Appendix

Contents

A Implementation and Design

A.1 Uganda and Ghana Survey Experiments (2014/2015)

A.1.1 Assignment to Treatment

Subjects were randomly assigned to treatment and control conditions in which they were provided with information about government revenue. While simple randomization would not lead to biased estimates in expectation, the presence of non-trivial differences in respondent experience with local government at the constituency-level presented an opportunity to improve the efficiency of the differences estimator through the use of a block randomization algorithm. This algorithm was designed such that, within our primary sampling unit and thus at all higher-level geographic units—including, importantly, the constituency—there was perfect (or, when the number of respondents was not divisible by four, near-perfect) balance between our experimental conditions.

The donation measure prompt was as follows:

A.1.2 Donation Prompt for 2014 Uganda and 2015 Ghana surveys

"There are several organizations in [Ghana/Uganda] that work to make it easier for ordinary [Ghanaians/Ugandans] to see how development funds are spent. At the beginning of the survey, we gave you [6 cedis/1,000 shillings] to compensate you for the time it has taken to answer our questions. Now, we would like to know if you would like to donate to one of those organizations. You may choose to donate to [Action Aid Ghana/Uganda, Transparency International Ghana/Uganda, or IMANI, a research organization that analyzes government budgets, policies and initiatives/a third organization of your choosing]. If you would like to donate, please give me the amount of money you would like to donate and which organization you would like to donate to. If you do donate, your money will be used to help reduce corruption and improve the lives of ordinary Ghanaians/Ugandans."

A.1.3 Index Construction

To investigate the effects of government revenues, we construct three separate indexes for the mass surveys, behavior, action, and expected benefits, and two indexes for the MP surveys, influence and expected benefits.

Our first index focuses on the actions citizens might take to monitor and sanction the government for its use of the revenues; Action includes questions about supporting and paying for an independent agency to monitor the government, signing a petition to create such an agency, sending an SMS about this petition, contacting their village elder or MP or local official if funds are used badly, and donating part of their incentive money for this agency. The second index involves whether and how much citizens think the revenues are likely to be misappropriated by the government; Misappropriation includes questions about the probability the funds are used for clientelism, whether subjects can see how the funds are spent, and whether their MP can see how they are spent. The third index tracks whether citizens believe the funds will be used to help the public versus helping political leaders and the government; Benefits includes questions about whether people believe the funds will be

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spread equally over the districts (versus concentrated in ruling government ones), whether the funds will benefit ordinary people like themselves, whether they will benefit their family, and whether they will benefit their community. We include the exact wording of individual questions in Section A 1.4 of the appendix.

A.1.4 Dependent Variables

We provide below the exact question wording for individual questions in each index:
Action Index

1. **Create Agency (post_createagency)**: An agency to do this could be created, but it would require all Ghanaians to pay special taxes in order to create it. Would you be willing to, HYPOTHETICALLY, pay a SMALL TAX so that this agency could be created? **1=Yes, 0=No**

2. **Willing to Send SMS (post_sms)**: Would you be willing to send an SMS saying that you would like to create an agency to track how the money from 0 will be spent? Your message will be presented along with other messages to your Member of Parliament. Standard SMS fees apply. You may send this message at your earliest convenience. Sending the message is entirely voluntary. ENUMERATOR: If they don't have a phone themselves, you can tell them that they can use a friend's phone. The important thing is that THE MESSAGE INCLUDE THE NUMBER YOU WROTE ON THE PAPER FOR THEM. Remember that you are only asking if they are willing to send the message, you are not forcing them to send it or standing there until they send it? **1=Yes, 0=No**

3. **Sent SMS (sms_sent)**: Indicator after post_sms for sms sent.

4. **Donated Binary (post_donate_bin)**: There are several organizations in Ghana that work to make it easier for ordinary Ghanaians to see how development funds are spent. At the beginning of the survey, we gave you 6 cedis to compensate you for the time it has taken to answer our questions. Now, we would like to know if you would like to donate to one of those organizations. You may choose to donate to Action Aid Ghana, Ghana Integrity Initiative (also known as Transparency International Ghana), IMANI, a research organization that analyzes government budgets, policies and initiatives. If you would like to donate, please give me the amount of money you would like to donate and which organization you would like to donate to. ENUMERATOR: How much money did the respondent GIVE you? You are to enter ONLY how much money the respondent has actually GIVEN you, not how much they say they are willing to donate. If they do not donate any money, type "0" as the answer. Also, make sure to let them know this is entirely voluntary. **1= donation greater than zero, 0 otherwise**

5. **Taxes Willing to Commit (Binary) (post_wtp_bin)**: How much would you be willing to pay PER MONTH in new taxes for this agency to be created? **1= donation greater than zero, 0 otherwise**

6. **Signed Petition (any) (post_sign_any)** ENUMERATOR: If the respondent signed the petition, how many signatures were on the petition when this respondent signed it? EUMERATOR: Enter -5 if the person did not sign the petition

7. **Pr(Contact Village Elder) (post_contact_elder)**: If the money is not spent on the things you think are most important, how likely are you to do each of the following. . . Contact local opinion leader. **1=Yes, 0=No**

8. **Pr(Contact Local Official) (post_contact_local)** If the money is not spent on the things you think are most important, how likely are you to do each of the following. . . Contact local opinion leader. **1=Yes, 0=No**

9. **Pr(Contact MP) (post_contact_mp)** If the money is not spent on the things you think are most important, how likely are you to do each of the following. . . Contact local opinion leader. **1=Yes, 0=No**

Expected Benefits Index

1. **Funds Benefit Family (post_help_family)**: How much do you think the money from 0 will help the following people? . . . **Your Family** (1=Not at all, 4 = A Lot)

2. **Funds Benefit Community (post_help_community)**: The money we mentioned before may be spent in many different ways. We are now going to ask you some questions about the revenue. After each, we would like to know if you think they are very likely to happen, somewhat likely to happen, not very likely to happen, or not at all likely to happen. . . . **The money will be spent on projects that will make ordinary people's lives better.** (1 = Very Likely, 5 = Likely)

3. **Funds Benefit Ordinary People (post_helppub)**: The money we mentioned before may be spent in many different ways. We are now going to ask you some questions about the revenue. After each, we would like to know if you think they are very likely to happen, somewhat likely to happen, not very likely to happen, or not at all likely to happen. **The money will be spent on projects that will make ordinary people's lives better** (1 = Very Likely, 5 = Likely)

4. **Funds Split Equally (post_where_spend_equal)** Now, we would like to ask you some questions about WHERE you think the money will be spent. Do you think it will spent: (1 == Equally among all Ghanaian / Ugandan districts). Binary variable.

Misappropriation Index

1. **Pr(Used for Clientelism) (post_rent)** The money we mentioned before may be spent in many different ways. We are now going to ask you some questions about the revenue. After each, we would like to know if you think they are very likely to happen, somewhat likely to happen, not very likely to happen, or not at all likely to happen . . . **Politicians will use the money to get people to vote for them.** (1 = Very Unlikely, 6 = Very Likely)

2. **Pr(Spending Hidden) (post_opaque)** This is the transformation of post_transparent that makes higher = less transparent, done to harmonize for misappropriation index. The money we mentioned before may be spent in many different ways. We are now going to ask you some questions about the revenue. After each, we would like to know if you think they are very likely to happen, somewhat likely to happen, not very likely to happen, or not at all likely to happen.... **People like me will be able to learn how it was spent**. (1 = Very Unlikely , 6 = Very Likely) (We inverse this coding for analysis)

3. **Pr(MP Observes Spending) (post_mpknow)** The money we mentioned before may be spent in many different ways. We are now going to ask you some questions about the revenue. After each, we would like to know if you think they are very likely to happen, somewhat likely to happen, not very likely to happen, or not at all likely to happen.... **My MP will know how this money is spent**. (1 = Very Unlikely, 6 = Very Likely)

A.2   Laboratory Games in Ghana and Uganda (2016/2017)

To test whether aid and oil generate different accountability pressures from citizens (Hypothesis 1), we designed a set of laboratory experiments based on those in Martin (2014)[1]. These lab experiments took place in Ghana in 2016 and in Uganda in January and June of 2017.[2] All games were single-shot and took place between one "citizen" and one "leader," with both roles played by ordinary Ghanaian or Ugandan citizens. The games all share the same basic structure. First, the Citizen receives an endowment of 5 monetary units (MU).[3] The Leader is then given a group fund of 10 MU that he must allocate between his own salary and the Citizen.[4] We interpret the group fund to be the government budget; hence, we are focusing on revenues that go directly to the government. Before the Citizen observes this decision, she must choose whether, for each possible allocation, she wishes to pay to punish the Leader. If punishment takes place, the Citizen pays 1 MU and the Leader loses 4 MU (no one gets the money lost in punishment). The Leader's allocation decision is then revealed, and any punishment is enacted. Following Martin, we make citizens perfectly efficacious; if they decide to punish, punishment occurs with certain probability. Citizens' willingness to punish is our measure of demand for accountability.

The key source of variation in the experiments is the source of the "group fund" given to the Leader; that is, the different types of revenues going directly to the government. The Aid and Oil conditions are our main treatments; each explicitly identifies the group fund as coming from "a foreign donor" or "oil." These source treatments are repeatedly emphasized in the the game scripts used by the enumerators as well as illustrated on game boards. During enumeration, enumerators place real coins representing the group fund on a source tile on

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[1]See Martin, Lucy. 2014. "Taxation, Loss Aversion, and Accountability: Theory and Experimental Evidence for Taxation's Effect on Citizen Behavior."Working Paper. Available from https://www.poverty-action.org/sites/default/files/publications/Martin_LossAv.pdf.41

[2]The Uganda experiment took place over two periods, but all reported conditions were identical, so results are pooled here. No significant differences in results occurred across the two study periods.

