## SUPPLEMENTARY MATERIAL

# ELECTORAL DISCRIMINATION <br> The Relationship between Skin Color and Vote Buying in Latin America 

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Replication data are available at:
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Appendix 1: Survey Question-Wording, Descriptive Statistics and Additional Analysis for Study 1
Appendix 1 includes supplemental information for Study 1 as referenced in the footnotes and text of the manuscript. Appendix 1 can be broken down into 4 main sections. Section A provides variable definitions for the key independent variables used in the LAPOP and DALP surveys and descriptive statistics from LAPOP. Section B provides the logistic regression coefficients used to generate the predicted probabilities in Figure 2. Section C presents predicted probabilities and logistic regression tables from separate country models. Section D presents the Oaxaca-Blinder decomposition for Panama and Brazil discussed in the manuscript. Section E presents additional descriptive and analytical figures that could not be included in the manuscript.

## Section A: Descriptive Statistics

## Question-wording for clientelism measures

## LAPOP

Client (Clien1)

Partisan (VB10)
Civic (CP5, CP6, CP7, and CP8)

Political Interest (Pol1)
Participation Index (Prot3, NP1, and VB20)

Interpersonal Trust (IT1)

DALP
Clientelistic Effort (B15)

Clientelistic Efficiency (B11)

Ethnic Targeting (B8_3)
"In recent years and thinking about election campaigns, has a candidate or someone from a political party offered you something, like a favor, food, or any other benefit or thing in return for your vote or support? Has this happened often, sometimes or never?"
"Do you currently identify with a political party?"
This measure comes from a series of questions about the frequency of attendance at meetings for religious organizations, parent-teacher associations, and community associations. The measure also includes a question about the frequency of involvement in community problem solving. See Holland and Palmer-Rubin (2015).
"How much interest do you have in politics: a lot, some, little, or none?"
This measure comes from three separate questions about protest participation in the last 12 months, attendance at a town hall meeting in the last 12 months, and willingness to participate in a general election if it were held that week. See Schaffer and Baker (2015).
"Now, speaking of the people from around here, would you say that the people in this community are very trustworthy, somewhat trustworthy, not very trustworthy or untrustworthy...?"

This measure sums the responses across a series of 5 questions about the level of effort that parties put into mobilizing citizens and private businesses through different forms of patronage: consumer goods, preferential access to public social policy schemes, jobs, government contracts, and favorable application of regulatory rules.
"Please assess how effective political parties are in their efforts to mobilize voters by targeted benefits."
"Do political parties make special efforts to attract Specific ethnic group with such inducements?"

|  | Appendix Table 1.1: Descriptive Statistics |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
|  | mean | sd | min | max |
| Client |  | 0.136 | 0.342 | 0 |
| Skin Tone |  |  |  |  |
| Very Light | 0.0933 | 0.291 | 0 | 1 |
| Light | 0.193 | 0.394 | 0 | 1 |
| Medium Light | 0.455 | 0.498 | 0 | 1 |
| Medium Dark | 0.213 | 0.410 | 0 | 1 |
| Dark | 0.0406 | 0.197 | 0 | 1 |
| Very Dark | 0.00538 | 0.0732 | 0 | 1 |
| Wealth Quintile (reverse coded) | 2.985 | 1.408 | 1 | 1 |
| Partisan | 0.331 | 0.471 | 0 | 5 |


| Civic | 1.746 | 1.220 | 0 | 4 |
| :--- | :--- | :--- | :---: | :---: |
| Participation Index | 1.072 | 0.561 | 0 | 3 |
| Political Interest | 1.132 | 0.961 | 0 | 3 |
| Interpersonal Trust | 1.741 | 0.893 | 0 | 3 |
| Voted | 0.776 | 0.417 | 0 | 1 |
| Registered | 0.922 | 0.268 | 0 | 1 |
| Education Years | 9.495 | 0.454 | 0 | 29 |
| Gender | 0.501 | 0.500 | 0 | 1 |
| Age | 39.17 | 15.57 | 16 | 98 |
| Urban | 0.705 | 0.456 | 0 | 1 |
| Color_I | 4.428 | 1.388 | 1 | 11 |
|  |  |  |  |  |
| Year |  |  |  |  |
|  |  | 0.474 | 0 | 1 |
|  |  | 0.103 | 0.499 | 1 |
| Country Rounds | 012 | 0.423 | 0.304 | 0 |

This table includes all of the variables included in the main model (Figure 2 in the manuscript). $\mathrm{N}=39,774$.

