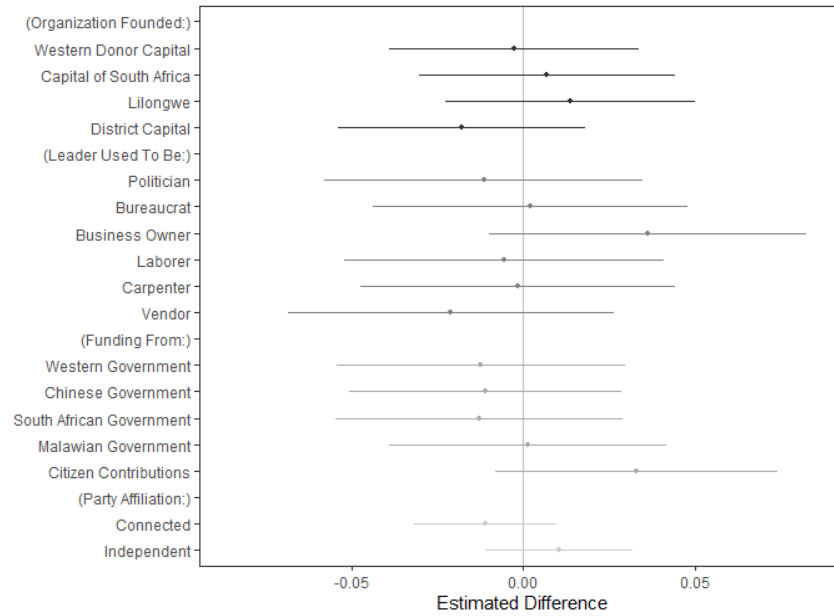
(b) Marginal Means by Agree and Disagree



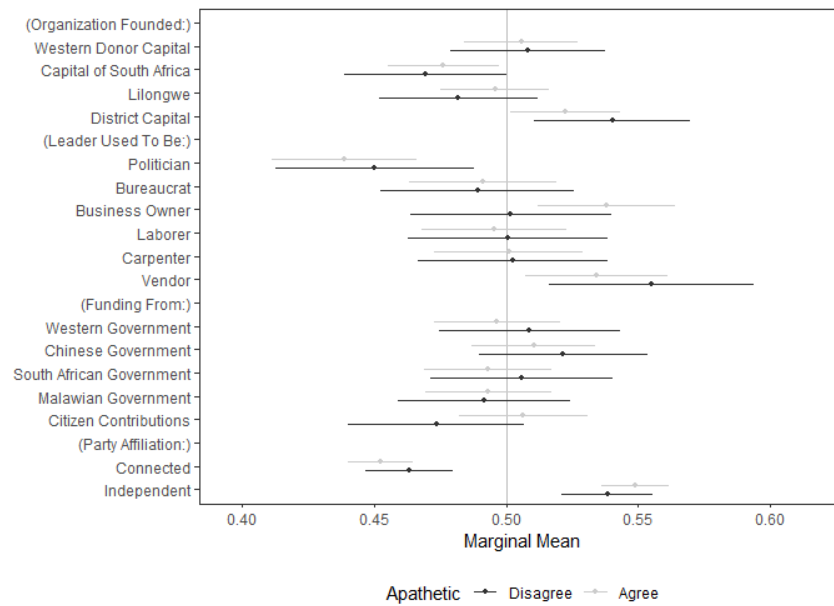
Scandal Question

Figure D4: Marginal Means Plots for Agree and Disagree to NGO Apathy Question, Scandal Question. ANOVA test: $F = 0.617$, $p = 0.8534$.

(a) Difference between Disagree and Agree



(b) Marginal Means by Agree and Disagree



E Interaction Analysis Using Causal ANOVA

The Causal ANOVA returned no three-way interactions for the scandal question, but did return a three-way interaction for the meeting question, between *Organization Founded*, *Leader's Former Profession*, and *Funding* (Egami and Imai, 2018). However, only 9 of the possible 119 individual effects were statistically different from 0. For the meeting question, it returned two-way interactions between *Organization Founded* and *Leader's Former Profession*, *Funding*, and *party*, as well as between *Leader's Former Profession* and *Funding*. For the scandal question, it returned two-way interactions between *Organization Founded* and *Leader Former's Profession*, *Funding*, and *Party Connection Status*. However, as tables E1 and E2 for the meeting question, and E3 for the scandal question show, almost none of the level combinations are significantly different from the baseline. This suggests that there is limited evidence for an interactive effect between attributes, although it is possible that power issues may arise due to multiple comparisons. All in all, the hypothesis specified in my pre-analysis plan does not find support here.

