# Supplementary Appendix For "All Sins are not Created Equal: The Factors that Drive Perceptions of Corruption Severity"*

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**Abstract**

Despite corruption's effects on citizen welfare, there is substantial variation in when citizens are willing to sanction government wrongdoing. This paper uses a conjoint survey experiment, conducted in Uganda, to test how information about the position a corrupt official holds, and the details of an act of embezzlement, affect citizens' perceptions of corruption severity and willingness to punish. I find that the revenue source of stolen funds and the sector to which the funds had been allocated have the largest impact on perceived severity, followed by whether stolen funds are spent privately or recirculated through patronage or clientelism. The position the corrupt official holds has a smaller impact on severity, including whether the official was elected and whether he was a central or local official.

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*The data, code, and any additional materials required to replicate all analyses are available at the Journal of Experimental Political Science Dataverse within the Harvard Dataverse Network, at: doi: 10.7910/DVN/ID1KJG.

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# A Survey Implementation

This study was approved by the IRB boards of Yale University (Protocol 1307012471) and Innovations for Poverty Action (Protocol 13August-002). It was also approved by the Uganda National Council for Science and Technology (Reference SS 2839).

Innovations for Poverty Action's Uganda office was hired to implement the survey. The survey was conducted in November 2013 in eight districts in central and eastern Uganda: Buikwe, Iganga, Jinja, Kalunga, Lwengo, Masaka, Mukono, and Rakai. Within each district I sampled 1-5 towns. In each town, 15 motorcycle taxi drivers (boda-boda drivers), 15 market vendors, and 15 shopkeepers were interviewed. Within each district, towns were included if local contacts confirmed that they had at least one daily market, as well as at least 15 boda-boda riders and 15 shopkeepers; in some districts only 1 town met these criteria, in others 5 did.

Within each town respondents were quasi-randomly selected. Enumerators were assigned to a particular street of shops, aisle of a market, or boda-boda taxi stage, then interviewed every third vendor, shopkeeper, or boda-boda rider. All interviews were conducted privately in the dominant local language (Luganda or Lusoga), and respondents received 2,000 UGX (about US$0.80) to compensate them for the survey, which took about twenty minutes. The survey consisted of the conjoint experiment, plus a set of pre-treatment questions to collect demographic, economic, and political covariates. A total of 780 interviews were completed; two of these are dropped from analysis because, due to enumerator error, the town in which the survey was completed could not be identified.

The survey was programmed using Survey CTO, and was conducted using smartphones. Within each survey, respondents saw 4 pairs of officials. The attribute-levels for each official within each pair were independently randomized.

To alleviate concerns with literacy, and to visually represent the complex conjoint profiles,

enumerators placed icons on paper to represent each attribute-level of each conjoint profile. As a check against enumerator error or deviations from the protocol, the survey software randomly selected 25% of profile pairs and asked the enumerator to take a picture of the completed profile representations. These photographs were reviewed by supervisors at the end of each day to check data quality. The photographs did not include faces, locations, or any additional information that could compromise respondent confidentiality.

Table 1 presents summary statistics for the sample. Boda-boda riders and market vendors both have high collective action potential, and typically belong to local professional organizations. Both groups vote at high rates and are generally politically engaged. Boda-bodas are frequently employed by political parties to mobilize during elections, and some markets mobilize to support specific candidates (Gombay, 1994). While boda-bodas are almost universally male, market vendors are predominantly female. Both groups have relatively high incomes (about US$4-7 a day) compared to ordinary Ugandans, making them influential in their neighborhoods. In contrast, shopkeepers are typically wealthier and better educated than the other two groups, but are less likely to vote, or to belong to local trade associations.

The sample differs in several ways from Uganda's general population. In Round 6 of the Afrobarometer, 78% of respondents who were at least 18 years old in the 2011 election (the last election at the time the survey was conducted in 2015) reported voting (Afrobarometer Data, 2015).[1] In the market vendors, boda-boda riders, and shopkeepers survey (MBS), 83% reported voting. The MBS sample also differs demographically. While the Ugandan Bureau of Statistics (UBOS) reports that Uganda is 77.4% rural, 100% of the MBS sample was interviewed in a trading center or town, and 72.4% of the sample reports living in the town

[1]Note that even this number is significantly higher than the official turnout of 59% (https://www.idea.int/data-tools/country-view/293/40), likely due to social desirability bias in survey responses.

| | Boda | Shopkeeper | Market |
|---|---|---|---|
| Male | 1.00 | 0.47 | 0.26 |
| | (0.06) | (0.50) | (0.44) |
| Age | 29.32 | 33.73 | 35.68 |
| | (5.58) | (8.81) | (10.04) |
| Years Education | 8.38 | 9.96 | 7.43 |
| | (3.32) | (3.22) | (3.53) |
| Daily Profits (UGX) | 11,811 | 24,539 | 16,476 |
| | (5,437) | (30,877) | (19,432) |
| Registered to Vote | 0.92 | 0.88 | 0.92 |
| | (0.28) | (0.33) | (0.27) |
| Voted (Presidential) | 0.85 | 0.79 | 0.86 |
| | (0.36) | (0.41) | (0.34) |
| $N$ | 254 | 267 | 257 |

Columns depict group means; SD in parentheses
$^{*}$ $p < 0.05$, $^{**}$ $p < 0.01$, $^{***}$ $p < 0.001$

Table 1: Average values of covariates, by occupational group.

of enumeration, rather than a surrounding village (UBOS, 2017). UBOS also reports that as of 2012/13, 78% of men and 57% of women over age 18 were literate; in the MBS sample the corresponding numbers are 84.49% (men) and 82.58% (women) (UBOS, 2017). The MBS sample is also wealthier. The Ugandan government reported average monthly household expenditures in Uganda of 351,600 UGX in 2016/17 (Oketch, Martin Luther, 2017). While I do not have household-level income data for the MBS respondents, the average daily income from the primary occupation of the respondent (boda-boda riding, market vending, or shopkeeping) is 17,720 UGX, which assuming 25 work-days per month means that even without including other sources of household income, average monthly incomes in the sample are at least 443,000 UGX.

# B Experimental Protocols: Conjoint Experiment

This section reports the English-language text of the conjoint survey experiment. Because corruption is a politically sensitive topic, the protocols stress that the officials described are only hypothetical. To make the forced-choice nature of the experiment plausible, the protocol also stressed that governments may not have the resources to prosecute all corruption cases. This encourages respondents to select the officials they think most deserve punishment. For enumeration, these protocols were translated into Lusoga and Luganda.

**Text of Conjoint Experiment:**

I am going to show you some scenarios that we have made up. You will see several pairs of officials who are suspected of corruption. These are not real people, but rather examples of the types of corruption that occur in some countries. Remember, we are not saying that any of your own officials have done this - it is an example of something that might happen in some places. Governments have limited resources to prosecute and punish corruption. For each pair of officials, you will be asked to choose which one you would rather see punished for his or her corrupt behavior. Even if you would like to see both punished, or neither, you must choose one. You will then be asked some other questions about your thoughts on these officials. **Enumerators: Go through the following script four times. Use the randomization on your data collection form, and explain the pictures to respondents.**

These columns represent two different officials. Each has a different role in government, and is accused of a different type of corruption.

Consider the first official. **(NOTE: set out each attribute in turn)**

1. He is an [BLANK] official.
2. He works in the [BLANK] government.
3. He is accused of spending the money on [BLANK].

4. The funds were supposed to be used to fund [BLANK].
5. He is accused of misusing funds that came from [BLANK].

Now, consider the second official. **(NOTE: set out each attribute in turn)**

1. He is an [BLANK] official.
2. He works in the [BLANK] government.
3. He is accused of spending the money on [BLANK].
4. The funds were supposed to be used to fund [BLANK].
5. He is accused of misusing funds that came from [BLANK].