Section B: Logistic Regression Coefficients of Client on Skin Color

| Appendix Table 1.2: Logistic Regression of Client on Skin Color |  |  |
| :---: | :---: | :---: |
|  | (1) | (2) |
| Skin Color |  |  |
| Light | $\begin{gathered} 0.110 \\ (0.0680) \end{gathered}$ | $\begin{gathered} 0.112 \\ (0.0687) \end{gathered}$ |
| Medium Light | 0.230*** | 0.184*** |
|  | (0.0622) | (0.0632) |
| Medium Dark | 0.332*** | 0.249*** |
|  | (0.0665) | (0.0681) |
| Dark | $0.380 * * *$ | 0.283*** |
|  | (0.0897) | (0.0918) |
| Very Dark | 0.586*** | 0.437** |
|  | (0.175) | (0.179) |
| Wealth Quintile (reverse code) |  | 0.0685*** |
|  |  | (0.0129) |
| Partisan |  | 0.181*** |
|  |  | (0.0361) |
| Civic |  | 0.248*** |
|  |  | (0.0135) |
| Political Interest |  | $0.141 * * *$ |
|  |  | (0.0175) |
| Participation Index |  | $0.156^{* *}$ |
|  |  | (0.0280) |
| Interpersonal Trust |  | -0.0810*** |
|  |  | (0.0174) |
| Voted |  |  |
|  |  | $(0.0455)$ |
| Registered |  | 0.249*** |
|  |  | (0.0703) |
| Education Years |  | $0.00199$ |
|  |  | (0.00441) |
| Gender | $-0.201 * * *$ | $-0.203 * * *$ |
|  | (0.0303) | (0.0311) |
| Age | $-0.00601^{* * *}$ | $-0.0110^{* * *}$ |
|  | (0.000993) | $(0.00119)$ |
| Urban | -0.157*** | -0.0266 |
|  | (0.0333) | (0.0367) |
| Color_I | $0.00719$ | $0.0115$ |
|  | (0.0115) | (0.0117) |


| $-1.817^{* * *}$ | $-3.025^{* * *}$ |
| :---: | :---: |
| $(0.166)$ | $(0.199)$ |
| $0.496^{* * *}$ | $0.513^{* * *}$ |
| $(0.144)$ | $(0.149)$ |

Number of groups
25
Appendix Table 1.2 presents the coefficients from a logistic regression with country round fixed effects (standard errors in parentheses). Very Light skin tone is the reference category. 38,423 observations.
${ }^{* * *} \mathrm{p}<0.01, * * \mathrm{p}<0.05, * \mathrm{p}<0.1$

Section C: Predicted Probabilities \& Logit Coefficients for Skin Color from Separate Country Models
The figure plots the predicted probabilities for Skin Color for each country in the study. Results from the simple model are plotted with the solid line and with the dashed line for the full model. The logit tables come from select country models of the Disproportionate Impact and Differential Treatment Cases. Columns 1 and 2 present the results from a simple model. And Columns 3 and 4 from a full model. The covariates in the simple model are the same in Appendix Table 1.2. All models include municipal and year fixed effects. Standard errors in parentheses ${ }^{* * *} \mathrm{p}<0.01, * * \mathrm{p}<0.05, * \mathrm{p}<0.1$


| Nested Models: Mexico |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
|  | 1: Simple | 2: Simple | 3: Full | 4: Full |
| Standardized Color (continuous) | $0.118^{*}$ |  |  | $0.126^{*}$ |
|  | $(0.0620)$ |  | $(0.0654)$ |  |
| Light |  | 0.146 | 0.0935 |  |
|  |  | $(0.205)$ | $(0.210)$ |  |
| Medium Light |  | 0.162 | 0.163 |  |
|  |  | $(0.185)$ | $(0.191)$ |  |
| Medium Dark |  | $0.594^{* * *}$ | $0.575^{* * *}$ |  |
|  | $(0.213)$ | $(0.222)$ |  |  |
| Dark |  | -0.587 | -0.471 |  |
| Constant |  | $(0.502)$ | $(0.511)$ |  |
|  |  | $-2.202^{* * *}$ | $-2.395^{* * *}$ | $-2.651^{* * *}$ |
|  | $-2.353^{* * *}$ | $(0.357)$ | $(0.542)$ | $(0.542)$ |