Factor	Level1	Level2	base	AMIE	Std.Err	2.5%CI	97.5%CI
capital:leader_frmr_prof	Western_Donor	politician		0.04	0.04	-0.03	0.12
capital:leader_frmr_prof	South_Africa	politician		-0.03	0.04	-0.10	0.04
capital:leader_frmr_prof	Lilongwe	politician		0.03	0.04	-0.04	0.11
capital:leader_frmr_prof	District_Capital	politician		0.02	0.04	-0.06	0.10
capital:leader_frmr_prof	Western_Donor	bureaucrat		0.00	0.04	-0.07	0.08
capital:leader_frmr_prof	South_Africa	bureaucrat		0.03	0.04	-0.05	0.10
capital:leader_frmr_prof	Lilongwe	bureaucrat		0.04	0.04	-0.03	0.11
capital:leader_frmr_prof	District_Capital	bureaucrat		0.00	0.04	-0.08	0.09
capital:leader_frmr_prof	Western_Donor	business_owner		0.01	0.04	-0.07	0.08
capital:leader_frmr_prof	South_Africa	business_owner		-0.00	0.04	-0.08	0.07
capital:leader_frmr_prof	Lilongwe	business_owner		0.01	0.04	-0.06	0.08
capital:leader_frmr_prof	District_Capital	business_owner		0.06	0.04	-0.03	0.14
capital:leader_frmr_prof	Western_Donor	laborer		-0.04	0.04	-0.12	0.03
capital:leader_frmr_prof	South_Africa	laborer		0.06	0.04	-0.01	0.13
capital:leader_frmr_prof	Lilongwe	laborer		0.04	0.04	-0.03	0.12
capital:leader_frmr_prof	District_Capital	laborer		0.01	0.04	-0.07	0.09
capital:leader_frmr_prof	Western_Donor	carpenter		0.01	0.04	-0.06	0.08
capital:leader_frmr_prof	South_Africa	carpenter		0.01	0.04	-0.06	0.08
capital:leader_frmr_prof	Lilongwe	carpenter		0.03	0.04	-0.04	0.11
capital:leader_frmr_prof	District_Capital	carpenter		0.01	0.04	-0.07	0.10
capital:leader_frmr_prof	Western_Donor	vendor		0.08	0.04	-0.01	0.17
capital:leader_frmr_prof	South_Africa	vendor		0.05	0.04	-0.04	0.13
capital:leader_frmr_prof	Lilongwe	vendor		-0.06	0.05	-0.15	0.03
capital:leader_frmr_prof	District_Capital	vendor	***	0.00	0.00	0.00	0.00
capital:funding	Western_Donor	Western_gov		-0.00	0.03	-0.07	0.06
capital:funding	South_Africa	Western_gov		-0.03	0.03	-0.09	0.04
capital:funding	Lilongwe	Western_gov		-0.04	0.03	-0.10	0.02
capital:funding	District_Capital	Western_gov		-0.03	0.04	-0.11	0.05
capital:funding	Western_Donor	Chinese_gov		-0.04	0.03	-0.11	0.03
capital:funding	South_Africa	Chinese_gov		-0.00	0.03	-0.07	0.06
capital:funding	Lilongwe	Chinese_gov		0.00	0.03	-0.06	0.07
capital:funding	District_Capital	Chinese_gov		-0.06	0.04	-0.14	0.01
capital:funding	Western_Donor	South_African_gov		-0.04	0.03	-0.11	0.02
capital:funding	South_Africa	South_African_gov		-0.04	0.03	-0.10	0.02
capital:funding	Lilongwe	South_African_gov		0.00	0.03	-0.06	0.07
capital:funding	District_Capital	South_African_gov		-0.02	0.04	-0.10	0.05
capital:funding	Western_Donor	Malawian_gov		-0.02	0.03	-0.09	0.04
capital:funding	South_Africa	Malawian_gov		-0.03	0.03	-0.09	0.03
capital:funding	Lilongwe	Malawian_gov		-0.04	0.03	-0.10	0.03
capital:funding	District_Capital	Malawian_gov		-0.02	0.04	-0.09	0.06
capital:funding	Western_Donor	citizen_contr		-0.02	0.04	-0.10	0.06

Table E1: Causal ANOVA Analysis — Meeting Question, Pt. 1

Factor	Level1	Level2	base	AMIE	Std.Err	2.5%CI	97.5%CI
capital:funding	South_Africa	citizen_contr		-0.03	0.04	-0.10	0.05
capital:funding	Lilongwe	citizen_contr		-0.06	0.04	-0.14	0.02
capital:funding	District_Capital	citizen_contr	***	0.00	0.00	0.00	0.00
capital:party	Western_Donor	connected_to		-0.02	0.01	-0.05	0.01
capital:party	South_Africa	connected_to		0.01	0.01	-0.02	0.04
capital:party	Lilongwe	connected_to		0.00	0.01	-0.02	0.03
capital:party	District_Capital	connected_to		-0.00	0.02	-0.05	0.04
capital:party	Western_Donor	indep.of		0.02	0.02	-0.02	0.05
capital:party	South_Africa	indep.of		-0.02	0.02	-0.05	0.02
capital:party	Lilongwe	indep.of		-0.01	0.02	-0.05	0.03
capital:party	District_Capital	indep.of	***	0.00	0.00	0.00	0.00
leader_frmr_prof:funding	politician	Western_gov		-0.03	0.04	-0.11	0.06
leader_frmr_prof:funding	bureaucrat	Western_gov		-0.07	0.04	-0.15	0.01
leader_frmr_prof:funding	business_owner	Western_gov		-0.01	0.04	-0.09	0.08
leader_frmr_prof:funding	laborer	Western_gov		0.01	0.04	-0.08	0.09
leader_frmr_prof:funding	carpenter	Western_gov		-0.07	0.04	-0.16	0.01
leader_frmr_prof:funding	vendor	Western_gov		-0.04	0.05	-0.14	0.06
leader_frmr_prof:funding	politician	Chinese_gov		0.05	0.04	-0.03	0.14
leader_frmr_prof:funding	bureaucrat	Chinese_gov		-0.05	0.04	-0.13	0.04
leader_frmr_prof:funding	business_owner	Chinese_gov		-0.08	0.04	-0.17	0.00
leader_frmr_prof:funding	laborer	Chinese_gov		-0.07	0.04	-0.15	0.02
leader_frmr_prof:funding	carpenter	Chinese_gov		-0.03	0.04	-0.12	0.05
leader_frmr_prof:funding	vendor	Chinese_gov		-0.04	0.05	-0.14	0.06
leader_frmr_prof:funding	politician	South_African_gov		-0.05	0.04	-0.14	0.04
leader_frmr_prof:funding	bureaucrat	South_African_gov		0.01	0.04	-0.08	0.09
leader_frmr_prof:funding	business_owner	South_African_gov		-0.05	0.04	-0.14	0.03
leader_frmr_prof:funding	laborer	South_African_gov		-0.05	0.04	-0.14	0.03
leader_frmr_prof:funding	carpenter	South_African_gov		-0.03	0.04	-0.12	0.05
leader_frmr_prof:funding	vendor	South_African_gov		-0.03	0.05	-0.13	0.07
leader_frmr_prof:funding	politician	Malawian_gov		-0.04	0.04	-0.13	0.05
leader_frmr_prof:funding	bureaucrat	Malawian_gov		-0.03	0.04	-0.12	0.06
leader_frmr_prof:funding	business_owner	Malawian_gov		-0.05	0.04	-0.14	0.03
leader_frmr_prof:funding	laborer	Malawian_gov		-0.04	0.04	-0.12	0.05
leader_frmr_prof:funding	carpenter	Malawian_gov		0.02	0.04	-0.07	0.10
leader_frmr_prof:funding	vendor	Malawian_gov		-0.07	0.05	-0.16	0.02
leader_frmr_prof:funding	politician	citizen_contr		-0.11	0.05	-0.20	-0.01
leader_frmr_prof:funding	bureaucrat	citizen_contr		-0.04	0.05	-0.14	0.06
leader_frmr_prof:funding	business_owner	citizen_contr		0.02	0.05	-0.07	0.11
leader_frmr_prof:funding	laborer	citizen_contr		-0.03	0.05	-0.12	0.07
leader_frmr_prof:funding	carpenter	citizen_contr		-0.06	0.05	-0.15	0.04
leader_frmr_prof:funding	vendor	citizen_contr	***	0.00	0.00	0.00	0.00