[3]One MU was set to 100 shillings (UGX) in Uganda, and 0.5 cedis (GHC) in Ghana.

[4]Calling the Leader's endowment the group fund signals that it is a shared resource.
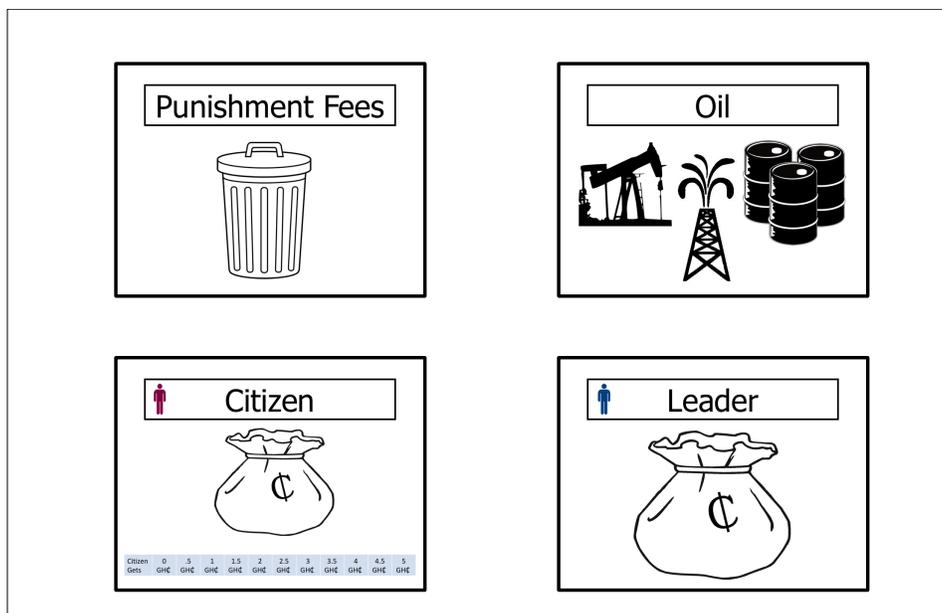
Figure A.1: Example Game Board, Oil Conditions. Game board for aid condition was identical in all respects except for the source tile. In the aid condition, the source tile included pictures of the flags for major aid-giving countries.

the game board, and verbally state the source, before moving the group fund to the Leader's tile. Note that the games are structurally equivalent; the only difference is the framing effect of describing the group fund as coming from aid or oil and illustrating the sources visually on the game board (see below). Note also that the aid goes directly into the government budget, so the experiment focuses on Citizens' views about state-to-state aid exclusively.

As this is a single-shot game, a citizen who is perfectly economically rational will never punish, as it is strictly costly. The unique subgame-perfect Nash equilibrium is thus for the Leader to offer 0 MU to the Citizen, who never punishes. If we observe positive levels of punishment, it must therefore be that respondents receive some kind of non-economic, expressive benefit from punishment.

A.2.1 Lab Outcome of Interest

Game Outcome. Our primary outcome in the experiments is the Citizen's punishment threshold; this allows us to test citizens' willingness to punish low transfers across revenue treatments. In each round, before seeing the Leader's allocation decision, each Citizen was asked – for each possible allocation of the group fund – whether he would pay the fee to punish the leader. Enumerators began by asking subjects playing the role of Citizen, "If the Leader kept 10 MU and passed you 0 MU," would they pay to punish? If the Citizen indicated he would punish, the enumerator proceeded to the next possible increment of transfer. Once the Citizen indicated he would no longer punish the leader for a given anticipated transfer, that transfer value was recorded as the Citizen's punishment threshold. For example, if the Citizen would punish when he was given 3 MU but not 4 MU, the punishment threshold is 4 MU.

Following Martin (2014)[5], our key outcome of interest is the punishment threshold. Higher thresholds indicate a higher willingness to punish, as Leaders must make larger transfers to avoid punishment. We interpret this as meaning the government must provide more public goods to avoid citizen punishment.

A.2.2 Implementation of Lab Experiments

Enumeration followed the same structure in Ghana and Uganda. In each location, we recruited subjects for sessions of approximately 16 respondents. Assignment to treatment was at the session level. At each session, subjects first saw a group training on the assigned treatment; this described the rules of the game and walked through examples using set visual illustrations. Respondents then met one-on-one with enumerators for a practice round, then completed five single-shot rounds of the game. Within each game session, we randomly assigned subjects to the role of citizen or leader at a ratio of 4-5 citizens per leader. In the first round, each citizen was randomly assigned to a play with a leader. During the game, each citizen received the transfer decided by the leader to whom he or she was assigned. Because each leader played with multiple citizens, one was selected to serve as the leader's pair, and his or her punishment threshold determined whether or not the leader was punished. In each proceeding round, the subjects' roles remained the same, but citizen-leader pairs were re-randomized. We repeatedly emphasized that pairs changed in between each round to ensure subjects understood that these were single-shot games.

In Ghana, subjects were recruited from 8 constituencies in the Greater Accra region and transported to a laboratory in Adabraka, a central zone in Accra. Subjects were recruited from randomly-chosen polling stations via random walk. Subjects were recruited one day prior to their participation and were transported from a central meeting place near the polling station to the field site at a time specified by the recruiters. In Uganda, subjects were recruited from two high-density, lower-income areas in urban Kampala. In each area an enumeration site was rented, typically in a hotel or guest house.[6] Each day, a local political ("LC1") unit was identified by the enumerators for mobilization from which 48 subjects were recruited for 3 sessions of 16 participants. A convenience sample was recruited from the LC1 unit.

A.3 Information Field Experiment in Uganda (2018)

One possibility for the null results in the 2014 and 2015 survey experiments is that the information treatments given were too weak to move behavior. Treatments were designed such that they closely mirrored the type and amount of information that subjects are likely to receive in the real world—through newspapers or radio, for example. Nonetheless, to explore the possibility that a stronger treatment could produce differences between aid and oil, we conducted a much stronger intervention in Uganda in 2018. Importantly, this intervention also included a pure control condition in which subjects received no information, enabling estimation of source-specific effects relative to a baseline condition.

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[5]Martin, Lucy. 2014. "Taxation, Loss Aversion, and Accountability: Theory and Experimental Evidence for Taxation's Effect on Citizen Behavior."Working Paper. Available from https://www.poverty-action.org/sites/default/files/publications/Martin_LossAv.pdf.41

[6]Areas used in Martin 2014 were excluded from consideration.

A.3.1 Implementation and Design

Our sampling strategy was a modified area probability sample in which we intentionally oversampled urban areas. We did so because our population of interest is those Ugandans who are the most likely to take political action. This choice makes our test harder since we pick a more knowledgeable and politically involved sample. We split our sample between municipalities—a special administrative designation reserved for urban areas—and non-municipalities. In each of ten districts, split across Uganda's four regions proportional to their respective shares of total population, we sampled one municipality and one non-municipality, both of which are considered counties, a mid-level administrative unit also referred to as LC4.

We included a pure control condition here. This treatment provided no information to respondents: they went straight from the pre-treatment questions to the outcome measures described below. Our two treatments for foreign aid and oil revenues were designed to test whether giving citizens more information about each revenue source, and helping them process the information, affects behavior.[7] We focused on state-to-state aid here, indicating to people that the aid was going directly to the government to spend. These information treatments have four steps. First, each of the two information treatments gives respondents information about the inflation-adjusted amount of [OIL/AID] money Uganda has received in the past 10 years. Second, these absolute amounts are broken down by village and by household, with the amount determined by the average village and average household size throughout all Uganda. This breakdown is presented as how much the government could have given to the average village/household if they had divided the money among all Ugandans, rather than spending it through the main budget. In this calculation, we assume a 15% overhead cost. Then, information is given about the projected amount of future [OIL/AID] revenues Uganda will receive. Finally, this information is gone over once verbally and then again using a board to help respondents understand and process the amounts. This makes the treatments much stronger than in our earlier surveys, reiterates their size and the government's control over them, and compares them to a pure control.

A.3.2 Dependent Variables

For our key outcomes, we used five measures. First, we invited subjects to write a message to a government official, Sent Message to Official. As part of our government approval to run the survey, we are required to send a report to district-level officials. We asked respondents if they would like to include an anonymous message in the report. If they wished to leave the message, we then gave them a chance to pick which official they wanted to receive their message, from a list of options. The higher the official was placed in government, from local to national, the greater the value for the outcome Sent Message to Official. Second, we asked them to sign up to get our survey results, Requested Report. Third, we gave them the ability to send an SMS message, Sent SMS, which would sign them up for a text message platform run by a local NGO dedicated to providing budget information. Our fourth measure involved a Donation. We invited them to donate money to a humanitarian or good-governance NGO. We informed subjects that we would donate 1,000 UGX on their behalf to

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[7]We had a third condition evoking tax revenues, but it is not included in this study.

one of two possible NGOs. The good-governance NGO was coded "1" and the humanitarian NGO "0." The voluntary choice avoided the possibility minor coercion that subjects would feel pressured to donate money we had recently given them by telling them we will donate on their behalf. Our fifth measure is an average of the non-missing items from the above four; we call this the Behavioral Index.

While our treatment is significantly stronger than in the 2014 and 2015 experiments, we nonetheless included an additional outcome designed to measure whether and to what extent our treatment is changing subjects' beliefs about the relative size and importance of the revenue source that is the subject of their treatment condition. As part of the post-treatment survey module, subjects engaged in a coin-based allocation task in which they were asked to distribute 10 coins into four baskets, each representing a major source of government revenue in Uganda (aid, oil, taxes and debt). The outcome of interest is the number of coins that subjects allocate to the revenue source that is the subject of the informational treatment. For ease of interpretation, we then normalize this value by 10 (the number of coins) such that the measure can be interpreted as subjects' belief about the relative size of each source as a proportion of the government budget. This measure allows us to assess whether subjects are updating their beliefs about the amount of revenue derived from the source given in the treatment. If they are doing so, any null results are unlikely to be the result of weak treatment.