| Variance(Municipality) | $\begin{gathered} 0.649 * * * \\ (0.135) \end{gathered}$ | $\begin{gathered} 0.677 * * * \\ (0.139) \end{gathered}$ | $\begin{gathered} 0.593 * * * \\ (0.136) \end{gathered}$ | $\begin{gathered} 0.577 * * * \\ (0.133) \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: |
| Observations | 3,057 | 3,057 | 2,847 | 2,847 |
| Number of municipalities | 260 | 260 | 260 | 260 |
| Nested Models: Panama |  |  |  |  |
|  | 1: Simple | 2: Simple | 3: Full | 4: Full |
| Standardized Color (continuous) | $\begin{gathered} 0.171 * * * \\ (0.0640) \end{gathered}$ |  |  | $\begin{gathered} 0.183 * * * \\ (0.0693) \end{gathered}$ |
| Light |  | $\begin{gathered} -0.516^{*} \\ (0.263) \end{gathered}$ | $\begin{aligned} & -0.331 \\ & (0.287) \end{aligned}$ |  |
| Medium Light |  | $\begin{gathered} -0.000354 \\ (0.248) \end{gathered}$ | $\begin{gathered} 0.121 \\ (0.273) \end{gathered}$ |  |
| Medium Dark |  | $\begin{gathered} 0.00768 \\ (0.275) \end{gathered}$ | $\begin{aligned} & 0.0627 \\ & (0.304) \end{aligned}$ |  |
| Dark |  | $\begin{gathered} 0.167 \\ (0.330) \end{gathered}$ | $\begin{gathered} 0.398 \\ (0.361) \end{gathered}$ |  |
| Very Dark |  | $\begin{aligned} & 1.726^{* *} \\ & (0.725) \end{aligned}$ | $\begin{aligned} & 1.888 * * \\ & (0.798) \end{aligned}$ |  |
| Constant | $\begin{gathered} -3.518^{* * *} \\ (0.392) \end{gathered}$ | $\begin{gathered} -2.884^{* * *} \\ (0.415) \end{gathered}$ | $\begin{gathered} -5.280^{* * * *} \\ (0.927) \end{gathered}$ | $\begin{gathered} -5.860^{* * *} \\ (0.915) \end{gathered}$ |
| Variance(Municipality) | $\begin{gathered} 0.743 * * * \\ (0.193) \end{gathered}$ | $\begin{gathered} 0.734 * * * \\ (0.192) \end{gathered}$ | $\begin{gathered} 0.537 * * * \\ (0.172) \end{gathered}$ | $\begin{gathered} 0.521 * * * \\ (0.168) \end{gathered}$ |
| Observations | 2,936 | 2,936 | 2,725 | 2,725 |
| Number of municipalities | 122 | 122 | 122 | 122 |
| Nested Models: Ecuador |  |  |  |  |
|  | 1: Simple | 2: Simple | 3: Full | 4: Full |
| Standardized Color (continuous) | $\begin{aligned} & 0.212 * * * \\ & (0.0612) \end{aligned}$ |  |  | $\begin{gathered} 0.206 * * * \\ (0.0668) \end{gathered}$ |
| Light |  | $\begin{gathered} 0.600 * * \\ (0.255) \end{gathered}$ | $\begin{gathered} 0.566^{* *} \\ (0.270) \end{gathered}$ |  |
| Medium Light |  | $\begin{aligned} & 0.521^{* *} \\ & (0.244) \end{aligned}$ | $\begin{aligned} & 0.454^{*} \\ & (0.260) \end{aligned}$ |  |
| Medium Dark |  | $\begin{gathered} 0.897 * * * \\ (0.270) \end{gathered}$ | $\begin{gathered} 0.814 * * * \\ (0.288) \end{gathered}$ |  |
| Dark |  | $\begin{gathered} 1.257 * * * \\ (0.374) \end{gathered}$ | $\begin{gathered} 1.198 * * * \\ (0.394) \end{gathered}$ |  |
| Very Dark |  | $\begin{aligned} & 1.019^{*} \\ & (0.607) \end{aligned}$ | $\begin{aligned} & 1.278^{* *} \\ & (0.639) \end{aligned}$ |  |
| Constant | $\begin{gathered} -2.120^{* * *} \\ (0.331) \end{gathered}$ | $\begin{gathered} -2.071 * * * \\ (0.353) \end{gathered}$ | $\begin{gathered} -3.966^{* * *} \\ (0.656) \end{gathered}$ | $\begin{gathered} -3.996^{* * *} \\ (0.642) \end{gathered}$ |
| Variance(Municipality) |  |  |  |  |
| Observations | $\begin{gathered} 0.295 * * * \\ (0.100) \end{gathered}$ | $\begin{gathered} 0.295 * * * \\ (0.100) \end{gathered}$ | $\begin{aligned} & 0.217 * * \\ & (0.0929) \end{aligned}$ | $\begin{aligned} & 0.212 * * \\ & (0.0920) \end{aligned}$ |
| Number of municipalities | 4,396 | 4,396 | 4,064 | 4,064 |
| Standardized Color (continuous) | 136 | 136 | 136 | 136 |


|  | Nested Models: Bolivia |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
|  | 1: Simple | 2: Simple | 3: Full | 4: Full |
| Standardized Color (continuous) | 0.0736 |  |  | 0.0851 |
|  | $(0.0530)$ |  |  | $(0.0602)$ |
| Light |  | $0.661^{* *}$ | $0.540^{*}$ |  |
|  |  | $(0.288)$ | $(0.314)$ |  |
| Medium Light |  | $0.569^{* *}$ | $0.513^{*}$ |  |
| Medium Dark |  | $0.270)$ | $(0.294)$ |  |
|  |  | $0.649^{* *}$ | $0.584^{*}$ |  |


| Dark |  | (0.276) | (0.302) |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | 0.628* | 0.638* |  |
|  |  | (0.350) | (0.378) |  |
| Constant | -0.814*** | -1.150*** | -2.554*** | $-2.322^{* * *}$ |
|  | (0.283) | (0.345) | (0.507) | (0.465) |
| Variance(Municipality) | 0.261*** | 0.254*** | 0.252*** | $0.257 * * *$ |
|  | (0.0899) | (0.0884) | (0.0951) | (0.0960) |
| Observations | 5,880 | 5,880 | 5,241 | 5,241 |
| Number of municipalities | 151 | 151 | 151 | 151 |
| Nested Models: Peru |  |  |  |  |
|  | 1: Simple | 2: Simple | 3: Full | 4: Full |
| Standardized Color (continuous) | $\begin{gathered} 0.171 * \\ (0.0893) \end{gathered}$ |  |  | $\begin{gathered} 0.0587 \\ (0.0975) \end{gathered}$ |
| Light |  | -0.894*** | -0.868*** |  |
|  |  | (0.303) | (0.321) |  |
| Medium Light |  | -0.471* | -0.734** |  |
|  |  | (0.262) | (0.287) |  |
| Medium Dark |  | -0.165 | -0.506 |  |
|  |  | (0.292) | (0.320) |  |
| Dark |  | 0.852* | 0.826 |  |
|  |  | (0.473) | (0.506) |  |
| Constant | -1.711*** | -0.700 | -2.048 | -2.944** |
|  | (0.443) | (0.443) | (1.263) | (1.262) |
| Variance(Municipality) | 0.817*** | 0.817*** | 0.744*** | 0.748*** |
|  | (0.213) | (0.215) | (0.226) | (0.223) |
| Observations | 2,943 | 2,943 | 2,663 | 2,663 |
| Number of municipalities | 230 | 230 | 230 | 230 |