Table E2: Causal ANOVA Analysis — Meeting Question, Pt. 2

Factor	Level1	Level2	base	AMIE	Std.Err	2.5%CI	97.5%CI
capital:leader_frmr_prof	Western_Donor	politician		0.00	0.04	-0.07	0.07
capital:leader_frmr_prof	South_Africa	politician		0.01	0.04	-0.06	0.08
capital:leader_frmr_prof	Lilongwe	politician		0.03	0.04	-0.04	0.11
capital:leader_frmr_prof	District_Capital	politician		0.05	0.04	-0.03	0.13
capital:leader_frmr_prof	Western_Donor	bureaucrat		-0.03	0.04	-0.10	0.05
capital:leader_frmr_prof	South_Africa	bureaucrat		0.04	0.04	-0.04	0.11
capital:leader_frmr_prof	Lilongwe	bureaucrat		0.03	0.04	-0.04	0.10
capital:leader_frmr_prof	District_Capital	bureaucrat		0.05	0.04	-0.04	0.13
capital:leader_frmr_prof	Western_Donor	business_owner		0.05	0.04	-0.02	0.13
capital:leader_frmr_prof	South_Africa	business_owner		0.00	0.04	-0.07	0.08
capital:leader_frmr_prof	Lilongwe	business_owner		0.01	0.04	-0.06	0.08
capital:leader_frmr_prof	District_Capital	business_owner		0.02	0.04	-0.07	0.10
capital:leader_frmr_prof	Western_Donor	laborer		0.01	0.04	-0.07	0.08
capital:leader_frmr_prof	South_Africa	laborer		0.03	0.04	-0.04	0.10
capital:leader_frmr_prof	Lilongwe	laborer		0.06	0.04	-0.02	0.13
capital:leader_frmr_prof	District_Capital	laborer		-0.00	0.04	-0.09	0.08
capital:leader_frmr_prof	Western_Donor	carpenter		0.06	0.04	-0.01	0.14
capital:leader_frmr_prof	South_Africa	carpenter		0.01	0.04	-0.06	0.09
capital:leader_frmr_prof	Lilongwe	carpenter		-0.01	0.04	-0.08	0.07
capital:leader_frmr_prof	District_Capital	carpenter		0.02	0.04	-0.06	0.10
capital:leader_frmr_prof	Western_Donor	vendor		0.03	0.04	-0.06	0.12
capital:leader_frmr_prof	South_Africa	vendor		0.05	0.04	-0.04	0.13
capital:leader_frmr_prof	Lilongwe	vendor		0.01	0.04	-0.08	0.10
capital:leader_frmr_prof	District_Capital	vendor	***	0.00	0.00	0.00	0.00
capital:funding	Western_Donor	Western_gov		0.04	0.03	-0.02	0.11
capital:funding	South_Africa	Western_gov		0.04	0.03	-0.02	0.11
capital:funding	Lilongwe	Western_gov		0.02	0.03	-0.04	0.08
capital:funding	District_Capital	Western_gov		0.02	0.04	-0.05	0.10
capital:funding	Western_Donor	Chinese_gov		0.05	0.03	-0.01	0.12
capital:funding	South_Africa	Chinese_gov		0.04	0.03	-0.02	0.11
capital:funding	Lilongwe	Chinese_gov		0.02	0.03	-0.04	0.09
capital:funding	District_Capital	Chinese_gov		0.01	0.04	-0.07	0.08
capital:funding	Western_Donor	South_African_gov		-0.01	0.03	-0.08	0.05
capital:funding	South_Africa	South_African_gov		0.04	0.03	-0.03	0.10
capital:funding	Lilongwe	South_African_gov		0.01	0.03	-0.05	0.08
capital:funding	District_Capital	South_African_gov		0.09	0.04	0.01	0.16
capital:funding	Western_Donor	Malawian_gov		0.06	0.03	-0.01	0.13
capital:funding	South_Africa	Malawian_gov		-0.00	0.03	-0.07	0.06
capital:funding	Lilongwe	Malawian_gov		0.03	0.03	-0.04	0.09
capital:funding	District_Capital	Malawian_gov		0.05	0.04	-0.03	0.12
capital:funding	Western_Donor	citizen_contr		0.01	0.04	-0.06	0.09
capital:funding	South_Africa	citizen_contr		0.04	0.04	-0.04	0.12
capital:funding	Lilongwe	citizen_contr		0.08	0.04	-0.01	0.16
capital:funding	District_Capital	citizen_contr	***	0.00	0.00	0.00	0.00
capital:party	Western_Donor	connected_to		0.01	0.01	-0.02	0.04
capital:party	South_Africa	connected_to		0.03	0.01	-0.00	0.05
capital:party	Lilongwe	connected_to		-0.01	0.01	-0.04	0.02
capital:party	District_Capital	connected_to		0.02	0.02	-0.02	0.07
capital:party	Western_Donor	indep_of		0.02	0.02	-0.02	0.06
capital:party	South_Africa	indep_of		-0.00	0.02	-0.04	0.04
capital:party	Lilongwe	indep_of		0.03	0.02	-0.00	0.07
capital:party	District_Capital	indep_of	***	0.00	0.00	0.00	0.00