A.3.3   Sampling strategy

Our sampling strategy was a modified area probability sample in which we intentionally oversampled urban areas. We did so because our population of interest is those Ugandans who are the most likely to take political action. The characteristics of this population have countervailing effects on their responsiveness to treatment. On the one hand, city-dwellers are more likely to be informed about government behavior, meaning that the informational content of the treatment will be less valuable. They may also have stronger feelings of ownership, making our ownership treatments less effective. On the other hand, urban citizens tend to be wealthier, better-educated and more efficacious, making it more likely that they are willing to take costly political action and that they would believe it is valuable to do so.

The effect of the treatment on more rural respondents is also of interest. As such, we split our sample between municipalities—a special administrative designation reserved for urban areas—and non-municipalities. In each of ten districts, split across Uganda's four regions proportional to their respective shares of total population, we sample one municipality and one non-municipality, both of which are counties. In the urban county (e.g. the municipality), our sampling frame is the universe of polling stations present in the 2016 elections. We then bin polling stations into quartiles according to the number of registered voters. In municipalities, we draw 8 polling stations, taking 2 from each quartile to ensure that we cover the polling-station size distribution, which is highly correlated with an area's level of urbanization. In non-municipalities we draw 4 polling stations, one from each quartile. Sampling at the PSU level is random walk starting from the polling station.

Respondents were selected according to their head-of-household status, with the goal of an approximately equal split between head of households and non-head of households. We define head of households for our purposes to be the male or female that is responsible for

making financial decisions and/or handles household expenditures. Actual sampling is done using respondent cards, which are one of these two types and are shuffled at the start of each day. The remaining one-half of the sample is non-household heads, which are selected randomly after a full enumeration of all qualified residents of the household.

B   Pre-Registration

Research designs and pre-analysis plans (PAPs) for all of the experiments were deposited in the Evidence in Governance and Politics registry (at egap.org) before researcher access to outcome data. Here, we discuss analytical choices and deviations between the PAPs and the results reported in the main text of the paper.

B.1   2014 and 2015 Survey Experiments

1. **Relabeling Indexes.** In the PAP, we referenced "the spending effect, the accountability effect, and the repression effect" as plausible causal mechanisms that may drive the resource curse. We relabeled these mechanisms here as, respectively, "benefit," "action," and "misappropriation." Action is the main reported outcome in the text. We altered the names in order to better capture the essences of the concepts and their associated indices, but the categories are consistent in intent.

2. **Hierarchy of Hypothesized Effects.** In the PAP, we pre-registered an expectation that aid funds to government would generate greater accountability-pressure actions among citizens compared to oil revenue. We also pre-registered that bypass aid through NGOs would generate the greatest amount of citizen action, followed by taxes, aid to governments, and then oil.

3. **Least Squares Regression Analysis.** The PAP included an ambiguity in the following statement: "We will supplement the difference-in-means results with robustness checks using logit and ordered probit regression analysis using standard demographic covariates as controls." Given that the main outcome of interest, action/accountability, is a continuous index, least-squares regression is the appropriate analysis tool rather than logit or ordered probit, which are instead appropriate for the individual items when analysis is disaggregated. For the sake of simplicity we also present here the least-squares results for individual items, but estimates are robust to the use of logit and ordered probit models.

4. **Index Construction.** In general, the items used to construct the Action index follow the anticipated items in the PAP with some exceptions, discussed here. For the Action index, we folded the planned Contact items into it to remain consistent with the rest of the PAP. All of the anticipated items are included save subjects' beliefs about the importance of tracking the funding, their self-reported propensity to march in a demonstration, or their self-reported likelihood to change which party they vote for.

   The Benefits index focuses on subjects' perceptions of the probability that the money would produce public goods generally, including the planned PAP items inquiring about perceptions that the revenue's anticipated effects on subjects' individual lives,

families and communities, and adding an item focused on perceptions that the benefits would be distributed equally among all citizens. The Benefits index omits the items for anticipated help to the government, the governing party, and the economy generally.

Finally, the Misappropriation index focused on possible use of the funds for clientelistic purposes and on tracking the money, including items for whether citizens believed the money would be used for politicians to buy votes in elections (clientelism), whether the spending would be hidden from citizens, and whether MPs can know how the money is spent. The index omits items focused on subject projections that funding will be used for repression, perceptions that the money will become a prize to be won, and perceptions that it will help opposition parties. Changes were made to the indexes from the pre-analysis plan because of ceiling effects detected in the omitted item or due to failure of the item to load consistently with the other items in the index construction.

B.2   2016 and 2017 Laboratory Experiments

1. **Hypotheses.** In the PAPs for the laboratory experiments, we reconsidered the ownership effects of windfalls and hypothesized that oil would produce stronger accountability effects than aid because most citizens believe they have a right to public benefits derived from the sale of oil extracted from national lands, whereas aid is more of a pure windfall. We also hypothesized that taxes would have stronger accountability effects than either oil or aid. These hypotheses were informed by the prior 2014 and 2015 survey experiments in which no differences between aid and oil were detected. Given that researcher expectations evolved after seeing results, we felt it prudent to list as our core hypothesis in this article the earliest pre-registered hypothesis from the 2014 PAP.

2. **Estimation.** For the 2016 Ghana lab experiment, we pre-registered the employment of randomization inference (RI) for estimation. RI is a non-parametric technique that makes no distributional assumptions about the test statistic but rather uses the known data on random assignment to consider all possible assignment vectors to construct a distribution that represents the range of potential treatment effects that might arise from chance alone. For ease of presentation and consistency, we have reported OLS estimates here. However, all results are fully consistent with and substantively indistinguishable from estimates derived from RI, which is to be expected with the larger samples employed here. For the June 2017 Uganda laboratory experiment, OLS was registered as the intended method for estimation with RI to check for robustness.

B.3   2018 Survey-Based Field Experiment

1. **Hypotheses.** In the 2018 information field experiment in Uganda, both the oil and aid treatment conditions are detailed, and we pre-registered an expectation aligned with the original 2014 survey experiment that subjects would have stronger expectations that they would benefit from aid compared to oil and that these expectations would result in stronger action for aid. Again, we determined that the most conservative choice would be to defer to the earliest pre-registered hypothesis from 2014.

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2. **Estimation.** Outcome measures focusing on accountability actions—sending a message to a government official, requesting information, and directing a donation—are analyzed here as pre-registered.

C   Additional Results

This section includes several additional sets of results that speak to potential internal validity concerns with each of the experiments. As in the maintext, we harmonize specifications wherever possible, including a vector of subject-level controls, enumerator fixed effects, and, in the case of the lab games, a lag of the previous round's transfer amount as well as round fixed effects. In some cases these specifications are different from those that were pre-registered, but because they include covariates and result in more precision will bias against a null finding.

C.1   Manipulation Test Results

One potential concern with the null results reported in the maintext is that low comprehension is driving treatment effects down to zero. To assess this possibility, this section reproduces Figures 1 and 2 using only those subjects who passed each experiments' respective manipulation test. In the 2014 and 2015 survey experiments in Uganda and Ghana, subjects were coded as passing the manipulation test if they could recall, without prompting, the exact source about which they had received information. This test came at the end of the post-treatment module and enumerators were instructed to provide no assistance nor read the answer options. In the 2016 and 2017 lab experiments, subjects were asked the source of the group fund at the beginning of a debrief survey conducted after gameplay had finished. The question wording gave them the four possible sources of the group fund — taxes, aid, oil or an unspecified grant — and asked them to choose among the options.

The 2018 survey experiment manipulation test was similar to those in administered in 2014 and 2015. Because the number of subjects passing the manipulation check in 2018 exceeds 95% in both treatment conditions, we omit reproducing the corresponding maintext table; results are available on request and nearly identical. Table C.1, below, gives the passage rates in both the oil and aid conditions in each of our included studies. Neither the substantive nor statistical conclusions of the maintext are meaningfully changed by subsetting only to those subjects who passed the manipulation check.

	Treatment Condition Pass Rate	
	Aid	Oil
Uganda 2014 Mass Survey Experiment	70.51%	65.49%
Ghana 2015 Mass Survey Experiment	76.32%	75.11%
Ghana July 2016 Lab Experiment	86.21%	81.35%
Uganda January 2017 Lab Experiment	95.65%	97.71%
Uganda June 2017 Lab Experiment	97.01%	97.18%
Uganda June 2018 Field Experiment	96.67%	95.07%