| Nested Models: Brazil |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 1: Simple | 2: Simple | 3: Full | 4: Full |
| Standardized Color (continuous) | $\begin{aligned} & 0.0825^{*} \\ & (0.0444) \end{aligned}$ |  |  | $\begin{gathered} 0.0413 \\ (0.0490) \end{gathered}$ |
| Light |  | $\begin{gathered} -0.00146 \\ (0.187) \end{gathered}$ | $\begin{gathered} -0.0466 \\ (0.203) \end{gathered}$ |  |
| Medium Light |  | $\begin{aligned} & 0.0829 \\ & (0.172) \end{aligned}$ | $\begin{aligned} & -0.0302 \\ & (0.189) \end{aligned}$ |  |
| Medium Dark |  | $\begin{gathered} 0.235 \\ (0.187) \end{gathered}$ | $\begin{gathered} 0.110 \\ (0.205) \end{gathered}$ |  |
| Dark |  | $\begin{gathered} 0.210 \\ (0.238) \end{gathered}$ | $\begin{aligned} & 0.0846 \\ & (0.257) \end{aligned}$ |  |
| Very Dark |  | $\begin{gathered} 0.482 \\ (0.369) \end{gathered}$ | $\begin{gathered} 0.166 \\ (0.422) \end{gathered}$ |  |
| Constant | $\begin{gathered} -1.181 * * * \\ (0.296) \end{gathered}$ | $\begin{gathered} -1.050^{* * *} \\ (0.298) \end{gathered}$ | $\begin{gathered} -3.590^{* * *} \\ (0.629) \end{gathered}$ | $\begin{gathered} -3.691 * * * \\ (0.629) \end{gathered}$ |
| Variance(Municipality) | $\begin{gathered} 0.734 * * * \\ (0.165) \end{gathered}$ | $\begin{gathered} 0.730^{* * *} \\ (0.164) \end{gathered}$ | $\begin{gathered} 0.719 * * * \\ (0.167) \end{gathered}$ | $\begin{gathered} 0.725^{* * *} \\ (0.167) \end{gathered}$ |
| Observations | 3,882 | 3,882 | 3,501 | 3,501 |
| Number of municipalities | 125 | 125 | 125 | 125 |


| Nested Models: Venezuela |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 1: Simple | 2: Simple | 3: Full | 4: Full |
| Standardized Color (continuous) | $\begin{gathered} 0.0432 \\ (0.0755) \end{gathered}$ |  |  | $\begin{gathered} 0.0463 \\ (0.0826) \end{gathered}$ |
| Light |  | $\begin{aligned} & 0.548^{*} \\ & (0.281) \end{aligned}$ | $\begin{aligned} & 0.605^{*} \\ & (0.311) \end{aligned}$ |  |
| Medium Light |  | $\begin{gathered} 0.225 \\ (0.265) \end{gathered}$ | $\begin{gathered} 0.282 \\ (0.294) \end{gathered}$ |  |
| Medium Dark |  | $\begin{gathered} 0.433 \\ (0.288) \end{gathered}$ | $\begin{gathered} 0.485 \\ (0.317) \end{gathered}$ |  |
| Dark |  | $\begin{aligned} & -0.189 \\ & (0.583) \end{aligned}$ | $\begin{aligned} & -0.387 \\ & (0.674) \end{aligned}$ |  |
| Very Dark |  | $\begin{aligned} & 1.515^{*} \\ & (0.874) \end{aligned}$ | $\begin{aligned} & 1.602^{*} \\ & (0.929) \end{aligned}$ |  |
| Constant | $\begin{gathered} -1.002^{*} \\ (0.564) \end{gathered}$ | $\begin{gathered} -1.222^{* *} \\ (0.574) \end{gathered}$ | $\begin{gathered} -2.613^{* * *} \\ (0.850) \end{gathered}$ | $\begin{gathered} -2.318^{* * *} \\ (0.838) \end{gathered}$ |
| Variance(Municipality) | $\begin{gathered} 0.966 * * * \\ (0.288) \end{gathered}$ | $\begin{gathered} 0.963 * * * \\ (0.289) \end{gathered}$ | $\begin{aligned} & 1.049 * * * \\ & (0.333) \end{aligned}$ | $\begin{gathered} 1.038^{* * *} \\ (0.327) \end{gathered}$ |
| Observations | 2,945 | 2,945 | 2,553 | 2,553 |
| Number of municipalities | 83 | 83 | 83 | 83 |