Table E3: Causal ANOVA Analysis — Scandal Question

F Robustness Checks

This appendix presents the results of alternative specifications (including fixed effects by enumerator and market), different modeling assumptions (logit model), and analysis of results by organization pair.

OLS Models with Fixed Effects

Table F1: Linear Probability Models with Fixed Effects By Market and Enumerator. Baseline for ‘Founded’ variable is *District Capital*. Baseline for ‘Leader’s Former Profession’ variable is *Vendor*. Baseline for ‘Organization’s Funding Is From’ variable is *Contributions from Malawian Citizens*. Baseline for ‘Organization’s Party Connections’ variable is *Independent*.

	<i>Dependent variable:</i>	
	meeting_yn (1)	scandal_yn (2)
Intercept	0.707* (0.029)	0.640* (0.031)
Org. Founded: Lilongwe	−0.033* (0.014)	−0.039* (0.014)
Org. Founded: Capital of South Africa	−0.064* (0.014)	−0.058* (0.014)
Org. Founded: Western Donor Capital	−0.027 (0.014)	−0.026 (0.015)
Leader Former: Carpenter	−0.115* (0.018)	−0.042* (0.018)
Leader Former: Laborer	−0.100* (0.018)	−0.048* (0.018)
Leader Former: Business Owner	0.014 (0.017)	−0.017 (0.018)
Leader Former: Bureaucrat	−0.060* (0.018)	−0.054* (0.018)
Leader Former: Politician	−0.118* (0.018)	−0.105* (0.018)
Funding From: Malawian Government	0.004 (0.016)	−0.004 (0.016)
Funding From: South African Government	−0.019 (0.016)	0.002 (0.016)
Funding From: Chinese Government	−0.013 (0.016)	0.019 (0.016)
Funding From: Western Government	−0.016 (0.016)	0.001 (0.016)
Org. Connected to Pol. Party	−0.107* (0.010)	−0.090* (0.010)
Observations	10,067	10,007
R ²	0.024	0.014
Adjusted R ²	0.006	−0.005
Residual Std. Error	0.498 (df = 9880)	0.501 (df = 9820)
F Statistic	1.332* (df = 186; 9880)	0.753 (df = 186; 9820)

Note:

*: $p < 0.05$

Logit Models

Table F2: Regression Output for Logit Models without (1, 3), and with (2, 4) Fixed Effects, for Both Outcome Variables