Table C.1: Manipulation Check Results
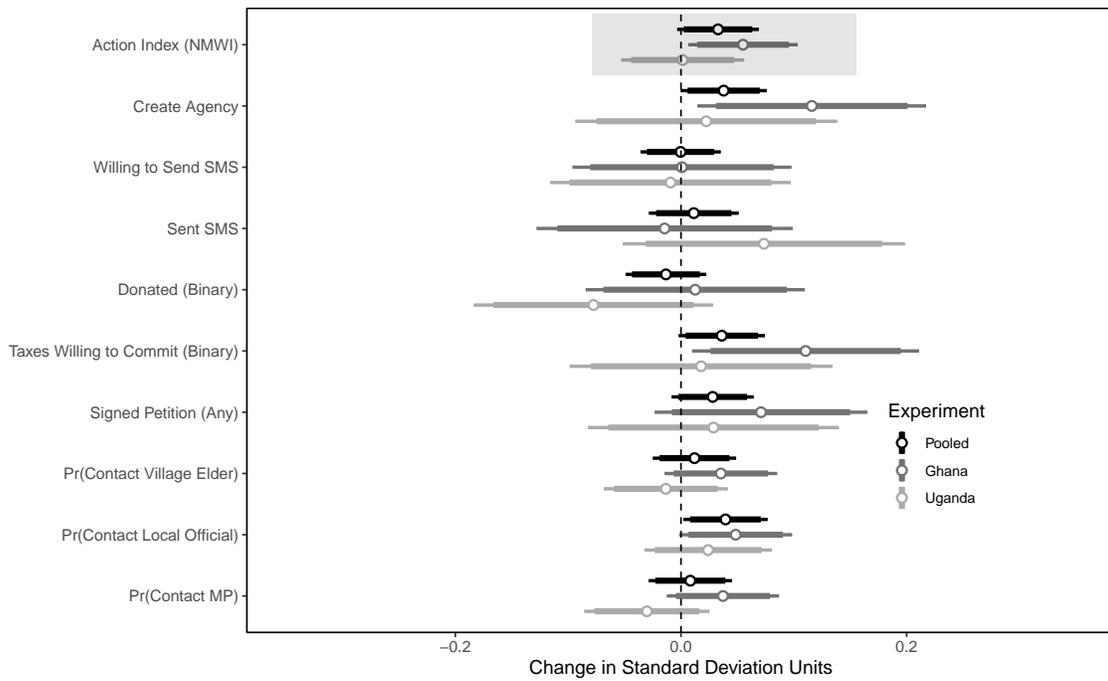
Figure C.2: Average Treatment Effect of Aid Relative to Oil in Action (Manipulation Check Passed) Index and Constituent Measures for the 2014 and 2015 Survey Experiments Estimates produced using ordinary least squares with binary treatment indicator, enumerator fixed effects and subject-level controls for age, education, gender, poverty and quality of local public goods.
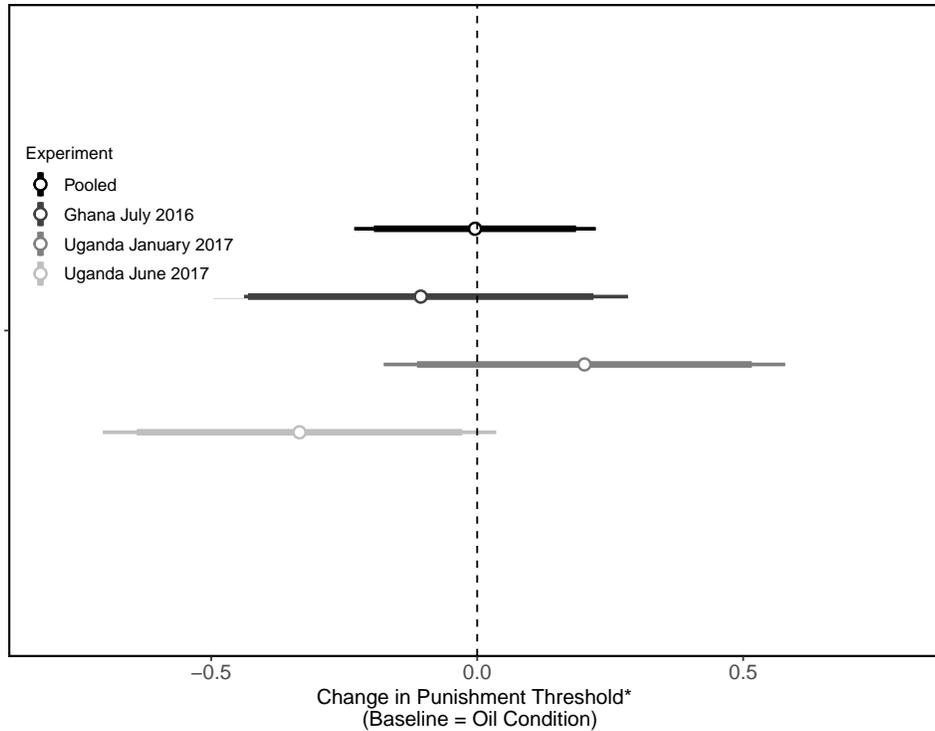
Figure C.3: Average Treatment Effect on Punishment Threshold of Being in Aid Condition (Manipulation Check Passed). All estimates produced via ordinary least squares that includes binary indicator taking 1 if subject was in Aid condition and 0 if in Oil condition. Controls for age, education, gender, poverty and quality of local public goods included alongside enumerator and round fixed-effects as well as a measure of size of the transfer received from the Leader in the previous round.

C.2 Main Tests and Mechanisms

C.2.1 Ghana and Uganda Survey Experiment (2014/2015)

Here, we include additional results on several items that ask about subjects' beliefs in the likelihood that they will benefit from spending coming from aid revenues (relative to oil), or that aid revenues are more likely to be misappropriated.
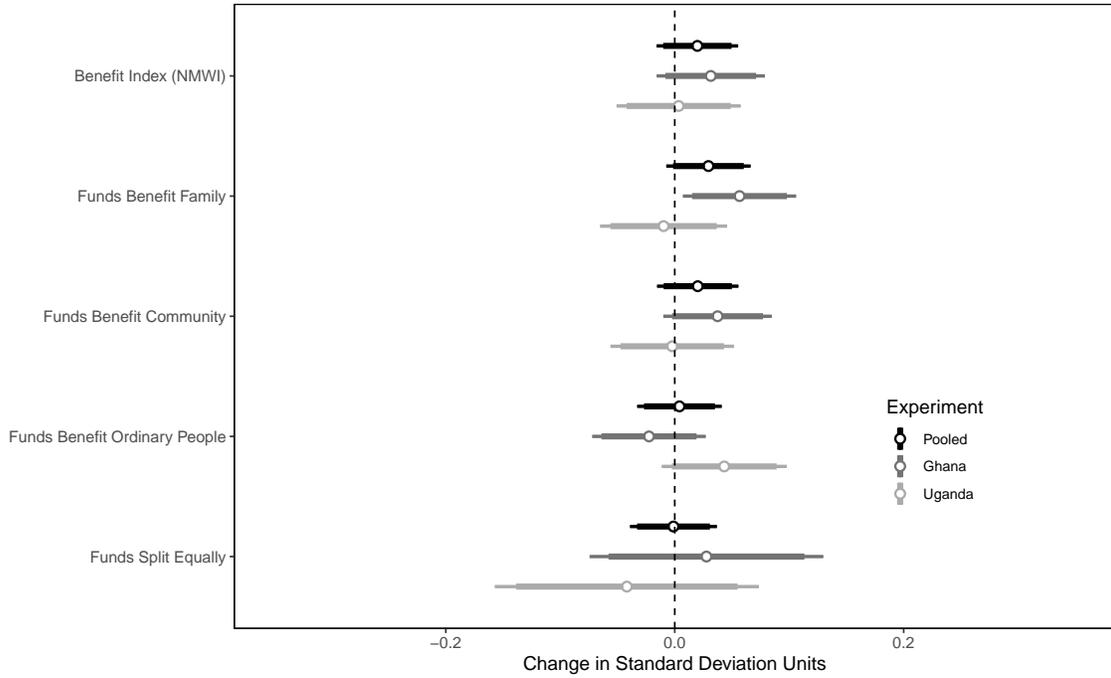
Figure C.4: Results from 2014/15 surveys showing the effect of each treatment on beliefs about who will benefit from aid and oil funds. The baseline category is oil; aid is the treatment group.
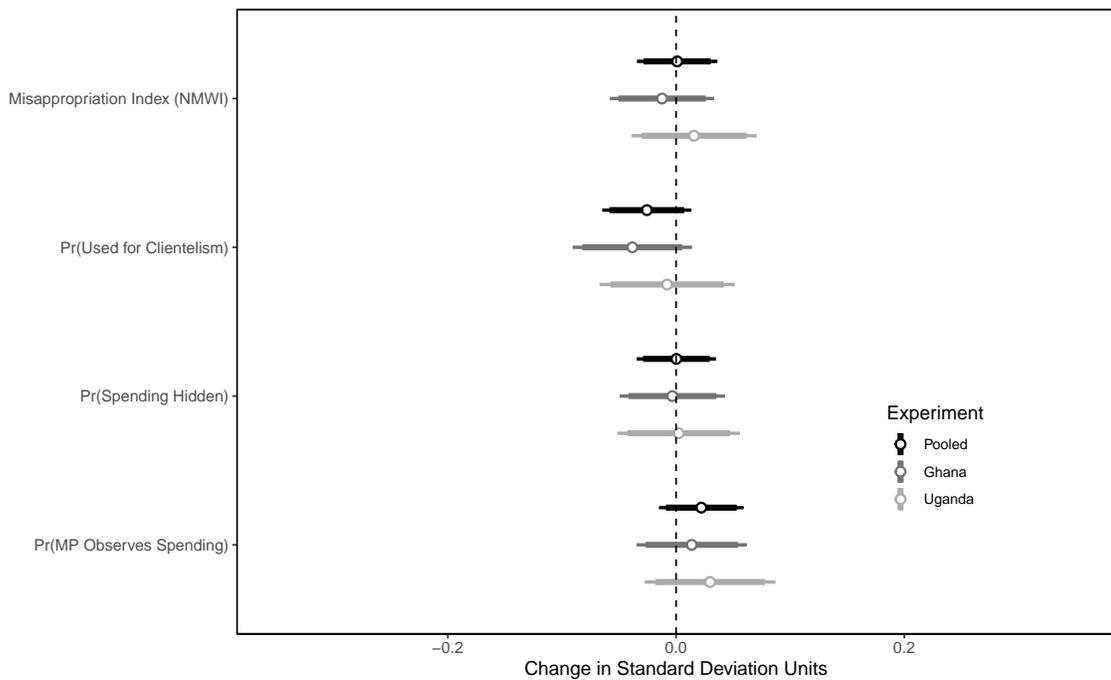
Figure C.5: Results from the 2014/15 surveys showing no differences in perceived levels of corruption and clientelism between the aid and oil treatments. Baseline category is oil.