| Nested Models: Dominican Republic |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 1: Simple | 2: Simple | 3: Full | 4: Full |
| Standardized Color (continuous) | $\begin{gathered} 0.0959 * * * \\ (0.0360) \end{gathered}$ |  |  | $\begin{gathered} 0.0591 \\ (0.0386) \end{gathered}$ |
| Light |  | $\begin{aligned} & 0.00912 \\ & (0.205) \end{aligned}$ | $\begin{gathered} -0.0690 \\ (0.213) \end{gathered}$ |  |
| Medium Light |  | $\begin{gathered} 0.236 \\ (0.191) \end{gathered}$ | $\begin{gathered} 0.162 \\ (0.198) \end{gathered}$ |  |
| Medium Dark |  | $\begin{gathered} 0.192 \\ (0.194) \end{gathered}$ | $\begin{aligned} & 0.0552 \\ & (0.203) \end{aligned}$ |  |
| Dark |  | $\begin{gathered} 0.446^{* *} \\ (0.217) \end{gathered}$ | $\begin{gathered} 0.274 \\ (0.227) \end{gathered}$ |  |
| Very Dark |  | $\begin{gathered} 0.450 \\ (0.298) \end{gathered}$ | $\begin{gathered} 0.286 \\ (0.316) \end{gathered}$ |  |
| Constant | $\begin{gathered} -1.103 * * * \\ (0.227) \end{gathered}$ | $\begin{gathered} -0.998^{* * *} \\ (0.265) \end{gathered}$ | $\begin{gathered} -1.943 * * * \\ (0.367) \end{gathered}$ | $\begin{gathered} -2.021 * * * \\ (0.339) \end{gathered}$ |
| Variance(Municipality) | $\begin{gathered} 0.100^{* * *} \\ (0.0357) \end{gathered}$ | $\begin{gathered} 0.0973 * * * \\ (0.0354) \end{gathered}$ | $\begin{gathered} 0.0996^{* * *} \\ (0.0380) \end{gathered}$ | $\begin{aligned} & 0.104 * * * \\ & (0.0385) \end{aligned}$ |
| Observations | 4,489 | 4,489 | 4,154 | 4,154 |
| Number of municipalities | 169 | 169 | 169 | 169 |

## Section D: Oaxaca-Blinder Decomposition

The Oaxaca-Decomposition shows evidence of differential treatment based on skin color in both Brazil and Panama. In Brazil, $63 \%$ of the total Client gap is unexplained by average differences in model covariates. The bulk of this unexplained difference is due to different parameters for Participation Index and Education predicting client targeting for dark and light skinned voters. Higher levels of participation for dark skinned voters reduce the Client Gap, while higher levels of educational attainment for dark skinned voters increases the Client Gap. In Panama, $85 \%$ of this gap ( 8.7 percentage-points) can be explained by out-of-model factors, principally by different parameters for Political Interest and Participation Index across skin color. Higher levels of interest in politics reduces the Client Gap, while higher levels of participation increase this gap. I used different cut-offs to establish the groups in Brazil and Panama. I based this judgement on the points in the standardized color-continuum where I observed a notable difference in the likelihood of client targeting. In Brazil, we observe this uptick for voters with medium dark skin tone and darker. In Panama we notice this uptick for voters with dark skin tone and darker. Standard errors in parentheses $* * * \mathrm{p}<0.01,{ }^{* *} \mathrm{p}<0.05, * \mathrm{p}<0.1$

| Appendix Table 1.3: Oaxaca-Blinder Decomposition Panama |  |  |  |
| :---: | :---: | :---: | :---: |
|  | Differential | Explained | Unexplained |
| Dark and Very Dark predicted | $\begin{gathered} 0.218 * * * \\ (0.0408) \end{gathered}$ |  |  |
| Medium Dark and Lighter predicted | $\begin{gathered} 0.115 * * * \\ (0.0123) \end{gathered}$ |  |  |
| Difference | $\begin{aligned} & 0.103^{* *} \\ & (0.0403) \end{aligned}$ |  |  |
| Wealth Quintile (reverse coded) |  | $\begin{aligned} & -0.00400 \\ & (0.00259) \end{aligned}$ | $\begin{gathered} 0.0650 \\ (0.0784) \end{gathered}$ |
| Partisan |  | $\begin{gathered} 9.59 \mathrm{e}-05 \\ (0.00180) \end{gathered}$ | $\begin{gathered} 0.0137 \\ (0.0397) \end{gathered}$ |
| Requester |  | $\begin{gathered} 0.00319 \\ (0.00234) \end{gathered}$ | $\begin{aligned} & -0.00522 \\ & (0.0136) \end{aligned}$ |
| Civic |  | $\begin{gathered} 0.00244 \\ (0.00547) \end{gathered}$ | $\begin{gathered} 0.0124 \\ (0.0431) \end{gathered}$ |
| Political Interest |  | $\begin{aligned} & 0.000833 \\ & (0.00143) \end{aligned}$ | $\begin{gathered} -0.0740 \\ (0.0531) \end{gathered}$ |
| Participation Index |  | $\begin{array}{r} 3.67 \mathrm{e}-05 \\ (0.00156) \end{array}$ | $\begin{gathered} 0.0846 \\ (0.0594) \end{gathered}$ |
| Interpersonal Trust |  | $\begin{aligned} & -0.00125 \\ & (0.00147) \end{aligned}$ | $\begin{gathered} 0.111 \\ (0.0710) \end{gathered}$ |
| Voted |  | $\begin{aligned} & -0.00193 \\ & (0.00188) \end{aligned}$ | $\begin{gathered} -0.0107 \\ (0.0573) \end{gathered}$ |
| Registered |  | $\begin{aligned} & -0.000867 \\ & (0.00125) \end{aligned}$ | $\begin{aligned} & 0.0563 \\ & (0.211) \end{aligned}$ |
| Education Years |  | $\begin{aligned} & 0.000190 \\ & (0.00109) \end{aligned}$ | $\begin{gathered} 0.208 \\ (0.189) \end{gathered}$ |
| Female |  | $\begin{aligned} & 0.000534 \\ & (0.00139) \end{aligned}$ | $\begin{aligned} & 0.0474^{*} \\ & (0.0278) \end{aligned}$ |
| Age |  | $\begin{aligned} & 0.00309^{*} \\ & (0.00170) \end{aligned}$ | $\begin{gathered} 0.104 \\ (0.0999) \end{gathered}$ |
| Urban |  | $\begin{aligned} & 0.00682^{*} \\ & (0.00393) \end{aligned}$ | $\begin{gathered} -0.0261 \\ (0.0648) \end{gathered}$ |
| Color_I |  | $\begin{gathered} 0.00673^{* *} \\ (0.00326) \end{gathered}$ | $\begin{array}{r} -0.0909 \\ (0.110) \end{array}$ |
| Constant |  |  | $\begin{aligned} & -0.408 \\ & (0.360) \end{aligned}$ |
| Total |  | $\begin{gathered} 0.0159 \\ (0.0109) \end{gathered}$ | $\begin{gathered} 0.0871^{* *} \\ (0.0394) \end{gathered}$ |
| Observations | 2,936 | 2,936 | 2,936 |