**Q1:** Which of these two officials would you personally rather see prosecuted and punished for what they have done?**(Record response.)**

**Q2a:** Now, on a scale of 1 to 5, how serious was the corruption that Official 1 is accused of (point to correct profile)? Was it not at all serious, a bit serious, somewhat serious, very serious, or extremely serious? **(1=not at all serious, 5=extremely serious)**

**Q2b:** Now, on a scale of 1 to 5, how serious was the corruption that Official 2 is accused of (point to correct profile)? Was it not at all serious, a bit serious, somewhat serious, very serious, or extremely serious? **(1=not at all serious, 5=extremely serious)**

[**Respondents then see three more pairs of randomized profiles.**]

5 **Implementation notes:**

Figure 1 shows an example of enumeration (left) and all image icons used in the conjoint experiment (right). For quality control purposes, enumerators were asked to take a picture of the enumeration sheet, with all icons placed, 25% of the time; this was randomly determined.


Figure 1: Left: an example of enumeration. Right: the icons used for each attribute-level.

# C Additional Results: Conjoint Experiment

## C.1 Regression Tables

| VARIABLES | (1) Chosen | (2) Rank |
|---|---|---|
| Elected | 0.098*** | 0.129*** |
| | (0.014) | (0.023) |
| Local | -0.016 | -0.013 |
| | (0.013) | (0.021) |
| Citizens' Taxes | 0.208*** | 0.301*** |
| | (0.016) | (0.029) |
| Central Transfers | 0.031* | 0.071*** |
| | (0.016) | (0.027) |
| Kin and Village | -0.197*** | -0.329*** |
| | (0.015) | (0.027) |
| Buy Election Support | -0.144*** | -0.215*** |
| | (0.016) | (0.025) |
| Water | 0.084*** | 0.176*** |
| | (0.021) | (0.039) |
| Health Care | 0.247*** | 0.444*** |
| | (0.020) | (0.038) |
| Education | 0.133*** | 0.300*** |
| | (0.020) | (0.037) |
| Infrastructure | 0.088*** | 0.231*** |
| | (0.020) | (0.037) |
| Constant | 0.389*** | 3.694*** |
| | (0.024) | (0.081) |
| Observations | 6,224 | 6,224 |
| R-squared | 0.095 | 0.196 |

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table 2: OLS results of the Conjoint Analysis. This matches the estimates shown in Figure 1.

## C.2 Focus Group Discussions

To provide insight into the results of the experiment, I conducted a set of focus group discussions with motorcycle taxi drivers (boda-boda riders) and market vendors in Kampala, Uganda in 2016.

*Local vs. National Officials.*

To gain insight into why corruption by local and national officials is not viewed differently, I asked 6 of the focus groups whether corruption by local or national officials was worse, and why. In two groups respondents prioritized punishment of national officials, arguing that they had more control over the entire country. Respondents in the other four focus groups argued that local officials should be prosecuted first, as they more directly impact service provision. Thus, all groups explained their preferences in terms of which level of government had more impact on citizens, but disagreed about which level of government was most salient. This suggests that the impact of decentralization on corruption perceptions may vary depending on whether citizens perceive local or national government as having more power in key sectors.

*How stolen funds are spent.*

The focus groups also asked respondents about how they perceive clientelism and patronage. Officials who spent money on themselves were consistently described as "selfish", while respondents explained that officials who spent money on patronage were likely helping sick people or building local public goods—one group explained that "you forgive him because he has given back to the citizens." In contrast, opinion was mixed on officials who engaged in clientelism. Some viewed such corruption as most severe, because it could lead to more corrupt officials in office and thus more corruption in the future, while others felt that "we are not given anything from government but during elections it's when we expect to be given [benefits]." This suggests that while some citizens view patronage and clientelism as similar, others view the long-term effects of clientelism more harshly. This is supported by sub-

group analysis: respondents who believed that the 2011 elections were free and fair viewed clientelism as significantly less severe (see Appendix C.6); as clientelism played a large and public role in the elections, this serves as a rough proxy for those who do not see clientelism as undermining elections more generally.

*Mechanism testing.*

Focus group discussions also confirm that citizens invoke economic utility in explaining their preference for punishing corruption. When asked why corruption involving health care was worse than theft from government salaries, participants cited the sickness and death that could, and did, result from corruption in the health sector; in contrast, they saw little impact of stealing bureaucrats' salaries on their day-to-day lives. Sectors like water were seen as having some impact, but less than health care.

## C.3 Robustness Checks

The analysis of the conjoint survey experiment is unbiased only if the experiment meets certain conditions (Hainmueller, Hopkins and Yamamoto, 2012). First, if the experiment was successfully implemented, whether an official was listed as Official 1 or Official 2 within a pairing should have no effect on the probability of selection. This may be a concern if, for example, respondents did not understand the task and so simply chose Profile A always. Overall, Profile 1 was selected for punishment 51% of the time, and Profile 2 49% of the time; this is statistically indistinguishable from the expected 50-50 split (p=.239). Second, whether an official was part of the first, second, third, or fourth profile pair, and whether an official was first or second within a pair, should not affect the results. The appendix shows the analysis broken down by profile and profile ordering; the results are substantively unchanged. As the dependent variables of interest are discrete, additional analysis was run using probit for the binary dependent variable and ordered probit for the severity ranking; again the results are substantively unchanged.

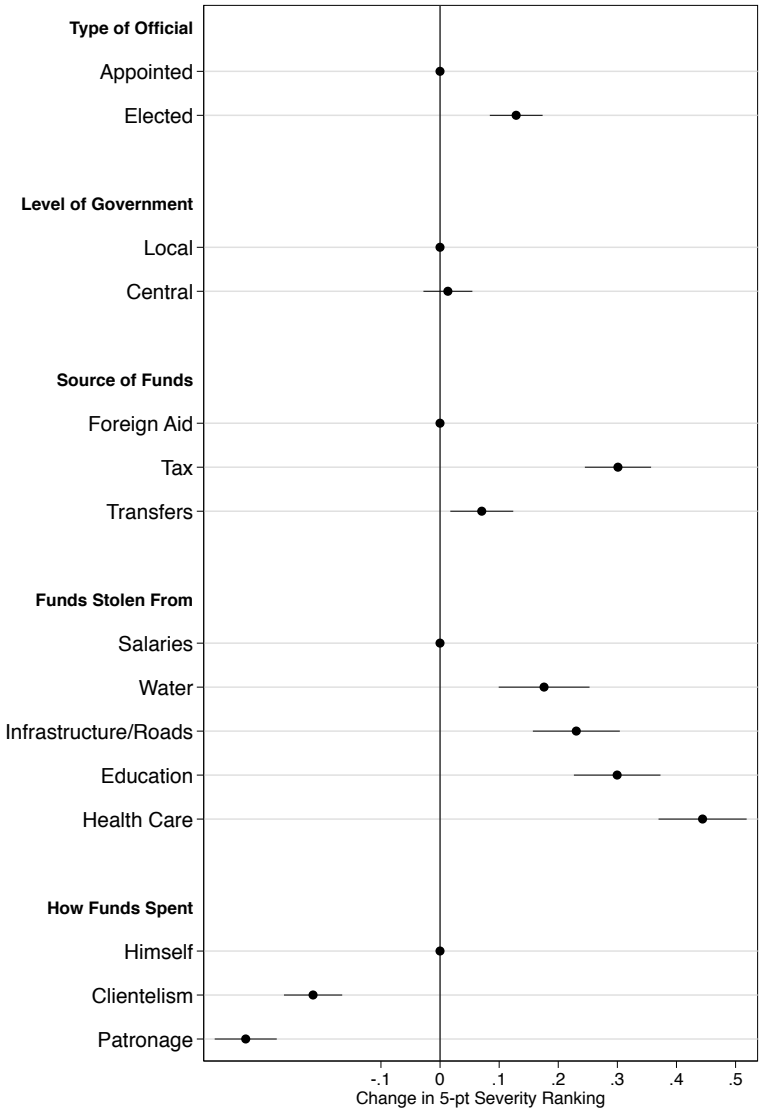


Figure 2: Results of Conjoint Analysis. This figure shows the OLS results for the analysis of how each factor affects respondent's ranking of the corrupt act's severity on a 5-point scale. Dots without bars represent omitted categories; other dots graph the estimated AMCE of each level. Bars represent 95% confidence intervals. Each coefficient can be interpreted as the average change in the 5-point severity ranking, relative to the omitted category.