The coefficient of interest is Aid, which represents the change in subjects' thresholds when the source of the group fund is derived from foreign aid that goes directly to the government budget compared to when it is derived from oil revenues. In both Ghana and Uganda, the substantively small and statistically insignificant coefficient demonstrates that subjects do not behave differently when the budget over which the Leader makes an allocation is derived from state-to-state aid rather than oil revenues.

C.2.2   Uganda Information Survey-Based Field Experiment (2018)

The top panel in Table C.2 reports treatment effects for our four behavioral measures and corresponding index. The bottom panel reports effects on subjects' posterior beliefs about each source's share of total government revenues; we also report the average proportion in the control conditions to facilitate substantive interpretation.

Despite the strengthened information treatments and more nuanced outcome measures, we find no significant differences between state-to-state aid and oil revenues in citizen's willingness to take action to make their leaders more accountable. And we find no differences from the control condition for either treatment, oil or aid. The one difference that shows up (but does not survive the multiple testing correction) is for sending an SMS, which is more likely for state-to-state aid than oil revenues.

Importantly, however, the lack of significant results on our behavioral measures is not due to a weak treatment. In the bottom panel, we report the difference in treatment subjects' beliefs about the share of the treatment source as a proportion of all government revenues compared to control subjects' beliefs. Examining the effects of the aid and oil treatments relative to the pure control condition (Columns 1 and 3, respectively), we find that subjects' beliefs about the treatment source's relative contribution to the budget increases by 3.1 percentage points in the aid condition and 4.0 percentage points in the oil condition relative to control. Compared to the average baseline proportion in the no-information control condition, this represents an increase of 11.2% and 17.1% respectively.

	Comparison:		
	Aid Treat-No Info Ctr	Aid Treat-Oil Ctr	Oil Treat-No Info Ctr
	(1)	(2)	(3)
Behavioral Measures			
Behavioral Index	0.003	-0.001	0.004
	(0.017)	(0.018)	(0.018)
Sent SMS	0.047	0.055*	-0.008
	(0.029)	(0.029)	(0.029)
Sent Message to Official	-0.045	-0.053	0.010
	(0.033)	(0.033)	(0.033)
Donation	-0.013	-0.029	0.013
	(0.033)	(0.033)	(0.033)
Request Report	0.017	0.022	-0.004
	(0.029)	(0.029)	(0.030)
Information Updating			
Aid as Share of Budget	0.031***	0.056***	-0.026***
	(0.009)	(0.008)	(0.008)
Oil as Share of Budget	-0.020**	-0.059***	0.040***
	(0.009)	(0.009)	(0.009)

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

Table C.2: Ordinary Least Squares Estimates for 2018 Uganda Information Treatments. Column 1 of the top panel gives the treatment effect of receiving information about past and future aid revenues compared to subjects who receive no information of any kind. Column 2 compares the Aid and Oil conditions. Column 3 compares the Oil condition with subjects who received no information. In the second panel, we estimate the effect of each information treatment on subjects' beliefs over each source's share of the government budget. The results are strongly significant and in the expected direction, suggesting that subjects are updating their beliefs in light of the information they receive.

C.3 Heterogeneous Effects

It is possible that the null results reported in the maintext are hiding substantial variation across certain ranges of theoretically important subgroups. In this section, we report the results of the same estimating procedure on several subsets of the data. For parsimony, we restrict our attention only to the main outcomes for each of the study: the behavioral indices and constituent measures used to measure political action in the 2014, 2015 and 2018 survey experiments and the punishment threshold used in the lab games. In selecting the covariates to examine for heterogeneous treatment effects, we chose covariates that were available for most of our experiments or that were especially theoretically relevant. We include these results in the tables below.

	Age 20-35	Age 35-50	Age 50+	High Ed.	Low Ed
Action Index (NMWI)	0.009	0.039	0.029	-0.010	0.016
	(0.025)	(0.028)	(0.036)	(0.051)	(0.016)
Create Agency	0.021	0.058**	-0.038	0.107**	0.014
	(0.027)	(0.029)	(0.039)	(0.051)	(0.017)
Willing to Send SMS	-0.023	0.014	0.000	-0.045	-0.005
	(0.026)	(0.029)	(0.037)	(0.050)	(0.017)
Sent SMS	0.001	0.043	0.005	-0.016	0.020
	(0.029)	(0.034)	(0.039)	(0.054)	(0.018)
Donated (Binary)	-0.019	0.003	0.065*	-0.045	0.000
	(0.025)	(0.028)	(0.036)	(0.050)	(0.016)
Taxes Willing to Commit (Binary)	0.014	0.070**	-0.028	0.099**	0.019
	(0.027)	(0.029)	(0.039)	(0.051)	(0.017)
Signed Petition (Any)	0.031	0.004	-0.013	0.025	-0.001
	(0.026)	(0.027)	(0.036)	(0.051)	(0.016)
Pr(Contact Village Elder)	0.014	-0.006	0.047	-0.075	0.011
	(0.026)	(0.029)	(0.038)	(0.055)	(0.017)
Pr(Contact Local Official)	0.038	0.028	0.062	-0.026	0.033**
	(0.026)	(0.030)	(0.038)	(0.053)	(0.017)
Pr(Contact MP)	-0.021	-0.024	0.073*	-0.050	-0.005
	(0.026)	(0.030)	(0.038)	(0.052)	(0.017)

$^{***}p < 0.01$, $^{**}p < 0.05$, $^{*}p < 0.1$

Table C.3: Pooled: Action Index, Aid Treatment-Oil Control, Het. Effects Results for 2014/15 survey experiments

	Female	Male	High Qual. Public Serv.	Low Qual. Public Serv.	Corrupt. High	Corrupt. Low
Action Index (NMWI)	0.006	0.025	-0.025	0.022	0.023	0.012
	(0.023)	(0.022)	(0.036)	(0.017)	(0.035)	(0.018)
Create Agency	0.022	0.030	0.016	0.018	0.031	0.022
	(0.024)	(0.023)	(0.039)	(0.018)	(0.038)	(0.019)
Willing to Send SMS	-0.022	-0.004	-0.052	0.006	0.011	-0.016
	(0.023)	(0.022)	(0.036)	(0.017)	(0.036)	(0.017)
Sent SMS	-0.008	0.023	-0.028	0.023	0.038	0.011
	(0.027)	(0.026)	(0.037)	(0.020)	(0.042)	(0.020)
Donated (Binary)	0.009	-0.021	-0.041	-0.001	0.020	-0.014
	(0.022)	(0.022)	(0.035)	(0.017)	(0.035)	(0.017)
Taxes Willing to Commit	0.025	0.036	0.024	0.020	0.044	0.023
(Binary)	(0.024)	(0.023)	(0.039)	(0.018)	(0.038)	(0.019)
Signed Petition (Any)	-0.003	0.009	-0.007	0.008	0.041	-0.003
	(0.022)	(0.022)	(0.036)	(0.017)	(0.036)	(0.018)
Pr(Contact Village Elder)	-0.014	0.022	-0.006	0.006	0.003	0.000
	(0.023)	(0.023)	(0.037)	(0.018)	(0.035)	(0.018)
Pr(Contact Local Official)	0.027	0.031	0.026	0.034^*	0.012	0.032^*
	(0.024)	(0.023)	(0.036)	(0.018)	(0.038)	(0.018)
Pr(Contact MP)	-0.004	-0.007	-0.038	-0.002	-0.075^{**}	0.011
	(0.023)	(0.023)	(0.037)	(0.018)	(0.037)	(0.018)

$^{***}p < 0.01$, $^{**}p < 0.05$, $^*p < 0.1$

Table C.4: Pooled: Action Index, Aid Treatment-Oil Control, Het. Effects Results for 2014/2015 survey experiments

	High Poverty	Low Poverty	Coethnic	Non-Coethnic
Action Index (NMWI)	0.023	0.015	0.123*	0.012
	(0.031)	(0.018)	(0.066)	(0.016)
Create Agency	0.036	0.022	0.084	0.021
	(0.035)	(0.019)	(0.080)	(0.017)
Willing to Send SMS	0.040	-0.017	0.033	-0.011
	(0.033)	(0.018)	(0.072)	(0.016)
Sent SMS	0.064*	0.002	0.093	0.009
	(0.037)	(0.020)	(0.068)	(0.018)
Donated (Binary)	-0.018	-0.007	-0.036	0.000
	(0.034)	(0.017)	(0.070)	(0.016)
Taxes Willing to Commit (Binary)	0.047	0.024	0.098	0.024
	(0.035)	(0.019)	(0.080)	(0.017)
Signed Petition (Any)	-0.006	0.013	0.073	0.000
	(0.032)	(0.018)	(0.058)	(0.016)
Pr(Contact Village Elder)	0.021	0.001	0.039	0.006
	(0.033)	(0.018)	(0.078)	(0.017)
Pr(Contact Local Official)	0.021	0.033*	0.209***	0.025
	(0.034)	(0.018)	(0.077)	(0.017)
Pr(Contact MP)	-0.055*	0.006	0.004	-0.010
	(0.033)	(0.018)	(0.072)	(0.017)

$^{***}p < 0.01$, $^{**}p < 0.05$, $^{*}p < 0.1$

Table C.5: Pooled: Action Index, Aid Treatment-Oil Control, Het. Effects Results for 2014/2015 experiment