The table includes the results of detailed two-fold Oaxaca Decomposition of the Skin Color Client Gap in Panama. Standard errors in parentheses *** $\mathrm{p}<0.01,{ }^{* *} \mathrm{p}<0.05,{ }^{*} \mathrm{p}<0.1$

| Appendix Table 1.4: Oaxaca-Blinder Decomposition Brazil |  |  |  |
| :---: | :---: | :---: | :---: |
|  | Differential | Explained | Unexplained |
| Medium Dark and Darker predicted | $\begin{gathered} 0.150 * * * \\ (0.0159) \end{gathered}$ |  |  |
| Medium Light and Lighter predicted | $\begin{gathered} 0.113^{* * *} \\ (0.0117) \end{gathered}$ |  |  |
| Difference | $\begin{gathered} 0.0374 * * \\ (0.0154) \end{gathered}$ |  |  |
| Wealth Quintile (reverse coded) |  | $\begin{aligned} & 0.0108 * * * \\ & (0.00321) \end{aligned}$ | $\begin{gathered} -0.00143 \\ (0.0327) \end{gathered}$ |
| Partisan |  | $\begin{gathered} 0.000516 \\ (0.000562) \end{gathered}$ | $\begin{aligned} & -0.00797 \\ & (0.00859) \end{aligned}$ |
| Requester |  | $\begin{aligned} & 0.000717 \\ & (0.00120) \end{aligned}$ | $\begin{aligned} & -0.00567 \\ & (0.00833) \end{aligned}$ |
| Civic |  | 0.00214 | 0.0113 |


|  | $(0.00145)$ | $(0.0181)$ |
| :--- | :---: | :---: |
| Political Interest | $-2.10 \mathrm{e}-05$ | -0.00356 |
| Participation Index | $(0.000738)$ | $(0.0174)$ |
| Interpersonal Trust | $4.43 \mathrm{e}-05$ | $-0.0675^{* *}$ |
|  | $(0.000286)$ | $(0.0267)$ |
| Voted | 0.000808 | -0.0388 |
|  | $(0.000939)$ | $(0.0257)$ |
| Registered | $-4.94 \mathrm{e}-05$ | -0.0378 |
|  | $(0.000287)$ | $(0.0273)$ |
| Education Years | $-0.00261 * *$ | 0.0618 |
|  | $(0.00107)$ | $(0.0463)$ |
| Female | -0.000859 | $0.0555^{* *}$ |
|  | $(0.00138)$ | $(0.0275)$ |
| Age | 0.000209 | -0.00955 |
|  | $(0.000353)$ | $(0.0145)$ |
| Urban | 0.00184 | 0.0552 |
| Color_I | $(0.00162)$ | $(0.0367)$ |
| Constant | $2.35 \mathrm{e}-05$ | -0.0473 |
| Total | $(0.000207)$ | $(0.0440)$ |
|  | 0.000436 | -0.0371 |
| Observations | $(0.00197)$ | $(0.0344)$ |

The table includes the results of detailed two-fold Oaxaca Decomposition of the Skin Color Client Gap in Brazil. Standard errors in parentheses ${ }^{* * *} \mathrm{p}<0.01,{ }^{* *} \mathrm{p}<0.05,{ }^{*} \mathrm{p}<0.1$

Section E: Appendix Figures


Appendix Figure 1.3 tests the robustness of the main model findings to the potential for reporting bias, through the interaction of Skin Color and Bribes_OK. The latter is a dichotomous measure of whether the respondent believes that sometimes it is ok to pay a bribe. Attitudes about whether bribery is justified is a proxy for respondents' sensitivity of the vote buying measure.


Appendix Figure 1.4 allows for a comparison of the predicted probabilities of Skin Color (See Figure 2 of the manuscript) to key model covariates. The darkest voters have a $45 \%$ greater predicted probability of Client relative to the lightest voters in the full model. The poorest voters have a $27 \%$ greater predicted probability of Client relative to the wealthiest (Wealth). Partisans have a $17 \%$ greater predicted probability of Client (Partisan). People with the max value of Civic have a $134 \%$ greater predicted probability of Client (Civic). They also have the greatest predicted probability of Client in the model ( 0.185 ). People with the max value of Participation have a $48.5 \%$ greater predicted probability of Client (Participation). People with the highest levels of Political Interest have a $43.7 \%$ greater predicted probability of Client (Political Interest). People with the highest Interpersonal Trust have a $19 \%$ lower predicted probability of Client (Trust). People that report voting have a $17 \%$ greater predicted probability of Client (Voted). Women have a $16 \%$ lower predicted probability of Client (Gender).