| VARIABLES | (1)<br>Prof Pair 1 | (2)<br>Prof Pair 2 | (3)<br>Prof Pair 3 | (4)<br>Prof Pair 4 |
|---|---|---|---|---|
| Elected | 0.096*** | 0.100*** | 0.099*** | 0.103*** |
| | (0.025) | (0.024) | (0.025) | (0.025) |
| Local | -0.021 | -0.036 | -0.044* | 0.036 |
| | (0.025) | (0.026) | (0.024) | (0.024) |
| Citizens' Taxes | 0.230*** | 0.219*** | 0.213*** | 0.175*** |
| | (0.030) | (0.030) | (0.030) | (0.031) |
| Central Transfers | 0.066** | 0.026 | -0.003 | 0.033 |
| | (0.031) | (0.031) | (0.031) | (0.031) |
| Kin and Village | -0.165*** | -0.189*** | -0.204*** | -0.241*** |
| | (0.031) | (0.031) | (0.030) | (0.030) |
| Buy Election Support | -0.111*** | -0.133*** | -0.166*** | -0.175*** |
| | (0.031) | (0.031) | (0.030) | (0.030) |
| Water | 0.080** | 0.039 | 0.117*** | 0.100** |
| | (0.040) | (0.040) | (0.040) | (0.039) |
| Health Care | 0.260*** | 0.248*** | 0.250*** | 0.240*** |
| | (0.038) | (0.037) | (0.038) | (0.039) |
| Education | 0.160*** | 0.071* | 0.191*** | 0.119*** |
| | (0.039) | (0.040) | (0.038) | (0.038) |
| Infrastructure | 0.093** | 0.061 | 0.105*** | 0.097** |
| | (0.038) | (0.040) | (0.038) | (0.038) |
| Constant | 0.358*** | 0.404*** | 0.404*** | 0.363*** |
| | (0.047) | (0.046) | (0.046) | (0.044) |
| Observations | 1556 | 1556 | 1556 | 1556 |
| $R^2$ | 0.097 | 0.107 | 0.101 | 0.095 |

*** p<0.01, ** p<0.05, * p<0.1
Robust standard errors in parentheses

Table 3: Effect of Profile on the AMCEs for Pr(Chosen).

| VARIABLES | (1)<br>Prof Pair 1 | (2)<br>Prof Pair 2 | (3)<br>Prof Pair 3 | (4)<br>Prof Pair 4 |
|---|---|---|---|---|
| Elected | 0.153*** | 0.108*** | 0.097** | 0.160*** |
| | (0.044) | (0.042) | (0.042) | (0.040) |
| Local | -0.001 | -0.025 | -0.050 | 0.003 |
| | (0.045) | (0.039) | (0.041) | (0.040) |
| Citizens' Taxes | 0.353*** | 0.321*** | 0.311*** | 0.212*** |
| | (0.054) | (0.049) | (0.050) | (0.049) |
| Central Transfers | 0.100* | 0.054 | 0.042 | 0.084 |
| | (0.055) | (0.050) | (0.052) | (0.051) |
| Kin and Village | -0.331*** | -0.289*** | -0.346*** | -0.362*** |
| | (0.056) | (0.050) | (0.051) | (0.050) |
| Buy Election Support | -0.180*** | -0.210*** | -0.250*** | -0.235*** |
| | (0.052) | (0.047) | (0.051) | (0.048) |
| Water | 0.219*** | 0.129* | 0.232*** | 0.102 |
| | (0.076) | (0.070) | (0.070) | (0.070) |
| Health Care | 0.489*** | 0.421*** | 0.462*** | 0.413*** |
| | (0.073) | (0.065) | (0.072) | (0.065) |
| Education | 0.398*** | 0.225*** | 0.366*** | 0.209*** |
| | (0.073) | (0.067) | (0.068) | (0.066) |
| Infrastructure | 0.273*** | 0.201*** | 0.262*** | 0.174*** |
| | (0.075) | (0.066) | (0.064) | (0.067) |
| Constant | 3.371*** | 3.663*** | 3.928*** | 3.826*** |
| | (0.139) | (0.131) | (0.120) | (0.116) |
| Observations | 1556 | 1556 | 1556 | 1556 |
| $R^2$ | 0.219 | 0.204 | 0.208 | 0.202 |

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table 4: Effect of Profile on the AMCEs for the 5-point severity rankings.

| VARIABLES | (1)<br>Prof A Chosen | (2)<br>Prof B Chosen | (3)<br>Prof A Rank | (4)<br>Prof B Rank |
|---|---|---|---|---|
| Elected | 0.103*** | 0.095*** | 0.133*** | 0.127*** |
| | (0.018) | (0.018) | (0.029) | (0.032) |
| Local | -0.030* | -0.001 | -0.038 | 0.008 |
| | (0.017) | (0.017) | (0.028) | (0.030) |
| Citizens' Taxes | 0.210*** | 0.196*** | 0.303*** | 0.300*** |
| | (0.021) | (0.022) | (0.037) | (0.039) |
| Central Transfers | 0.021 | 0.038* | 0.071** | 0.070* |
| | (0.021) | (0.021) | (0.036) | (0.038) |
| Kin and Village | -0.194*** | -0.197*** | -0.320*** | -0.332*** |
| | (0.021) | (0.021) | (0.036) | (0.038) |
| Buy Election Support | -0.145*** | -0.142*** | -0.193*** | -0.234*** |
| | (0.022) | (0.022) | (0.034) | (0.036) |
| Water | 0.103*** | 0.063** | 0.239*** | 0.114** |
| | (0.027) | (0.028) | (0.050) | (0.053) |
| Health Care | 0.259*** | 0.233*** | 0.427*** | 0.460*** |
| | (0.027) | (0.028) | (0.048) | (0.048) |
| Education | 0.130*** | 0.134*** | 0.333*** | 0.265*** |
| | (0.027) | (0.027) | (0.049) | (0.049) |
| Infrastructure | 0.102*** | 0.074*** | 0.266*** | 0.190*** |
| | (0.028) | (0.027) | (0.050) | (0.049) |
| Constant | 0.383*** | 0.386*** | 3.870*** | 3.744*** |
| | (0.069) | (0.063) | (0.109) | (0.151) |
| Observations | 3112 | 3112 | 3112 | 3112 |
| $R^2$ | 0.122 | 0.107 | 0.215 | 0.195 |

*** p<0.01, ** p<0.05, * p<0.1
Robust standard errors in parentheses

Table 5: Results by whether an official was the first or second official in a profile pair.

| VARIABLES | (1) Chosen (Probit) | (2) Rank (Ord. Probit) |
|---|---|---|
| Elected | 0.266*** | 0.170*** |
| | (0.037) | (0.031) |
| Local | -0.042 | -0.020 |
| | (0.034) | (0.029) |
| Citizens' Taxes | 0.556*** | 0.405*** |
| | (0.044) | (0.040) |
| Central Transfers | 0.084* | 0.087** |
| | (0.043) | (0.036) |
| Kin and Village | -0.529*** | -0.452*** |
| | (0.042) | (0.038) |
| Buy Election Support | -0.387*** | -0.307*** |
| | (0.043) | (0.036) |
| Water | 0.226*** | 0.240*** |
| | (0.056) | (0.051) |
| Health Care | 0.667*** | 0.609*** |
| | (0.056) | (0.052) |
| Education | 0.358*** | 0.397*** |
| | (0.054) | (0.049) |
| Infrastructure | 0.237*** | 0.298*** |
| | (0.054) | (0.049) |
| Observations | 6,224 | 6,224 |

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table 6: Robustness tests using Probit (column 1 - Pr(Selected)) and ordered probit (Column 2 - 5-pt severity ranking) instead of OLS.