	Ruling Party	Non Ruling Party	Oil Region	Non Oil Region
Action Index (NMWI)	0.021	0.012	0.034	0.010
	(0.021)	(0.022)	(0.047)	(0.017)
Create Agency	0.005	0.040*	0.032	0.018
	(0.023)	(0.023)	(0.052)	(0.018)
Willing to Send SMS	0.001	-0.011	-0.017	0.000
	(0.022)	(0.022)	(0.050)	(0.017)
Sent SMS	0.025	0.004	0.049	0.008
	(0.025)	(0.024)	(0.053)	(0.019)
Donated (Binary)	0.001	-0.006	-0.041	0.003
	(0.022)	(0.022)	(0.048)	(0.017)
Taxes Willing to Commit	0.012	0.040*	0.046	0.018
(Binary)	(0.023)	(0.023)	(0.053)	(0.018)
Signed Petition (Any)	0.010	0.000	0.020	-0.001
	(0.022)	(0.022)	(0.051)	(0.017)
Pr(Contact Village Elder)	0.014	-0.002	0.044	-0.005
	(0.022)	(0.023)	(0.052)	(0.018)
Pr(Contact Local Official)	0.036	0.027	0.035	0.027
	(0.023)	(0.023)	(0.052)	(0.018)
Pr(Contact MP)	0.007	-0.029	0.000	-0.012
	(0.022)	(0.023)	(0.050)	(0.018)

$^{***}p < 0.01, \,^{**}p < 0.05, \,^{*}p < 0.1$

Table C.6: Pooled: Action Index, Aid Treatment-Oil Control, Het. Effects Results for 2014/2015 survey

	Age 20-35	Age 35-50	Age 50+	High Ed.	Low Ed
Action Index (NMWI)	0.010	0.011	0.000	-0.086	0.015
	(0.035)	(0.042)	(0.066)	(0.066)	(0.025)
Create Agency	0.050	-0.036	-0.195	0.036	0.016
	(0.074)	(0.090)	(0.146)	(0.140)	(0.052)
Willing to Send SMS	-0.054	0.062	0.005	-0.177	0.017
	(0.068)	(0.086)	(0.130)	(0.121)	(0.049)
Sent SMS	0.012	0.280**	-0.021	-0.162	0.130
	(0.079)	(0.110)	(0.104)	(0.192)	(0.048)
Donated (Binary)	-0.063	-0.036	0.117	-0.123	-0.029
	(0.066)	(0.084)	(0.133)	(0.124)	(0.048)
Taxes Willing to Commit	0.028	-0.036	-0.141	0.035	0.008
(Binary)	(0.074)	(0.090)	(0.142)	(0.138)	(0.053)
Signed Petition (Any)	0.108	-0.029	-0.064	0.040	0.012
	(0.072)	(0.084)	(0.149)	(0.124)	(0.051)
Pr(Contact Village Elder)	0.003	-0.047	0.061	-0.110	0.001
	(0.035)	(0.041)	(0.071)	(0.071)	(0.025)
Pr(Contact Local Official)	0.042	0.034	0.078	-0.047	0.033
	(0.036)	(0.044)	(0.073)	(0.069)	(0.025)
Pr(Contact MP)	-0.026	-0.045	0.059	-0.081	-0.026
	(0.036)	(0.046)	(0.072)	(0.067)	(0.025)

$^{***}p < 0.01$, $^{**}p < 0.05$, $^{*}p < 0.1$

Table C.7: Uganda 2014: Action Index, Aid Treatment-Oil Control, Het. Effects Results

	Female	Male	High Qual. Public Serv.	Low Qual. Public Serv.	Corrupt. High	Corrupt. Low
Action Index (NMWI)	0.004	-0.012	-0.038	0.001	0.008	-0.006
	(0.034)	(0.035)	(0.058)	(0.025)	(0.059)	(0.026)
Create Agency	0.030	0.022	0.080	-0.014	0.142	-0.015
	(0.071)	(0.071)	(0.117)	(0.054)	(0.127)	(0.055)
Willing to Send SMS	-0.005	-0.064	-0.053	0.006	0.097	-0.051
	(0.066)	(0.066)	(0.110)	(0.050)	(0.116)	(0.051)
Sent SMS	-0.009	0.165**	0.018	0.081	0.205	0.079
	(0.053)	(0.101)	(0.124)	(0.052)	(0.145)	(0.057)
Donated (Binary)	-0.017	-0.101	-0.251**	-0.034	0.014	-0.088*
	(0.064)	(0.066)	(0.111)	(0.049)	(0.116)	(0.050)
Taxes Willing to Commit	0.010	0.030	0.020	-0.004	0.151	-0.023
(Binary)	(0.071)	(0.071)	(0.118)	(0.054)	(0.127)	(0.055)
Signed Petition (Any)	-0.019	0.009	0.031	0.010	0.062	0.008
	(0.069)	(0.067)	(0.115)	(0.053)	(0.125)	(0.053)
Pr(Contact Village Elder)	-0.018	-0.015	-0.047	-0.004	-0.072	-0.007
	(0.033)	(0.035)	(0.060)	(0.026)	(0.055)	(0.027)
Pr(Contact Local Official)	0.024	0.014	0.032	0.030	-0.067	0.040
	(0.035)	(0.035)	(0.059)	(0.027)	(0.063)	(0.027)
Pr(Contact MP)	0.020	-0.089**	-0.084	-0.030	-0.129**	-0.008
	(0.034)	(0.035)	(0.057)	(0.027)	(0.058)	(0.027)

$^{***}p < 0.01$, $^{**}p < 0.05$, $^{*}p < 0.1$

Table C.8: Uganda 2014: Action Index, Aid Treatment-Oil Control, Het. Effects Results

	High Poverty	Low Poverty	Coethnic	Non-Coethnic
Action Index (NMWI)	0.010	-0.004	0.183**	-0.014
	(0.050)	(0.026)	(0.079)	(0.025)
Create Agency	0.075	0.007	0.233	-0.006
	(0.105)	(0.056)	(0.175)	(0.052)
Willing to Send SMS	0.177	-0.067	0.016	-0.019
	(0.097)	(0.051)	(0.172)	(0.048)
Sent SMS	0.211*	0.040	0.163	0.084
	(0.100)	(0.056)	(0.124)	(0.054)
Donated (Binary)	-0.128	-0.049	0.132	-0.052
	(0.097)	(0.051)	(0.144)	(0.048)
Taxes Willing to Commit	0.076	0.000	0.232	-0.009
(Binary)	(0.105)	(0.056)	(0.180)	(0.052)
Signed Petition (Any)	0.003	0.037	0.182	-0.009
	(0.099)	(0.054)	(0.126)	(0.051)
Pr(Contact Village Elder)	-0.017	-0.014	0.109	-0.017
	(0.048)	(0.027)	(0.088)	(0.025)
Pr(Contact Local Official)	0.031	0.024	0.249***	0.012
	(0.051)	(0.027)	(0.090)	(0.025)
Pr(Contact MP)	-0.112**	-0.016	0.032	-0.050**
	(0.049)	(0.027)	(0.086)	(0.025)

$^{***}p < 0.01$, $^{**}p < 0.05$, $^{*}p < 0.1$

Table C.9: Uganda 2014: Action Index, Aid Treatment-Oil Control, Het. Effects Results

	Ruling Party	Non Ruling Party	Oil Region	Non Oil Region
Action Index (NMWI)	0.007	-0.005	0.037	-0.006
	(0.028)	(0.042)	(0.061)	(0.025)
Create Agency	0.001	0.066	0.007	0.017
	(0.058)	(0.091)	(0.138)	(0.052)
Willing to Send SMS	0.000	-0.006	-0.006	-0.015
	(0.055)	(0.083)	(0.130)	(0.048)
Sent SMS	0.095	0.065	0.231*	0.062
	(0.058)	(0.109)	(0.135)	(0.054)
Donated (Binary)	-0.005	-0.122	-0.095	-0.042
	(0.055)	(0.080)	(0.120)	(0.048)
Taxes Willing to Commit	0.008	0.031	0.030	0.007
(Binary)	(0.058)	(0.090)	(0.137)	(0.052)
Signed Petition (Any)	0.018	0.012	0.073	0.001
	(0.057)	(0.085)	(0.136)	(0.050)
Pr(Contact Village Elder)	-0.008	-0.014	0.065	-0.026
	(0.028)	(0.042)	(0.064)	(0.025)
Pr(Contact Local Official)	0.026	0.036	0.042	0.024
	(0.029)	(0.044)	(0.065)	(0.026)
Pr(Contact MP)	-0.031	-0.057	-0.048	-0.033
	(0.028)	(0.044)	(0.061)	(0.025)

$^{***}p < 0.01$, $^{**}p < 0.05$, $^{*}p < 0.1$

Table C.10: Uganda 2014: Action Index, Aid Treatment-Oil Control, Het. Effects Results

	Age 20-35	Age 35-50	Age 50+	High Ed.	Low Ed
Action Index (NMWI)	0.006	0.061*	0.041	0.101	0.019
	(0.037)	(0.036)	(0.043)	(0.082)	(0.021)
Create Agency	0.030	0.247***	-0.019	0.550***	0.040
	(0.074)	(0.082)	(0.100)	(0.162)	(0.047)
Willing to Send SMS	-0.043	-0.003	-0.035	0.013	-0.028
	(0.080)	(0.075)	(0.078)	(0.177)	(0.044)
Sent SMS	-0.017	-0.072	0.030	0.084	-0.040
	(0.100)	(0.069)	(0.097)	(0.290)	(0.046)
Donated (Binary)	-0.014	0.044	0.134	0.008	0.026
	(0.077)	(0.072)	(0.086)	(0.169)	(0.044)
Taxes Willing to Commit	0.027	0.290***	-0.021	0.471***	0.061
(Binary)	(0.073)	(0.081)	(0.102)	(0.167)	(0.046)
Signed Petition (Any)	0.008	0.032	0.002	0.017	-0.011
	(0.070)	(0.071)	(0.087)	(0.156)	(0.042)
Pr(Contact Village Elder)	0.028	0.031	0.038	0.005	0.022
	(0.038)	(0.039)	(0.046)	(0.093)	(0.023)
Pr(Contact Local Official)	0.033	0.023	0.057	0.018	0.035
	(0.038)	(0.040)	(0.046)	(0.088)	(0.023)
Pr(Contact MP)	-0.013	-0.010	0.084*	0.012	0.013
	(0.038)	(0.040)	(0.045)	(0.092)	(0.023)