Appendix Figure 1.4: Predicted Probabilities of Main Model Covariates


[^0] minimurn and maximurn values of each covariate. These predictions should be compared to the predicted probabilities for skin Color (Figure 2 of the manuscript). Models include country-round fixed effects. Covariates are at observed values. Source: LAPOP 2010-2014

Appendix 2: Descriptive Statistics and Robustness Checks for Study 2
Appendix 2 provides the descriptive statistics and robustness checks for Study 2, the conjoint experiment. The Appendix is broken down into two parts. Part A presents the experimental design, sampling procedure and descriptive statistics for the convenience sample for the conjoint analysis. Part B includes the robustness checks for the conjoint experiment, particularly evidence of social desirability bias in the latter tasks of the conjoint. Part C includes additional figures that could not be included in the main analysis reported in the manuscript.

## Section A: Design, Sampling Procedure and Descriptive Statistics

Experimental Procedure: At the beginning of the experiment respondents were instructed to imagine that they had been hired by a fictional political candidate to hand out supermarket vouchers to fictional voters in exchange for their promised vote. The party of the fictional candidate was matched to the partisanship of the respondent. Then the respondent continued to the conjoint portion of the survey where they participated in six decision tasks. Within each decision task, the respondent saw paired profiles of voters, whose 5 attributes varied independently across each profile and across each decision task. A picture of the voter showed the skin color and gender of the voter. In addition, the voter profiles varied on their political affiliation (1 of 5 Panamanian political parties or independent), their occupation (cashier, high school teacher, lawyer), and their propensity to vote (unlikely, undecided, likely). For each pair of profiles, respondents chose one voter to offer a voucher and then rated both profiles on the probability that they would offer them the voucher.

- Question wording for Vote Buy Choice: "If you had to choose one of these voters, to which would you offer the voucher in exchange for their promised vote?"
- Question wording for Vote Buy Rating: 'If you could offer the voucher to both voters, using the scale from 1 to 7 , where ' 1 ' means that you would never offer the voucher to this voter and ' 7 ' means that you would offer the voucher to this voter, indicate how likely you would be to offer the voucher to Voter 1 and then indicate how likely you would be to offer the voucher to Voter 2."

Sampling: I contracted UNIMER, a Central American marketing research firm, to assist me in recruiting participants for the experiment. UNIMER has a Facebook page ${ }^{1}$ where they publish announcements for paid online surveys. UNIMER published the link to my survey on May 31, 2016 and the link stayed open for participation until June 24, 2016. The post advertised the link to my survey hosted on Qualtrics and guaranteed that all participants that completed the survey would be entered into a raffle for a tablet. The post was only visible to Facebook users with a Panamanian IP address. Participants were then redirected to my survey where I screened respondents that were not Panamanian citizens, were not registered voters, and/or were too young to vote in the 2014 election. Previous research showed that about $15 \%$ of Panamanians reported having worked on an electoral campaign in the past. As a result, I cast a broad net for all Panamanian respondents assuming that at least $15 \%$ of my sample would have previous experience working on a campaign (and thus potentially provide a bit of insight into the logic of vote buy targeting). It is fairly common for candidates for office to offer registered voters $\$ 50-$ $\$ 100$ to work on their campaign and "convince" more voters to vote for them, so I also wanted to be sure to get insight into how lay voters would buy votes as they could potentially be contracted to buy votes in a future election. In total 803 people accessed the survey link, 504 began the conjoint task, and 411 respondents completed all 6 conjoint tasks.

|  | Appendix Table 2.1: Balance of skin color and occupational traits full sample, Task 1 |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Skin Color | Cashier | Teacher | Lawyer | Total |
| Very Light | 44 | 25 | 33 | 102 |
| Light | 119 | 142 | 140 | 401 |
| Medium | 31 | 32 | 27 | 90 |
| Dark | 81 | 61 | 57 | 199 |
| Very Dark | 80 | 70 | 66 | 216 |
| Total | 355 | 330 | 323 | 1,008 |


|  | Appendix Table 2.2: | Characteristics of Campaign Workers and Non-Campaign Workers |
| :--- | :--- | :--- |
|  | Campaign Workers | Non-Campaign Workers |
| Gender (Female) | .3158 | .3513 |
|  | $(.0764)$ | $(.0559)$ |
| Age | 35.66 | 32.86 |
|  | $(1.623)$ | $(1.101)$ |
| Education Years | 3.579 | 3.608 |
|  | $(.0971)$ | $(.0765)$ |
| Employed | .6316 | .3784 |
|  | $(.0793)$ | $(.0568)$ |

[^1]| Salary | 3.211 | 3.041 |
| :--- | :--- | :--- |
| $(.2826)$ | $(.1747)$ |  |
| Partisanship | .5263 | .2973 |
| Partido Revolucionario | .0821 | .0535 |
| Partido Popular | 0 | .0135 |
| Cambio Democrático | .2632 | .0135 |
|  | .0724 | .2568 |
| Panameñista | .2105 | .0511 |
| MOLIRENA | .0670 | .3784 |
|  | 0 | .0568 |
| FAD | 0 | .0405 |
|  |  | .0231 |