## C.4 Corruption Severity and Political Action

As part of the pre-treatment survey, all respondents completed a non-experimental module designed to test how perceived severity affects self-reported willingness to take political action.[2] Enumerators presented respondents with a hypothetical situation in which they had heard rumors "that a local official may have been stealing money."[3] Respondents were first asked on a 5-point scale how upset they were about the rumors (*Steal Upset*). They were then asked on a 4-point scale how likely they would be to engage in four potential actions in response to the rumors: sharing information with neighbors; going to a protest; contacting an elected official about the rumors; and campaigning for an opposition candidate in the next election.

Figure 3 plots respondents' self-reported willingness to engage in each action against the perceived severity of the rumored corruption. Respondents who were more upset by corruption rumors are more willing to engage in each possible action; regression results in Table 7 show that this relationship is statistically significant. While these are self-reported measures, even stated willingness to protest is potentially a costly action in Uganda's increasingly closed political climate, alleviating concerns that such responses are "cheap talk." The occupational groups chosen for the sample are also those that do frequently protest in Uganda, especially boda-boda riders and market vendors, making their responses more realistic. Encouragingly, citizens' reported willingness to act is lower for actions, like campaigning or protesting, that are more costly. There is also a significant correlation between how upset respondents were in the vignette and their average severity rankings in the conjoint experiment (p=.047), suggesting that the two measures are related (see Table 8).

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[2]As all respondents completed the same vignette, this does not affect the validity of the conjoint results.

[3]See Appendix D for full module text.

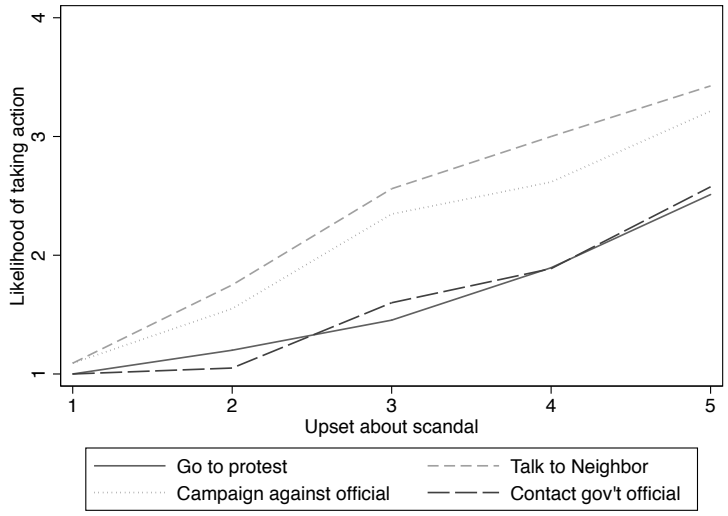


Figure 3: *Corruption Severity and Likelihood of Political Action.* On the x-axis, 1="Not at all upset" and 5="Extremely upset". On the y-axis, 1="Very unlikely" and 4="Very likely".

| VARIABLES | (1) Talk to Neighbor | (2) Contact Official | (3) Go to Protest | (4) Campaign Against |
|---|---|---|---|---|
| steal_upset | 0.414*** | 0.380*** | 0.335*** | 0.360*** |
| | (0.042) | (0.044) | (0.047) | (0.047) |
| Constant | 1.122*** | 0.463 | 0.737** | 1.268*** |
| | (0.294) | (0.306) | (0.326) | (0.328) |
| Observations | 778 | 778 | 777 | 778 |
| R-squared | 0.339 | 0.434 | 0.367 | 0.336 |

Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table 7: This table shows the relationship between a respondent's evaluation of how upset they would be about a corruption scandal and the self-reported likelihood of taking part in each potential action. "Steal Upset" is a 5-point Likert scale for how upset a respondent said they would be about corruption rumors (5=most upset); each dependent variable is measured on a 4-point likelihood scale where 4=very likely.

| VARIABLES | (1)<br>Steal Upset | (2)<br>Likelihood of Action (Avg) |
|---|---|---|
| Avg Severity Ranking (conjoint) | 0.180** | 0.230*** |
| | (0.091) | (0.080) |
| Constant | 3.623*** | 1.599*** |
| | (0.416) | (0.369) |
| Observations | 778 | 778 |
| R-squared | 0.201 | 0.425 |

Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table 8: This table shows OLS regression results linking perceived corruption severity in the conjoint experiment; the degree to which citizens report being upset about a hypothetical corruption scandal; and self-report political action. "Avg Severity Ranking (conjoint)" is the average ranking a respondent gave to the 8 profiles he or she saw on the conjoint experiment; it ranges from 1 (least severe) to 5 (most severe). "Steal Upset" is the 5-point severity ranking in the political action module; 5=very upset. "Likelihood of Action" is the average of self-reported willingness to engage in each of 4 possible political actions in response to a corruption scandal; it ranges from 1 (very unlikely) to 4 (very likely). All regressions include town and enumerator fixed effects.

## C.5 Interaction effects

This section reports the results of an interaction model that was run on both Rank and Chosen. Regressions are OLS and include town and enumerator FE. SE are clustered by individual. Few variables are significant across both Chosen and Rank. As I did not pre-specify hypotheses regarding interaction effects, I take these results to be exploratory and descriptive. Few coefficients are statistically significant across both dependent variables, suggesting limited interactions between attribute-levels.

I find a similar lack of heterogeneity when examining subgroups. For example, when an official is described as being part of the national government, "elected" officials are naturally the MP (the other alternative, the president, would not be a credible individual for the government to prosecute in the Ugandan context), and "appointed" officials refer to national-level bureaucrats, who work for the ministries. When I break the analysis down by whether the official was part of the national or local government, I find no difference in the coefficient on "elected"; the coefficient is 0.10, compared to 0.098 for the full sample (p=0.000 in both cases). This is consistent with the small and insignificant coefficient on "elect_local" in Table 9.

| | (1) | (2) | (3) | (4) |
|---|---|---|---|---|
| VARIABLES | Chosen | | Rank | |
| | Coef | SE | Coef | SE |
| Elected | 0.082 | (0.072) | -0.015 | (0.121) |
| Local | 0.078 | (0.072) | 0.103 | (0.117) |
| Taxes | 0.196** | (0.080) | 0.282** | (0.136) |
| Central Transfers | 0.141 | (0.088) | 0.099 | (0.136) |
| Patronage | -0.114 | (0.076) | -0.367** | (0.149) |
| Clientelism | -0.108 | (0.084) | -0.052 | (0.144) |

| | | | | |
|---|---|---|---|---|
| Water | 0.335*** | (0.093) | 0.500*** | (0.168) |
| Health Care | 0.383*** | (0.093) | 0.593*** | (0.159) |
| Education | 0.083 | (0.096) | 0.311* | (0.173) |
| Infrastructure | 0.233** | (0.096) | 0.187 | (0.152) |
| elect_local | -0.030 | (0.049) | -0.037 | (0.082) |
| elect_tax | -0.129** | (0.058) | -0.134 | (0.086) |
| elect_transfer | -0.017 | (0.057) | 0.003 | (0.093) |
| elect_kinvill | -0.035 | (0.052) | -0.047 | (0.096) |
| elect_buyel | -0.065 | (0.058) | -0.096 | (0.095) |
| elect_water | 0.072 | (0.074) | 0.160 | (0.124) |
| elect_health | 0.055 | (0.073) | 0.238* | (0.126) |
| elect_educ | 0.268*** | (0.077) | 0.476*** | (0.125) |
| elect_infra | 0.019 | (0.077) | 0.160 | (0.130) |
| local_tax | 0.039 | (0.055) | -0.028 | (0.105) |
| local_transfer | 0.005 | (0.060) | -0.041 | (0.099) |
| local_kinvill | 0.012 | (0.056) | 0.096 | (0.102) |
| local_buyel | 0.045 | (0.059) | -0.057 | (0.098) |
| local_water | -0.081 | (0.068) | -0.155 | (0.128) |
| local_health | -0.137* | (0.073) | -0.137 | (0.124) |
| local_educ | -0.041 | (0.075) | -0.117 | (0.125) |
| local_infra | -0.071 | (0.073) | -0.036 | (0.123) |
| tax_freq | -0.007 | (0.007) | 0.001 | (0.038) |
| tax_burden | -0.000** | (0.000) | 0.000 | (0.000) |
| tax_kinvill | 0.061 | (0.070) | 0.224* | (0.130) |
| tax_buyel | 0.095 | (0.066) | 0.224** | (0.111) |
| tax_water | -0.004 | (0.092) | -0.239 | (0.163) |