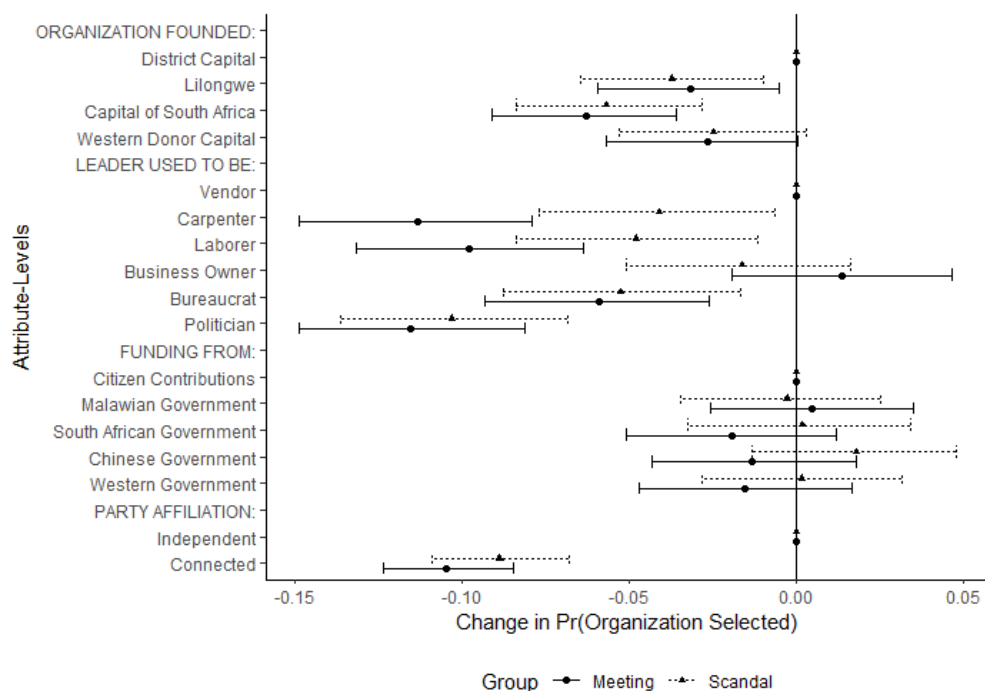
	<i>Dependent variable:</i>			
	meeting_yn		scandal_yn	
	(1)	(2)	(3)	(4)
Intercept	0.628* (0.075)	0.841* (0.119)	0.465* (0.075)	0.565* (0.128)
Org. Founded: Lilongwe	-0.131* (0.057)	-0.134* (0.059)	-0.154* (0.057)	-0.156* (0.058)
Org. Founded: Capital of South Africa	-0.257* (0.058)	-0.263* (0.059)	-0.230* (0.057)	-0.234* (0.059)
Org. Founded: Western Donor Capital	-0.110 (0.057)	-0.112 (0.059)	-0.102 (0.058)	-0.104 (0.060)
Leader Former: Carpenter	-0.461* (0.071)	-0.470* (0.073)	-0.167* (0.072)	-0.171* (0.074)
Leader Former: Laborer	-0.398* (0.070)	-0.405* (0.072)	-0.192* (0.071)	-0.195* (0.073)
Leader Former: Business Owner	0.058 (0.069)	0.060 (0.071)	-0.068 (0.069)	-0.068 (0.071)
Leader Former: Bureaucrat	-0.239* (0.071)	-0.244* (0.073)	-0.213* (0.071)	-0.217* (0.073)
Leader Former: Politician	-0.471* (0.070)	-0.479* (0.072)	-0.418* (0.071)	-0.424* (0.072)
Funding From: Malawian Government	0.018 (0.063)	0.018 (0.065)	-0.016 (0.063)	-0.017 (0.065)
Funding From: South African Government	-0.078 (0.065)	-0.080 (0.067)	0.006 (0.064)	0.006 (0.066)
Funding From: Chinese Government	-0.053 (0.064)	-0.053 (0.066)	0.074 (0.063)	0.075 (0.064)
Funding From: Western Government	-0.063 (0.064)	-0.065 (0.066)	0.007 (0.064)	0.006 (0.065)
Org. Connected to Pol. Party	-0.426* (0.042)	-0.434* (0.043)	-0.358* (0.042)	-0.364* (0.043)
Observations	10,067	10,067	10,007	10,007
Log Likelihood	-6,856.124	-6,853.632	-6,866.811	-6,865.543
Akaike Inf. Crit.	13,740.250	14,081.260	13,761.620	14,105.080

Note:

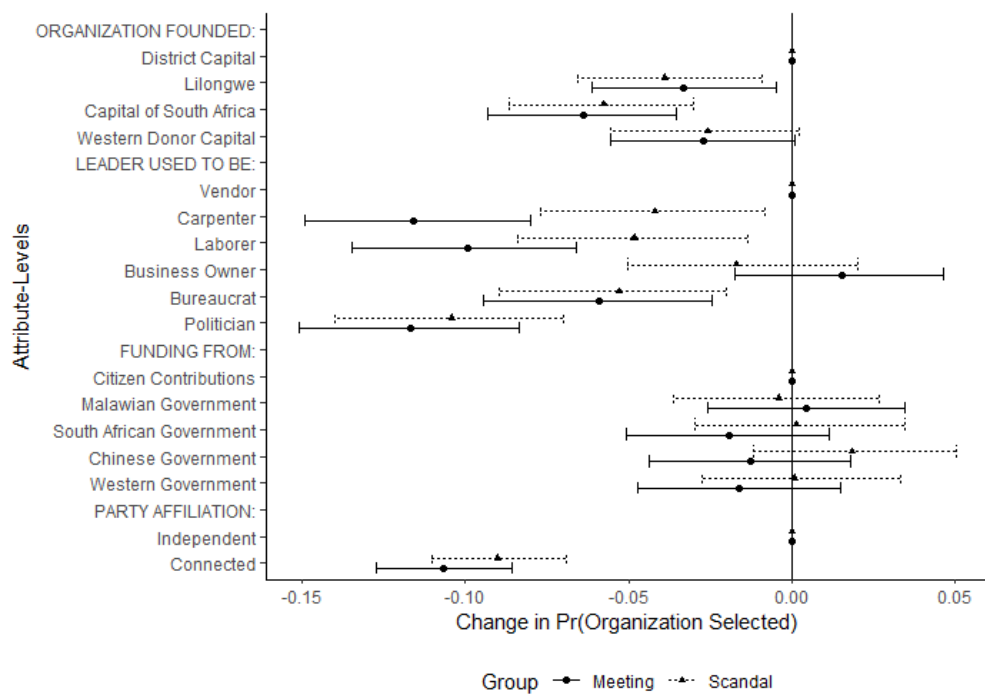
*: $p < 0.05$

Figure F1: Logit Results – 95% from Monte Carlo Simulation using Observed Case Approach

(a) Without Fixed Effects



(b) With Market and Enumerator Fixed Effects



Results Broken Down By Pair

I ran separate models by pair (first pair or second pair seen by respondent) as there was some evidence of satisficing for the first pair in the meeting question: 59.5% of respondents chose organization A for the meeting question in the first pair, and 53.5% of respondents chose organization A for the same question in the second pair; the respective percents for the scandal question are 49.6% and 50.4%.

OLS

Table F3: Linear Probability Models By Pair for Both Outcomes. Baseline for ‘Founded’ variable is *District Capital*. Baseline for ‘Leader’s Former Profession’ variable is *Vendor*. Baseline for ‘Organization’s Funding Is From’ variable is *Contributions from Malawian Citizens*. Baseline for ‘Organization’s Party Connections’ variable is *Independent*.