$^{***}p < 0.01$, $^{**}p < 0.05$, $^{*}p < 0.1$

Table C.11: Ghana 2015: Action Index, Aid Treatment-Oil Control, Het. Effects Results

	Female	Male	High Qual. Public Serv.	Low Qual. Public Serv.	Corrupt. High	Corrupt. Low
Action Index (NMWI)	0.008	0.054*	-0.013	0.040*	0.036	0.029
	(0.031)	(0.029)	(0.047)	(0.024)	(0.045)	(0.024)
Create Agency	0.056	0.095	0.002	0.084	0.012	0.095*
	(0.068)	(0.062)	(0.100)	(0.051)	(0.089)	(0.052)
Willing to Send SMS	-0.078	0.034	-0.150	0.019	-0.027	-0.013
	(0.060)	(0.061)	(0.097)	(0.047)	(0.095)	(0.048)
Sent SMS	(0.057)	(0.075)	(0.115)	(0.052)	(0.101)	(0.055))
Donated (Binary)	0.049	0.010	0.036	0.027	0.043	0.030
	0.062)	(0.059)	(0.092)	(0.048)	(0.088)	(0.048)
Taxes Willing to Commit (Binary)	0.087	0.103*	0.067	0.080	0.052	0.105**
	(0.066)	(0.062)	(0.101)	(0.051)	(0.089)	(0.052)
Signed Petition (Any)	0.007	0.024	-0.043	0.021	0.095	-0.017
	(0.059)	(0.057)	(0.089)	(0.046)	(0.081)	(0.047)
Pr(Contact Village Elder)	-0.009	0.056*	0.028	0.020	0.058	0.009
	(0.032)	(0.031)	(0.048)	(0.025)	(0.046)	(0.025)
Pr(Contact Local Official)	0.028	0.042	0.026	0.036	0.061	0.026
	(0.033)	(0.030)	(0.047)	(0.025)	(0.048)	(0.025)
Pr(Contact MP)	-0.027	0.059*	0.001	0.024	-0.034	0.029
	(0.033)	(0.030)	(0.048)	(0.025)	(0.047)	(0.025)

$^{***}p < 0.01$, $^{**}p < 0.05$, $^{*}p < 0.1$

Table C.12: Ghana 2015: Action Index, Aid Treatment-Oil Control, Het. Effects Results

	High Poverty	Low Poverty	Coethnic	Non-Coethnic
Action Index (NMWI)	0.045	0.030	0.040	0.032
	(0.040)	(0.024)	(0.117)	(0.021)
Create Agency	0.082	0.078	0.046	0.082*
	(0.101)	(0.050)	(0.293)	(0.046)
Willing to Send SMS	-0.006	-0.008	0.334	-0.024
	(0.086)	(0.049)	(0.252)	(0.043)
Sent SMS	-0.006	-0.028	0.000	-0.035
	(0.072)	(0.058)	(0.000)	(0.048)
Donated (Binary)	0.064	0.014	-0.510	0.040
	(0.091)	(0.047)	(0.355)	(0.043)
Taxes Willing to Commit	0.124	0.089*	0.130	0.094**
(Binary)	(0.099)	(0.050)	(0.294)	(0.046)
Signed Petition (Any)	-0.006	0.012	-0.155	0.007
	(0.084)	(0.047)	(0.220)	(0.042)
Pr(Contact Village Elder)	0.068	0.015	-0.082	0.026
	(0.048)	(0.025)	(0.238)	(0.022)
Pr(Contact Local Official)	0.017	0.039	0.238	0.035
	(0.046)	(0.025)	(0.180)	(0.022)
Pr(Contact MP)	0.020	0.022	-0.018	0.022
	(0.046)	(0.025)	(0.203)	(0.022)

$^{***}p < 0.01$, $^{**}p < 0.05$, $^{*}p < 0.1$

Table C.13: Ghana 2015: Action Index, Aid Treatment-Oil Control, Het. Effects Results

	Ruling Party	Non Ruling Party	Oil Region	Non Oil Region
Action Index (NMWI)	0.050	0.020	0.032	0.028
	(0.033)	(0.026)	(0.085)	(0.023)
Create Agency	0.036	0.088	0.170	0.063
	(0.076)	(0.056)	(0.131)	(0.053)
Willing to Send SMS	0.009	-0.027	-0.069	0.013
	(0.072)	(0.052)	(0.176)	(0.047)
Sent SMS	-0.024	-0.013	-0.079	-0.026
	(0.088)	(0.056)	(0.245)	(0.059)
Donated (Binary)	0.023	0.036	-0.074	0.062
	(0.071)	(0.053)	(0.152)	(0.048)
Taxes Willing to Commit	0.058	0.100*	0.203	0.069
(Binary)	(0.075)	(0.056)	(0.131)	(0.052)
Signed Petition (Any)	0.027	-0.006	-0.022	-0.006
	(0.067)	(0.051)	(0.139)	(0.046)
Pr(Contact Village Elder)	0.063*	0.005	0.013	0.019
	(0.037)	(0.028)	(0.086)	(0.025)
Pr(Contact Local Official)	0.055	0.024	-0.009	0.030
	(0.036)	(0.028)	(0.087)	(0.025)
Pr(Contact MP)	0.079**	-0.016	0.081	0.010
	(0.036)	(0.027)	(0.087)	(0.025)

$^{***}p < 0.01, ^{**}p < 0.05, ^*p < 0.1$

Table C.14: Ghana 2015: Action Index, Aid Treatment-Oil Control, Het. Effects Results

	Age 20-35	Age 35-50	Age 50+	High Ed.	Low Ed
Pooled	-0.025	0.433	0.434	-0.363*	0.094
	(0.155)	(0.291)	(0.438)	(0.192)	(0.138)
Ghana July 2016	-0.057	0.519	0.669	-1.792***	-0.026
	(0.311)	(0.508)	(0.408)	(0.000)	(0.202)
Uganda January 2017	0.096	0.903*	0.655	-0.305	0.235
	(0.237)	(0.459)	(1.025)	(0.561)	(0.209)
Uganda June 2017	-0.145	-0.944		0.096	-0.504**
	(0.223)	(0.564)		(0.429)	(0.212)

$^{***}p < 0.01, ^{**}p < 0.05, ^*p < 0.1$

Table C.15: Lab Experiment, Het. Effects Results

	Female	Male	High Qual. Public Serv.	Low Qual. Public Serv.	Poverty High	Poverty Low
Pooled	0.113	-0.053	0.081	0.047	0.052	0.120
	(0.162)	(0.179)	(0.295)	(0.129)	(0.240)	(0.136)
Ghana July 2016	0.114	-0.073	-0.130	0.062	-0.409	0.169
	(0.273)	(0.315)	(0.721)	(0.221)	(0.448)	(0.230)
Uganda January 2017	0.230	0.252	0.004	0.217	-0.319	0.387*
	(0.262)	(0.295)	(0.387)	(0.221)	(0.499)	(0.213)
Uganda June 2017	0.085	-0.561**	-0.093	-0.320	-0.559	-0.306
	(0.284)	(0.272)	(0.471)	(0.213)	(0.572)	(0.201)

$^{***}p < 0.01$, $^{**}p < 0.05$, $^{*}p < 0.1$

Table C.16: Lab Experiments, Heterogeneous Treatment Effects.

	Age 20-35	Age 35-50	Age 50+	High Ed.	Low Ed
Behavioral Index	-0.002	-0.017	0.046	-0.080*	0.020
	(0.028)	(0.036)	(0.047)	(0.043)	(0.022)
Sent SMS	0.064	0.021	0.082	-0.090	0.096***
	(0.047)	(0.057)	(0.069)	(0.074)	(0.036)
Donation	-0.043	-0.021	0.068	-0.046	-0.021
	(0.047)	(0.059)	(0.084)	(0.073)	(0.037)
Sent Message to Official	-0.052	-0.040	-0.086	-0.090	-0.045
	(0.049)	(0.061)	(0.093)	(0.075)	(0.039)
Request Report	0.022	-0.024	0.120	-0.095	0.053
	(0.048)	(0.060)	(0.088)	(0.071)	(0.038)

$^{***}p < 0.01$, $^{**}p < 0.05$, $^{*}p < 0.1$

Table C.17: 2018 Field Experiment, Heterogeneous Effects Results

	Female	Male	High Qual. Public Serv.	Low Qual. Public Serv.
Behavioral Index	0.014	-0.016	0.032	-0.004
	(0.026)	(0.028)	(0.067)	(0.025)
Sent SMS	0.072	0.038	0.118	0.030
	(0.044)	(0.046)	(0.098)	(0.042)
Donation	-0.019	-0.035	-0.068	0.013
	(0.046)	(0.048)	(0.131)	(0.045)
Sent Message to Official	-0.013	-0.093*	0.007	-0.035
	(0.050)	(0.048)	(0.111)	(0.046)
Request Report	0.017	0.026	0.072	-0.023
	(0.049)	(0.046)	(0.105)	(0.040)

$^{***}p < 0.01$, $^{**}p < 0.05$, $^{*}p < 0.1$

Table C.18: 2018 Field Experiment, Heterogeneous Effects Results

D Descriptive Statistics and Balance Tests

	Aid	%	Oil	%	N
Uganda 2014 Mass Survey	797	50.19	791	49.81	1588
Ghana 2015 Mass Survey	891	50.08	888	49.92	1779
Ghana Jul 2016 Lab Game	145	49.83	146	50.17	291
Uganda Jan 2017 Lab Game	138	51.30	131	48.70	269
Uganda Jun 2017 Lab Game	67	48.55	71	51.45	138
Uganda 2018 Info Experiment	420	49.65	426	50.35	846

Table D.1: Frequencies and Percentages of Respondents for Each Treatment.