| | | | | |
|---|---|---|---|---|
| tax_health | -0.007 | (0.087) | -0.102 | (0.138) |
| tax_educ | -0.027 | (0.088) | -0.053 | (0.142) |
| tax_infra | -0.084 | (0.093) | -0.044 | (0.157) |
| transfer_kinvill | -0.037 | (0.072) | 0.124 | (0.124) |
| transfer_buyel | -0.051 | (0.074) | 0.119 | (0.112) |
| transfer_water | -0.192** | (0.097) | -0.331** | (0.158) |
| transfer_health | -0.103 | (0.082) | -0.225 | (0.145) |
| transfer_educ | -0.106 | (0.092) | -0.076 | (0.156) |
| transfer_infra | -0.124 | (0.095) | -0.061 | (0.161) |
| kinvill_water | -0.211** | (0.083) | -0.080 | (0.152) |
| kinvill_health | -0.117 | (0.083) | -0.040 | (0.147) |
| kinvill_educ | -0.018 | (0.087) | -0.084 | (0.162) |
| kinvill_infra | 0.040 | (0.092) | 0.068 | (0.158) |
| buyel_water | -0.210** | (0.091) | -0.204 | (0.151) |
| buyel_health | -0.088 | (0.090) | -0.182 | (0.149) |
| buyel_educ | 0.022 | (0.089) | -0.149 | (0.143) |
| buyel_infra | -0.060 | (0.092) | -0.108 | (0.155) |
| Constant | 0.245*** | (0.085) | 3.326*** | (0.183) |
| | | | | |
| Observations | 1,728 | | 1,728 | |
| R-squared | 0.111 | | 0.236 | |

Robust standard errors in parentheses

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

Table 9: Interaction Effects

## C.6 Heterogeneity Results

The degree of heterogeneity in citizens' corruption perceptions has policy implications. If there is little heterogeneity, politicians may be able to gain legitimacy by focusing on prosecuting the forms of corruption that most citizens care most about. If, however, there is significant heterogeneity, this may make it more complicated to target forms of corruption that citizens care most about. I tested for heterogeneous preferences by analyzing a number of theoretically-relevant economic and demographic subgroups, including occupation, gender, age, income, and urbanization. While some coefficients are significantly different for some subgroups, the differences are rarely robust and almost never switched the preference rank-ordering regarding which forms of corruption are worst. The most consistent result is that respondents who were wealthier or better educated tended to care more strongly about theft from health care or infrastructure. As these are services for which there are only limited private-market substitutes in Uganda, this result is consistent with the idea that individuals care more about corruption that carries large personal costs. Figure 4 suggests that political variables are stronger predictors of a respondent's preferences over corruption. Those who believe that the last elections were free and fair care more about corruption by elected officials, and care more strongly about theft of citizens' taxes and central transfers, relative to donor funds. Such citizens also show less concern with patronage and vote-buying, perhaps because they are not viewed as detrimental to democracy.

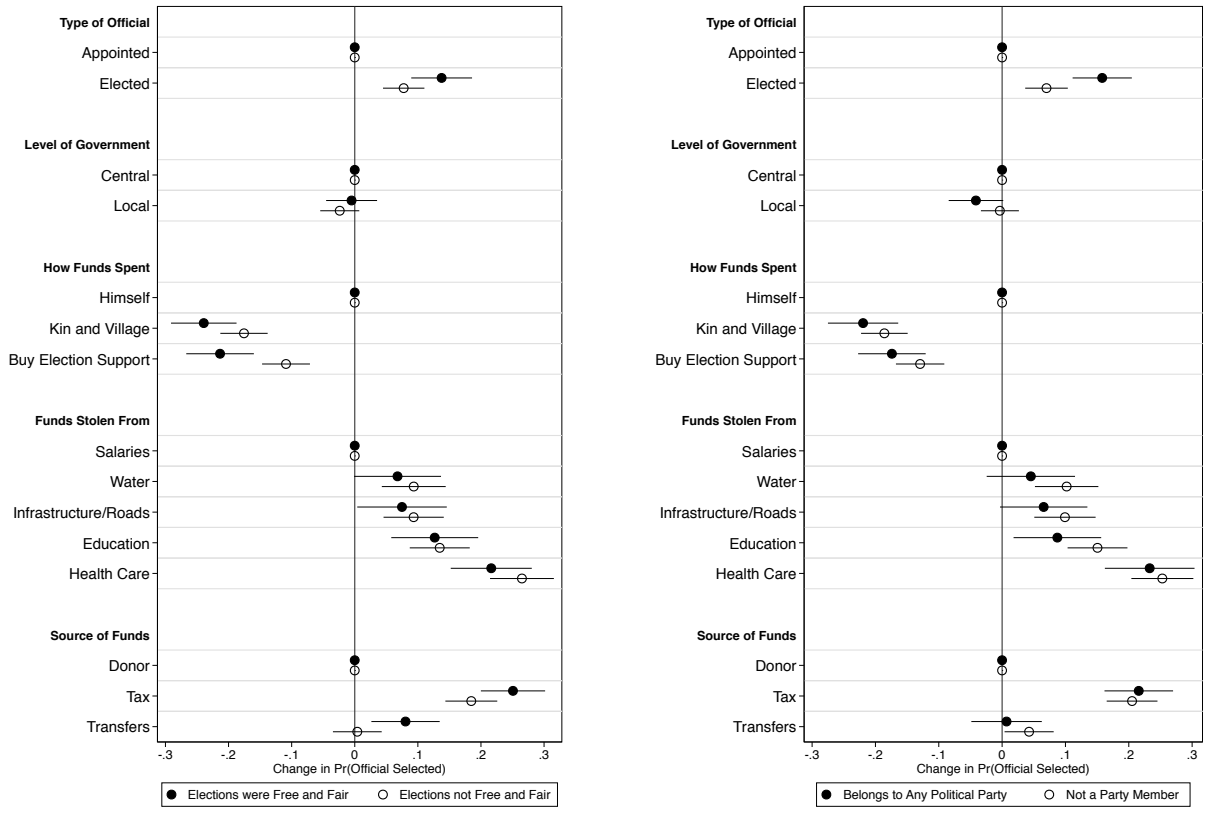


Figure 4: This figure shows similar analysis to Figure **??**. The left side presents subgroup analysis based on whether a respondent believed that the last elections were "free and fair." The right side presents analysis broken down by whether respondent reported being a member of any political party.