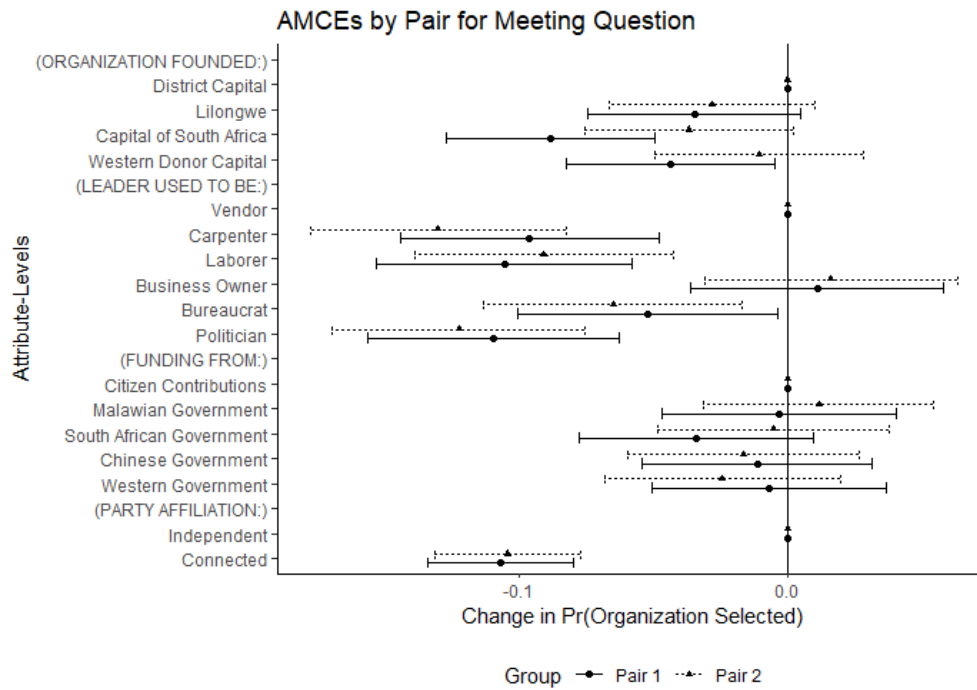
	<i>Dependent variable:</i>			
	meeting_yn		scandal_yn	
	Pair 1 (1)	Pair 2 (2)	Pair 1 (3)	Pair 2 (4)
Intercept	0.666* (0.026)	0.644* (0.025)	0.607* (0.025)	0.622* (0.025)
Org. Founded: Lilongwe	−0.035 (0.020)	−0.028 (0.020)	−0.040* (0.020)	−0.034 (0.020)
Org. Founded: Capital of South Africa	−0.088* (0.020)	−0.037 (0.020)	−0.053* (0.020)	−0.060* (0.020)
Org. Founded: Western Donor Capital	−0.043* (0.020)	−0.011 (0.020)	−0.036 (0.020)	−0.016 (0.020)
Leader Former: Carpenter	−0.096* (0.024)	−0.130* (0.024)	−0.042 (0.024)	−0.041 (0.024)
Leader Former: Laborer	−0.105* (0.024)	−0.091* (0.025)	−0.031 (0.025)	−0.065* (0.025)
Leader Former: Business Owner	0.011 (0.024)	0.016 (0.024)	−0.031 (0.024)	−0.003 (0.024)
Leader Former: Bureaucrat	−0.052* (0.025)	−0.065* (0.024)	−0.056* (0.025)	−0.051* (0.025)
Leader Former: Politician	−0.109* (0.024)	−0.122* (0.024)	−0.096* (0.024)	−0.111* (0.024)
Funding From: Malawian Government	−0.003 (0.022)	0.011 (0.022)	0.011 (0.022)	−0.017 (0.022)
Funding From: South African Government	−0.034 (0.022)	−0.005 (0.022)	0.004 (0.022)	−0.0004 (0.022)
Funding From: Chinese Government	−0.011 (0.022)	−0.017 (0.022)	0.035 (0.022)	0.002 (0.022)
Funding From: Western Government	−0.007 (0.022)	−0.024 (0.022)	0.025 (0.022)	−0.020 (0.022)
Org. Connected to Pol. Party	−0.107* (0.014)	−0.104* (0.014)	−0.094* (0.014)	−0.085* (0.014)
Observations	5,041	5,026	5,007	5,000
R ²	0.026	0.024	0.015	0.015
Adjusted R ²	0.023	0.022	0.012	0.012
Residual Std. Error	0.494 (df = 5027)	0.495 (df = 5012)	0.497 (df = 4993)	0.497 (df = 4986)

Note:

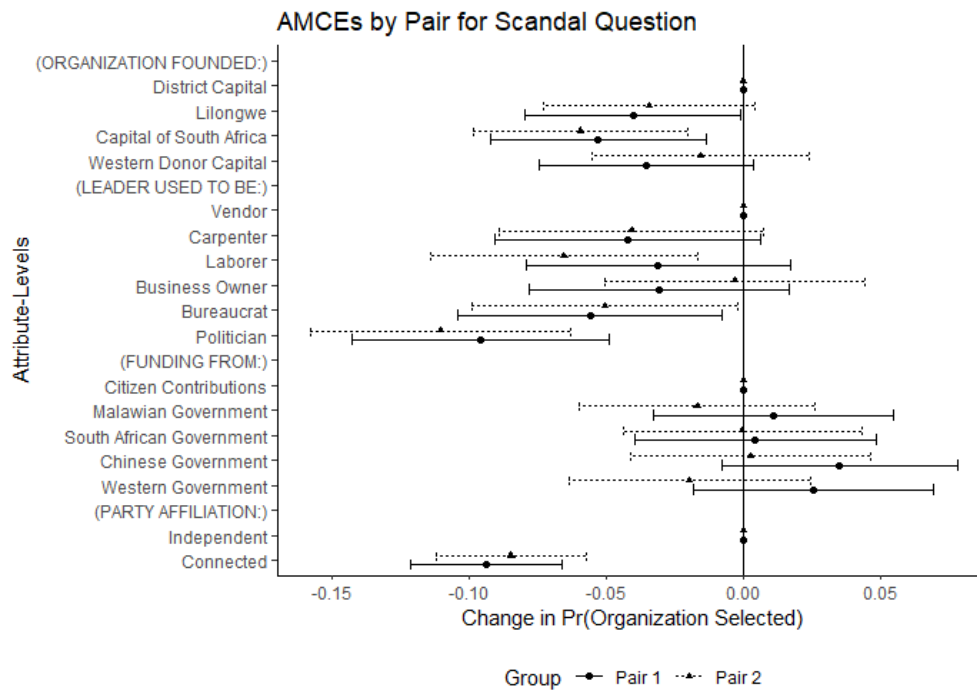
*: $p < 0.05$

Figure F2: AMCEs by Pair

(a) Meeting Question



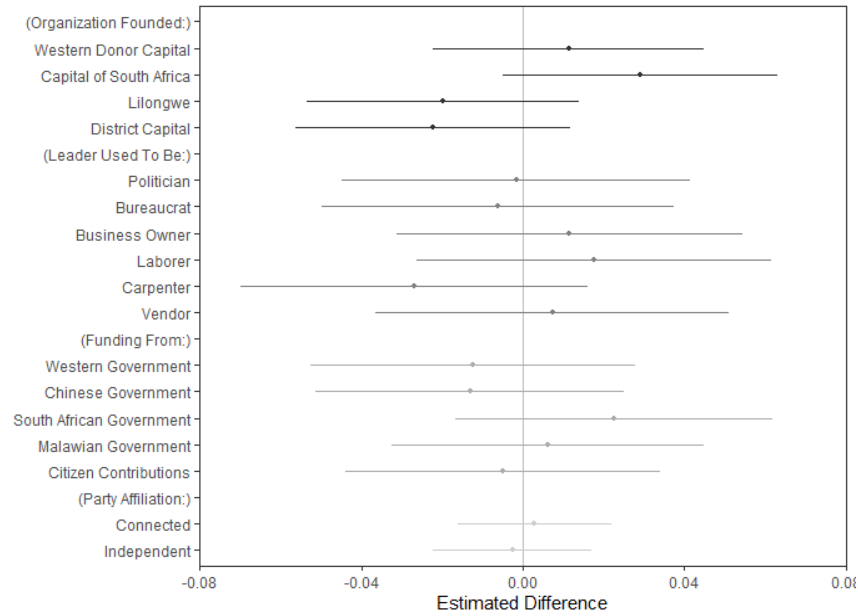
(b) Scandal Question



Marginal Means

Figure F3: Marginal Means Plots Pairs 1 and 2, Meeting Question. ANOVA test: $F = 0.675$, $p = 0.8011$.