Statistic	N	Mean	St. Dev.	Min	Pctl(25)	Pctl(75)	Max
Age	1,588	34.71	11.97	18	25	43	86
Education	1,587	3.11	1.58	1	2	4	8
Female	1,588	0.50	0.50	0	0	1	1
Average Quality of Local Services	1,587	−0.02	1.01	−2.62	−0.66	0.71	2.87
Lacked Food in Previous 6 Months	1,586	1.95	1.09	1	1	3	5
Lacked Water in Previous 6 Months	1,585	2.01	1.28	1	1	3	5
Quality of Local Schools	1,568	2.70	1.03	0	2	3	5
Quality of Local Clinics	1,579	2.62	1.02	0	2	3	5
Quality of Local Roads	1,585	2.32	1.08	0	1	3	5
Quality of Local Sewage/Sanitation	1,531	1.80	1.50	0	0	3	5
Trust in Member of Parliament	1,527	2.10	1.07	1	1	3	4
Voted in Prior Election	1,584	0.76	0.43	0	1	1	1

Table D.2: Sample Summary Statistics, Uganda 2014 Survey Experiment

	Aid	Oil	p-value	Holm p
Age	34.810	34.640	0.770	1
Education	3.120	3.110	0.880	1
How Often Gone Without Water	1.980	2.040	0.350	1
How Often Gone Without Food	1.970	1.920	0.370	1
Voted in Prior Election	0.760	0.750	0.760	1
Female	0.500	0.510	0.740	1
Quality of Public Goods	−0.020	−0.020	0.990	1

Table D.3: Balance Test, Uganda 2014 Survey Experiment

Statistic	N	Mean	St. Dev.	Min	Pctl(25)	Pctl(75)	Max
Age	1,779	39.08	14.82	18	27	49	84
Education	1,779	3.28	1.71	1	2	5	8
Female	1,779	0.47	0.50	0	0	1	1
Average Quality of Local Services	1,779	−0.01	1	−2.82	−0.60	0.70	2.92
Lacked Food in Previous 6 Months	1,779	1.80	1.04	1	1	3	5
Lacked Water in Previous 6 Months	1,779	2.07	1.25	1	1	3	5
Quality of Local Schools	1,739	3.28	1.15	0	3	4	5
Quality of Local Clinics	1,762	2.27	1.69	0	0	4	5
Quality of Local Roads	1,779	2.11	1.15	0	1	3	5
Quality of Local Sewage/Sanitation	1,777	2.39	1.15	0	1	3	5
Trust in Member of Parliament	1,631	2.36	1.22	1	1	4	4
Voted in Prior Election	1,777	0.84	0.36	0	1	1	1

Table D.4: Sample Summary Statistics, Ghana 2015 Survey Experiment

	Aid	Oil	p-value	Holm p
Age	38.550	39.640	0.120	0.840
Education	3.230	3.330	0.200	1
How Often Gone Without Water	2.080	2.050	0.640	1
How Often Gone Without Food	1.840	1.760	0.140	0.840
Voted in Prior Election	0.840	0.850	0.350	1
Female	0.480	0.460	0.430	1
Quality of Public Goods	−0.030	0	0.570	1

Table D.5: Balance Tests, Ghana 2015 Survey Experiment

Statistic	N	Mean	St. Dev.	Min	Pctl(25)	Pctl(75)	Max
Age	263	32.77	13.08	18	23	40.50	75
Education	263	2.61	1.32	0	2	4	7
Female	263	0.53	0.50	0	0	1	1
Average Quality of Local Services	263	4.36	0.54	2.71	4.14	4.71	6
Lacked Food in Previous 6 Months	263	1.42	0.75	1	1	2	5
Lacked Water in Previous 6 Months	263	1.35	0.64	1	1	2	4
Trust in Member of Parliament	264	2.55	1.16	1	1	4	4
Voted in Prior Election	266	0.68	0.47	0	0	1	1

Table D.6: Sample Summary Statistics, Ghana July 2016 Lab Experiment

	Aid	Oil	p-value	Holm p
Age	34.510	30.800	0.020	0.150
Education	2.580	2.670	0.570	1
How Often Gone Without Water	1.280	1.430	0.070	0.420
How Often Gone Without Food	1.340	1.500	0.090	0.460
Voted in Prior Election	0.700	0.670	0.550	1
Female	0.520	0.550	0.600	1
Quality of Public Goods	4.400	4.320	0.230	0.920

Table D.7: Balance Tests, Ghana July 2016 Lab Experiment

Statistic	N	Mean	St. Dev.	Min	Pctl(25)	Pctl(75)	Max
Age	257	31.77	10.22	18	25	37	68
Education	257	2.60	1.24	0	2	3	6
Female	257	0.52	0.50	0	0	1	1
Average Quality of Local Services	257	4.19	0.48	2.71	3.86	4.57	5.14
Lacked Food in Previous 6 Months	256	2.50	1.07	1	2	3	5
Lacked Water in Previous 6 Months	257	1.79	1.02	1	1	3	5
Trust in Member of Parliament	225	2.85	1.21	1	2	4	5
Voted in Prior Election	216	0.87	0.34	0	1	1	1

Table D.8: Sample Summary Statistics, Uganda January 2017 Lab Experiment

	Aid	Oil	p-value	Holm p
Age	31.980	31.560	0.450	1
Education	2.650	2.550	0.160	0.780
How Often Gone Without Water	1.730	1.850	0.040	0.250
How Often Gone Without Food	2.500	2.500	1	1
Voted in Prior Election	0.880	0.860	0.370	1
Female	0.540	0.500	0.210	0.830
Quality of Public Goods	4.220	4.170	0.040	0.250

Table D.9: Balance Tests, Uganda January 2017 Lab Experiment

Statistic	N	Mean	St. Dev.	Min	Pctl(25)	Pctl(75)	Max
Age	138	29.22	8.49	20	23	35	53
Education	138	9.17	4.34	0	7	11.8	17
Female	138	0.51	0.50	0	0	1	1
Average Quality of Local Services	138	3.83	0.58	2	3.5	4.2	5
Lacked Food in Previous 6 Months	138	2.25	1.13	1	1	3	5
Lacked Water in Previous 6 Months	138	1.72	0.99	1	1	2	5
Trust in Member of Parliament	137	2.07	1.00	1.00	1.00	3.00	4.00
Voted in Prior Election	138	0.72	0.45	0	0	1	1

Table D.10: Sample Summary Statistics, Uganda June 2017 Lab Experiment

	Aid	Oil	p-value	Holm p
Age	28.490	29.900	0.030	0.140
Education	9.220	9.110	0.740	0.790
How Often Gone Without Water	1.760	1.690	0.350	0.790
How Often Gone Without Food	1.970	2.510	0	0
Voted in Prior Election	0.700	0.750	0.190	0.750
Female	0.490	0.540	0.260	0.790
Quality of Public Goods	3.710	3.940	0	0

Table D.11: Balance Tests, Uganda June 2017 Lab Experiment. While there is an imbalance in the quality of local goods and frequency with which respondents have gone without food, these variables are included as covariates in the regression and thus are not a threat to inference. Results remain statistically insignificant with or without inclusion of imbalanced covariates.

Statistic	N	Mean	St. Dev.	Min	Pctl(25)	Pctl(75)	Max
Age	1,261	36.49	13.41	20	26	45	87
Education	1,250	8.69	4.61	0	6	11	17
Female	1,262	0.46	0.50	0	0	1	1
Average Quality of Local Services	819	2.85	0.62	1	2.40	3.40	4.40
Lacked Food in Previous 6 Months	19	1.79	0.98	1	1	2.50	4
Lacked Water in Previous 6 Months	19	1.68	1.20	1	1	2	4
Trust in Member of Parliament	811	2.22	1.16	1	1	3	4
Voted in Previous Election	1,262	0.77	0.42	0	1	1	1

Table D.12: Sample Summary Statistics, Uganda 2018 Field Experiment

	Aid Info	Oil Info	Pure Control	F-test p	Holm p
Age	35.750	36.510	37.210	0.290	1
Education	8.820	8.520	8.740	0.630	1
Voted in Prior Election	0.750	0.790	0.780	0.480	1
Female	0.440	0.520	0.420	0.010	0.070
Quality of Public Goods	2.920	2.840	2.790	0.050	0.250
Log Total Income	8.160	8.010	8	0.330	1

Table D.13: Balance Tests, Uganda 2018 Field Experiment. F-test used to establish whether treatment dummies jointly predict each covariate. How often respondents went without food or water not available in the Uganda 2018 data; log total income used instead. The single covariate that shows imbalance close to statistical significance (**Female**) is included as a control in the estimating equation and thus does not threaten inference.

Statistic	N	Mean	Min	Max
Behavioral Index	1,262	0.44	0.00	1.00
SMS Platform	1,262	0.34	0	1
Report Participation	1,261	0.61	0.00	1.00
Donated	1,257	0.37	0.00	1.00
Sent Message to Official	1,262	0.45	0	1

Table D.14: Summary Statistics for Behavioral Measures in 2018 Uganda Field Experiment