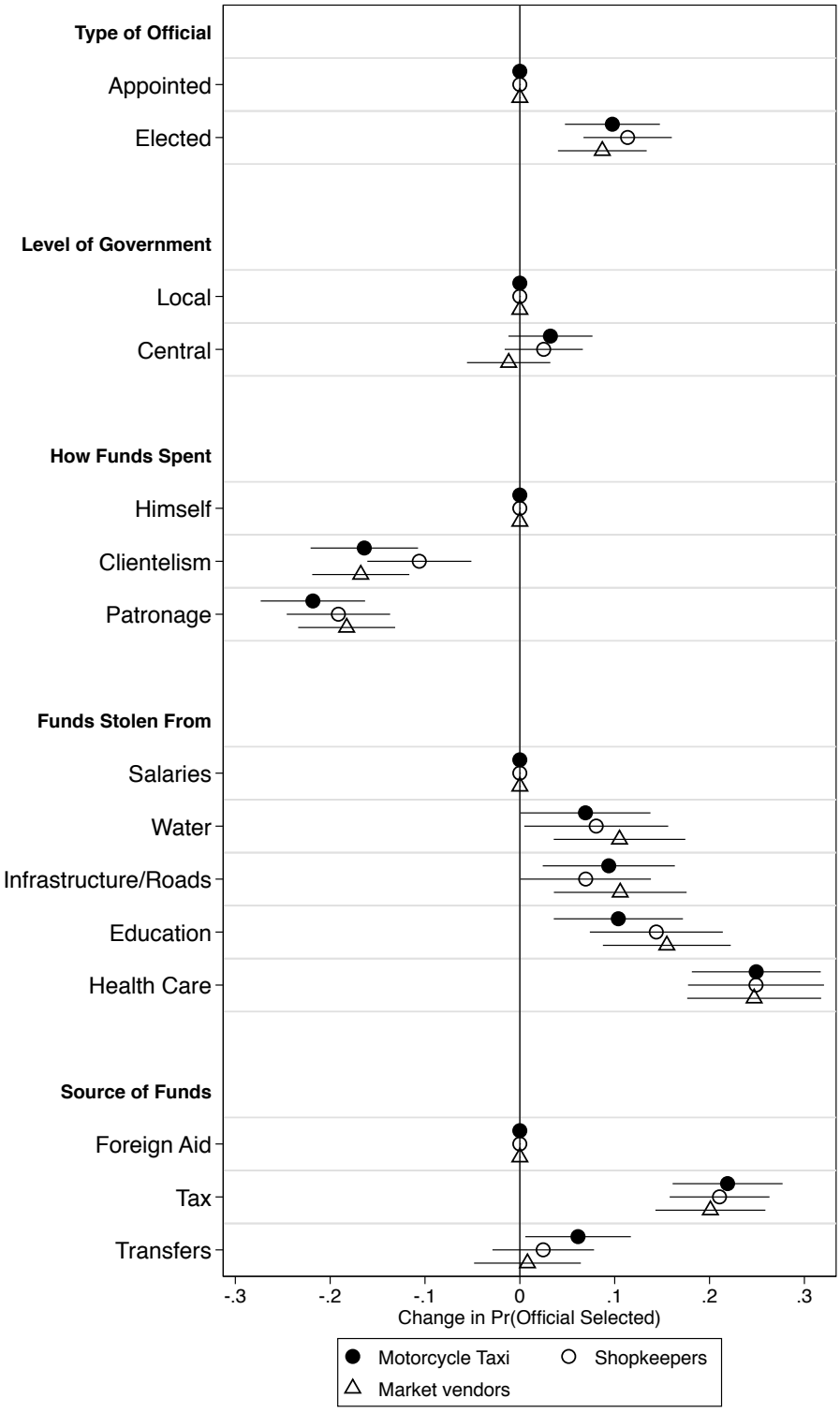


Figure 5: Heterogeneity Results by Occupation.

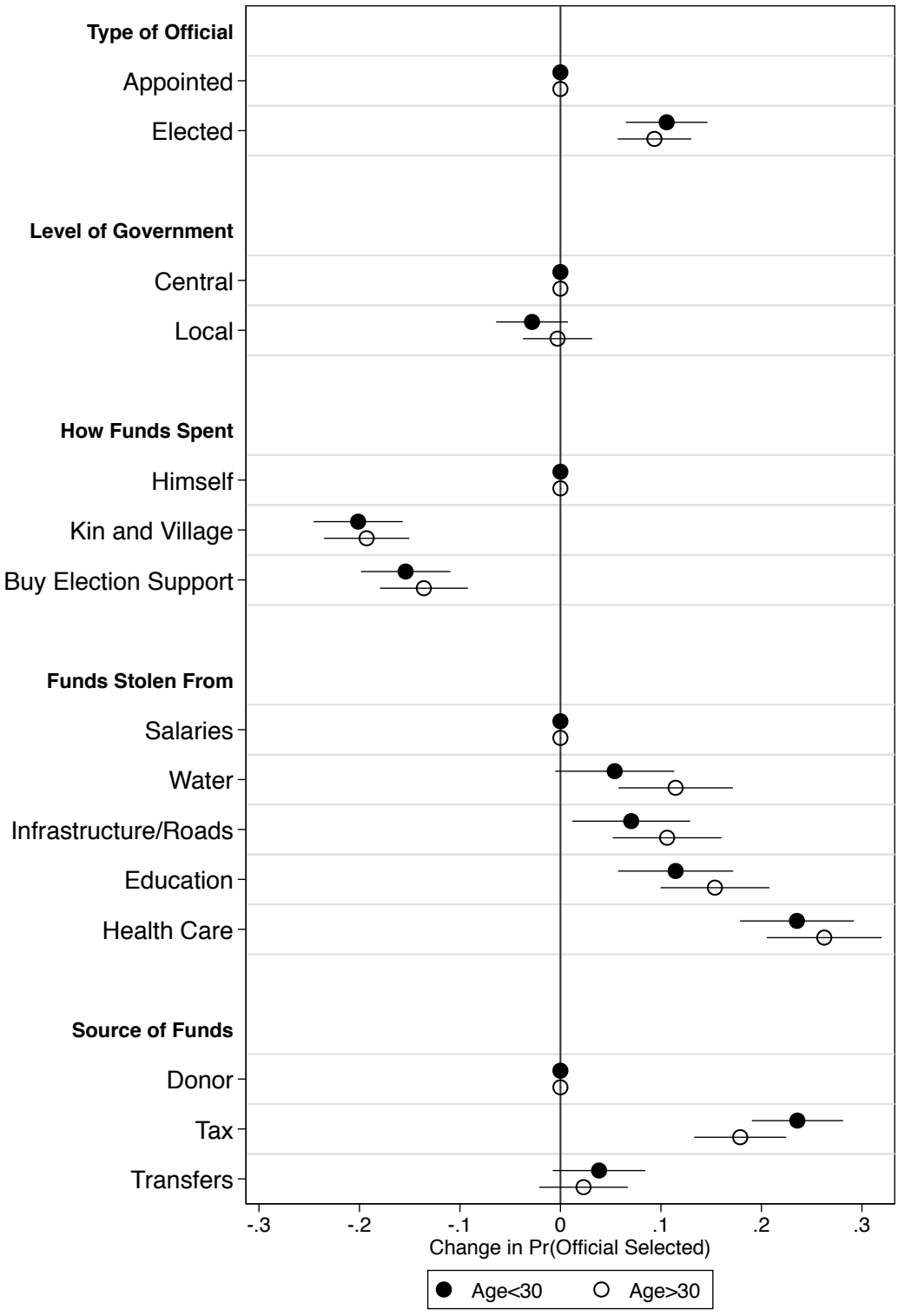


Figure 6: Heterogeneity results by whether respondent is of age 30 or higher.