(a) Difference Pair 2 and Pair 1



(b) Marginal Means by Pair 1 and Pair 2

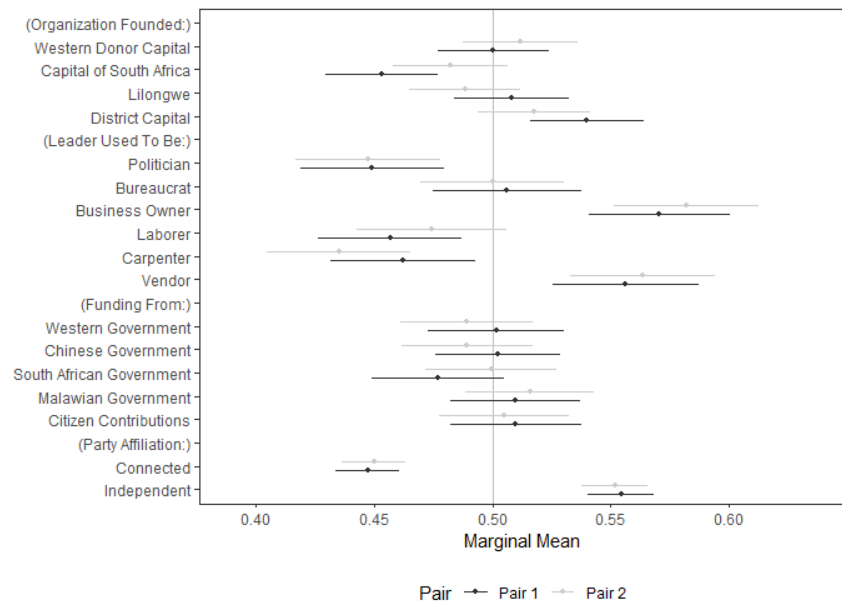
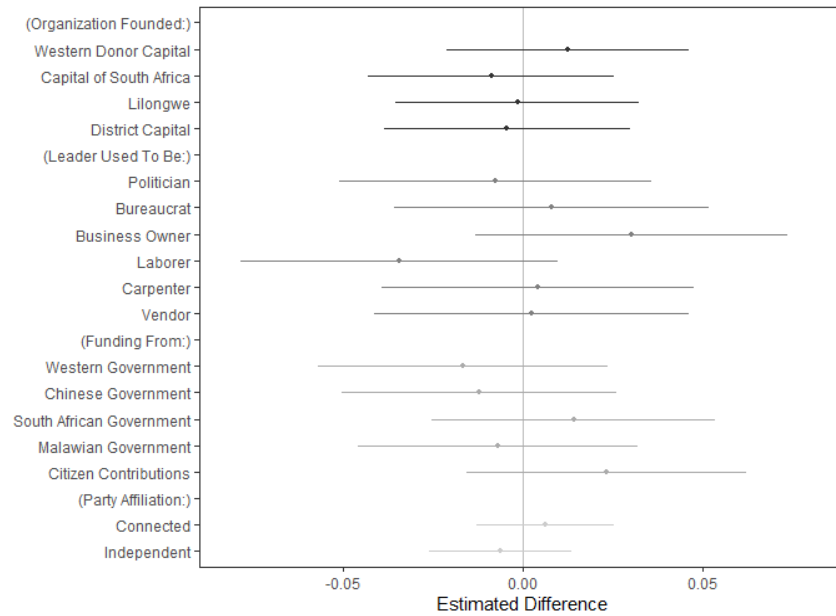
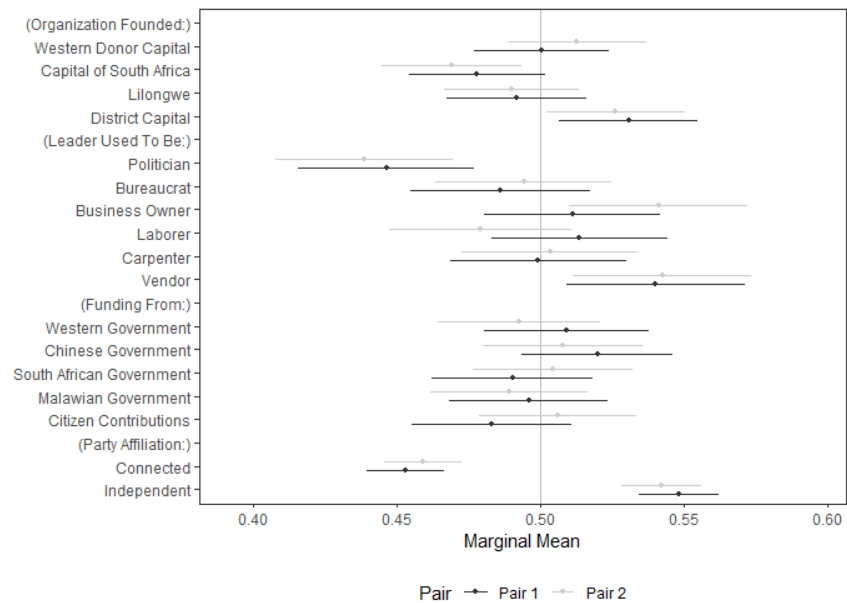


Figure F4: Marginal Means Plots Pairs 1 and 2, Scandal Question. ANOVA test: $F = 0.5593$, $p = 0.8979$.

(a) Difference Pair 2 and Pair 1



(b) Marginal Means by Pair 1 and Pair 2



G Summary Statistics

Variable	mean	sd	min	max
Female	0.31	0.46	0.00	1.00
Age	34.82	10.18	18.00	85.00
Literacy	0.85	0.36	0.00	1.00
Education	1.42	0.53	1.00	3.00
Household Income	82315.48	91786.46	2.00	600000.00
Service Stall	0.10	0.30	0.00	1.00
Sells Daily	0.31	0.46	0.00	1.00
Years in Market	6.58	6.34	0.00	50.00
Intends to Vote	0.87	0.34	0.00	1.00
Registered to Vote	0.88	0.32	0.00	1.00

Table G1: Summary Statistics for Sample

References

- Carroll, Thomas F. 1992. *Intermediary NGOs: The Supporting Link in Grassroots Development*. West Hartford, CT: Kumarian Press.
- Egami, Naoki and Kosuke Imai. 2018. “Causal Interaction in Factorial Experiments: Application to Conjoint Analysis.” *Journal of the American Statistical Association* 0(0):1–12.
- Hainmueller, Jens, Daniel J. Hopkins and Tepei Yamamoto. 2014. “Causal Inference in Conjoint Analysis: Understanding Multidimensional Choices via Stated Preference Experiments.” *Political Analysis* 22.
- Hoellerbauer, Simon. 2021. “Replication Data for: Why Join? How Civil Society Organizations’ Attributes Signal Congruence and Impact Community Engagement.” Harvard Dataverse, V1. doi:10.7910/DVN/O6NMGE.
- Leeper, Thomas. 2018. “cregg: Simple Conjoint Analyses and Visualization.” R package 0.3.0. <https://CRAN.R-project.org/package=cregg>.
- Leeper, Thomas J., Sara B. Hobolt and James Tilley. 2020. “Measuring Subgroup Preferences in Conjoint Experiments.” *Political Analysis* 28(2):207–221.

-
- Nelson-Núñez, Jami. 2019. "Substitution or Facilitation: Service-Delivery NGOs and Political Engagement in the Peruvian Amazon." *Comparative Political Studies* 52(3):445–477.
- Riley, Liam. 2014. "Operation Dongosolo and the Geographies of Urban Poverty in Malawi." *Journal of Southern African Studies* 40(3):443–458.
- Schwarz, Norbert, Fritz Strack and Hans-Peter Mai. 1991. "Assimilation and Contrast Effects in Part-Whole Question Sequences: A Conversational Logic Analysis." *Public Opinion Quarterly* 55(1):3–23.
- Tonda, Nanase and Thembela Kepe. 2016. "Spaces of Contention: Tension Around Street Vendors' Struggle for Livelihoods and Spatial Justice in Lilongwe, Malawi." *Urban Forum* 27:297–309.