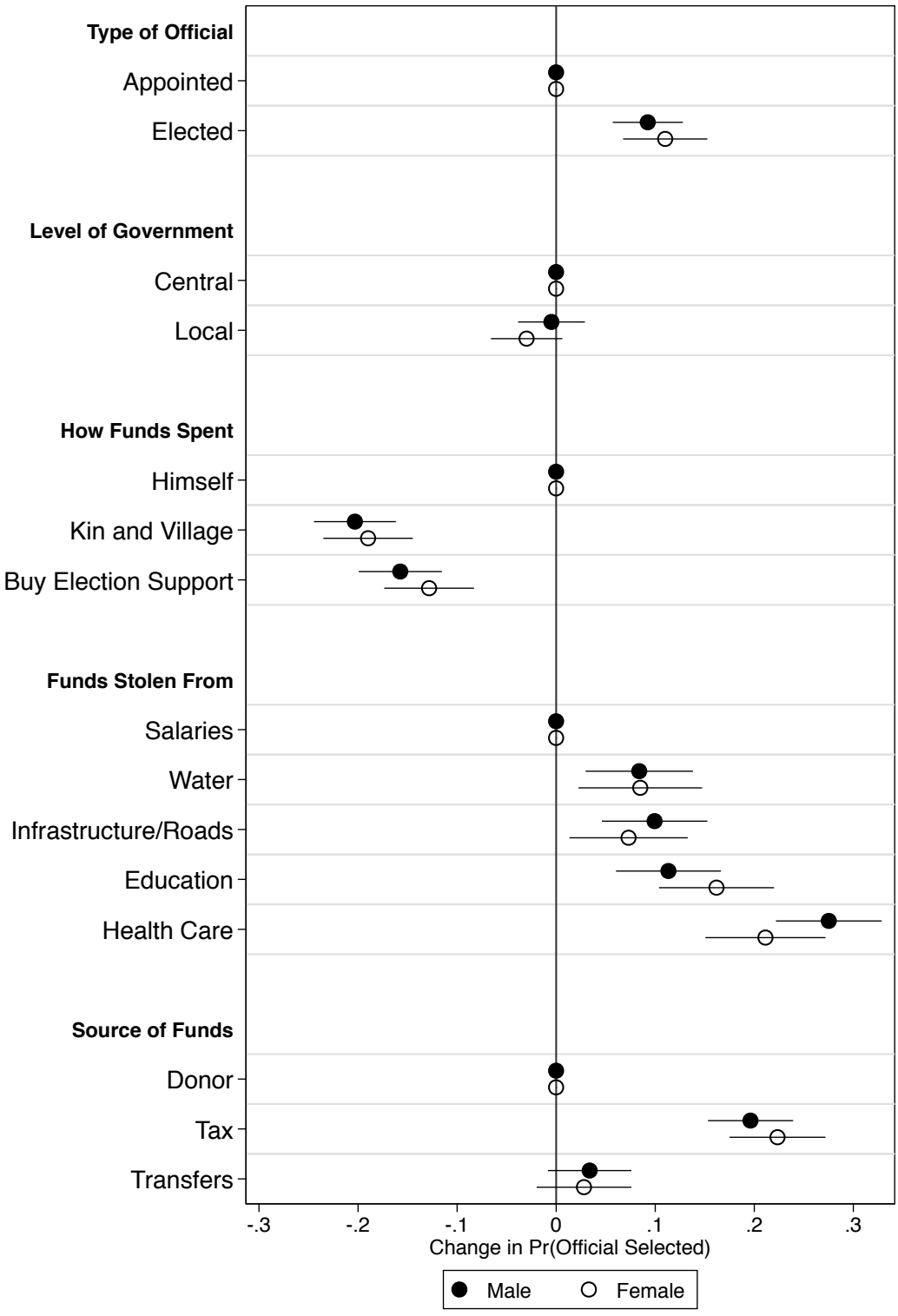


Figure 7: Heterogeneity Results by Gender.

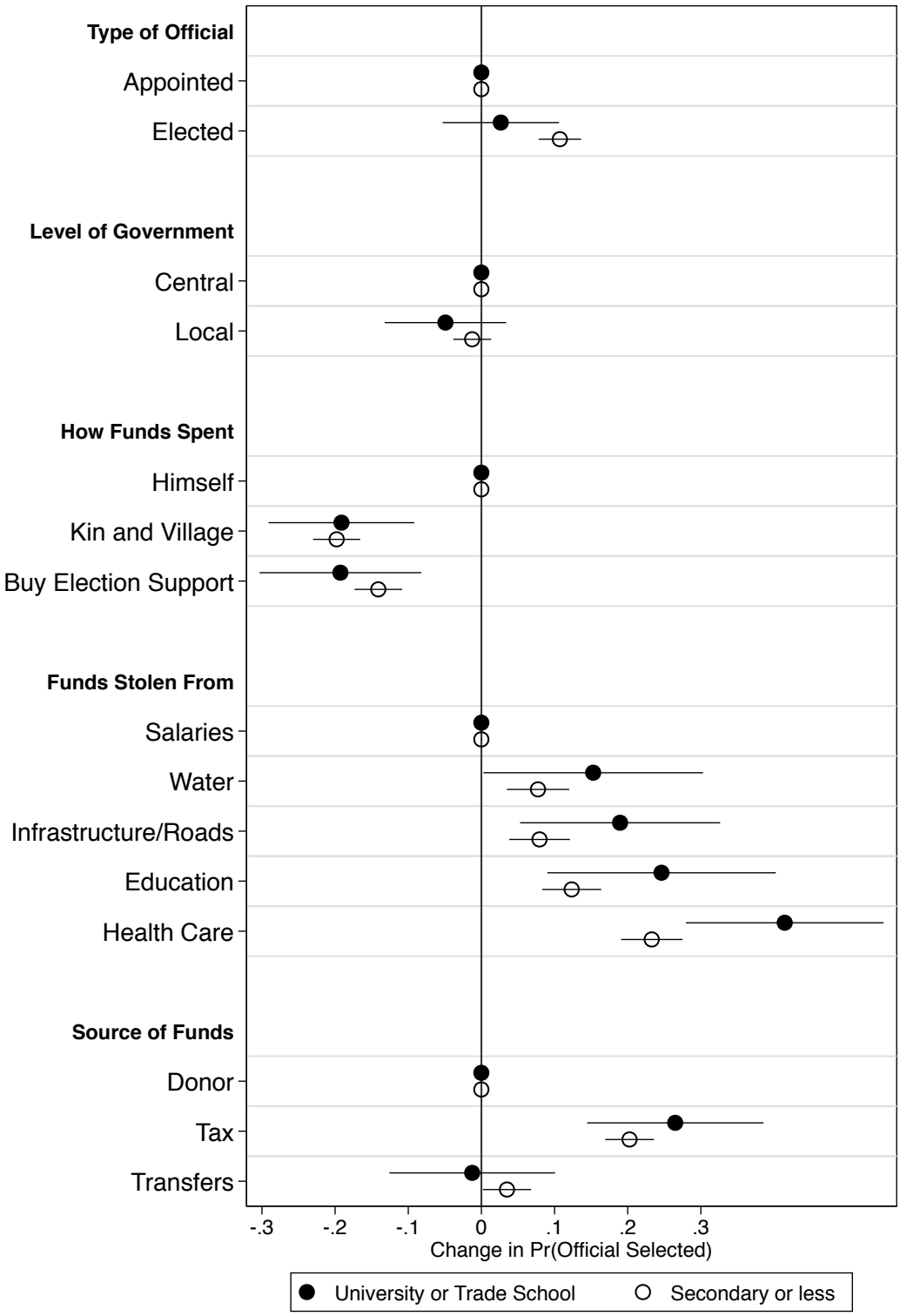


Figure 8: Heterogeneity Results by Education.

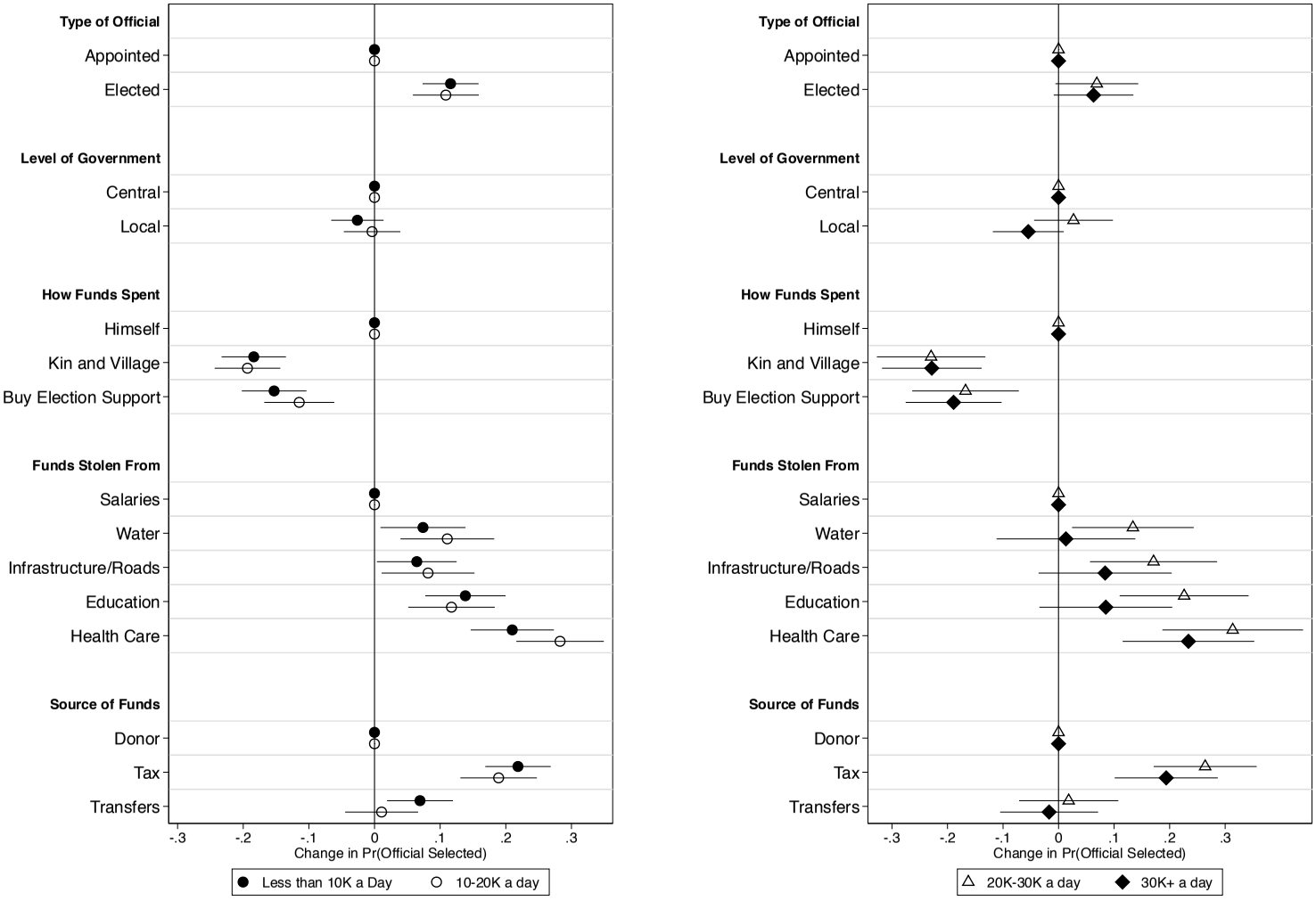


Figure 9: Heterogeneity Results by Income.

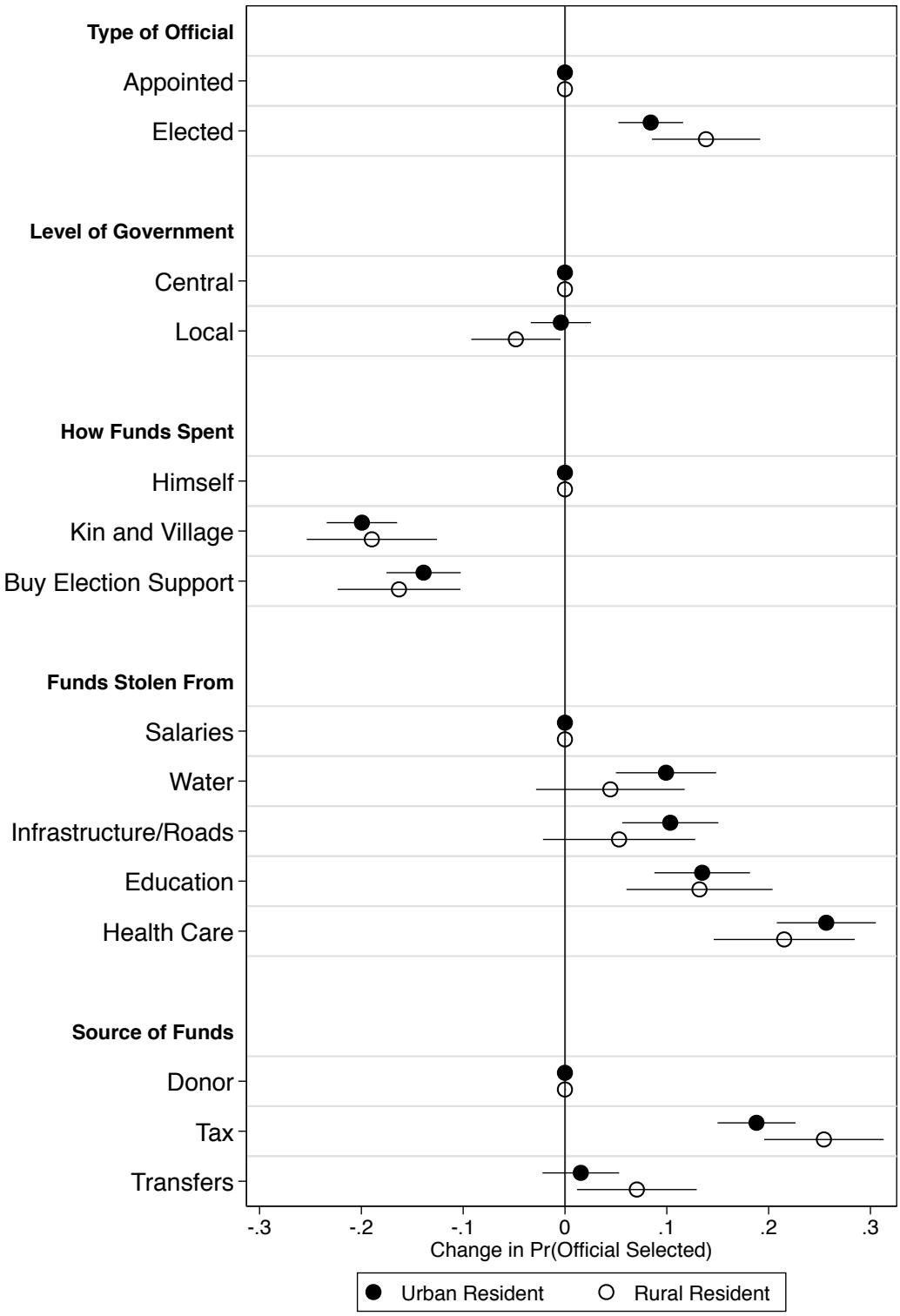


Figure 10: This figure shows similar analysis to Figure **??**, but broken down by whether a respondent reported living in the town in which he or she worked, or in a surrounding rural area.

# D Survey Module: Corruption perceptions and willingness to engage in political action

Now I am going to read you a short scenario – this is a story that we made up, but that could be a situation you would face in real life. We will then ask you questions about this scenario.

Pretend that you have heard rumors in your neighborhood that a local official may have been stealing money. (Remember, we are just pretending – we are not saying any officials here are actually corrupt).

Q1. How does it make you feel to hear about this official's actions? Not at all upset, A little upset, Somewhat upset, Very upset, or Extremely upset?

Q2. How likely would you be to do each of the following in response to hearing that this official may have stolen money - Very likely, somewhat likely, somewhat unlikely, or very unlikely?

1. Talk with your neighbors about these rumors.
2. Complain to a local government official about corruption.
3. Go to a protest to demand that this official be prosecuted.
4. Actively campaign for the official's opponent in the next election.

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