Appendix Table 2.3 provides the pictures that correspond with the skin color categories in the conjoint analysis (Figure 4 and Figure 5 in the manuscript). The first column gives the name of the picture that corresponds with the plot of the AMCEs. After the last conjoint task, every respondent was shown one of the above pictures and asked to rate the skin color of the respondent using an 11-point skin color scale, " 1 " being the lightest and " 11 " the darkest. The third column provides the mean skin color values that the respondents assigned to the pictures in the post-treatment tests. The fourth column reports how the pictured voters were grouped in the AMCE analysis within the five skin color categories: "Very light", "Light", "Medium", "Dark" and "Very Dark". I created these categories by grouping pictures based on their color-ratings. MF 1 was grouped as "Very Light" because her color rating was significantly lighter than the rest of the pictures. MF2, MM1, MF3 and MM2 were grouped as "Light" because their color ratings were not statistically different from one another. MM3 was placed in the "Medium" category because he was rated significantly darker than the "Medium Light" pictures and significantly lighter than the BF and BM pictures. BM1 and BF1 were grouped as "Medium Dark" together because they were both significantly darker than MM3 and lighter than BF2 and BM2. Finally BF2 and BM2 were grouped together because they were rated the darkest pictures. The pictures come from the Chicago Face Database (Ma et al. 2015). I pretested the pictures to make sure that Panamanian respondents would believe that each pictured individual would credibly be perceived as Panamanian. The post-treatment tests reinforced that the majority of respondents perceived each pictured individual to be Panamanian. MF: Mestiza Female; MM: Mestizo Male; BF: Black Female; BM: Black Male

| Appendix Table 2.3: Sample of pictures corresponding to skin color and gender in the conjoint experiment |  |  |  |
| :---: | :---: | :---: | :---: |
| Picture Name | Picture | Color Rating | Color Group (AMCE) |
| Mestiza Female (MF) 1 |  | 2.23 | Very Light |
| MF 2 | CFD file name: CFD-LF-222-147-N | 3.53 | Light |
| Mestizo Male (MM) 1 |  | 3.62 | Light |
| MF 3 | CFD file name: CFD-LF-241-188-N | 3.88 | Light |
| MM 2 | CFD file name: CFD-LM-218-183-N | 4.09 | Light |
| MM 3 | CFD file name: CFD-LM-202-072-N | 4.89 | Medium |
| Black Female (BF) 1 | CFD file name: CFD-BF-001-025-N | 6.36 | Dark |
| Black Male (BM) 1 | CFD file name: CFD-BM-215-155-N | 7.5 | Dark |
| BF 2 |  | 8.72 | Very Dark |
| BM 2 |  |  |  |
|  |  | 9 | Very Dark |

The table displays the photographs that were used in the conjoint experiment to signal skin color and gender.
Source: Ma, Correll, and Wittenbrink 2015

## Section B: Robustness Checks

|  | Appendix Table 2.4: AMCE of Vote Buy Choice Task on Color and Task Interaction |
| :---: | :---: |
| Light | 0.00821 |
|  | (0.0589) |
| Medium | -0.0706 |
|  | (0.0757) |
| Dark | 0.0420 |
|  | (0.0647) |
| Very Dark | 0.113* |
|  | (0.0621) |
| 2.task | 0.0122 |
|  | (0.0719) |
| 3.task | 0.0178 |
|  | (0.0749) |
| 4.task | 0.104 |
|  | (0.0719) |
| 5.task | 0.0828 |
|  | (0.0703) |
| 6.task | 0.00441 |
|  | (0.0731) |
| Light\#2.task | 0.0441 |
|  | (0.0844) |
| Light\#3.task | -0.0181 |
|  | (0.0881) |
| Light\#4.task | -0.0873 |
|  | (0.0835) |
| Light\#5.task | -0.000919 |
|  | (0.0835) |
| Light\#6.task | -0.00196 |
|  | (0.0865) |
| Medium\#2.task | 0.134 |
|  | (0.108) |
| Medium\#3.task | -0.0203 |
|  | (0.116) |
| Medium\#4.task | -0.0402 |
|  | (0.106) |
| Medium\#5.task | -0.0260 |
|  | (0.111) |
| Medium\#6.task | 0.0142 |
|  | (0.108) |
| Dark\#2.task | -0.0597 |
|  | (0.0911) |
| Dark\#3.task | 0.0280 |
|  | (0.0948) |
| Dark\#4.task | -0.0723 |
|  | (0.0936) |
| Dark\#5.task | -0.183** |
|  | (0.0909) |
| Dark\#6.task | 0.0219 |
|  | (0.0940) |
| Very Dark\#2.task | -0.145 |
|  | (0.0910) |
| Very Dark\#3.task | -0.0739 |
|  | (0.0934) |
| Very Dark\#4.task | -0.246** |
|  | (0.0958) |
| Very Dark\#5.task | $-0.220^{* *}$ |


|  |  |
| :--- | :---: |
| Very Dark\#6.task | $(0.0935)$ |
|  | -0.0374 |
| Constant | $(0.0945)$ |
|  | $0.471 * * *$ |
| Observations | $(0.0496)$ |
| R-squared | 5,375 |
| Prob $>$ F | 0.009 |

Table presents the AMCEs of the Vote Buy Choice on the interaction of each skin color category with each conjoint task for the full sample. Robust standard errors in parentheses ${ }^{* * *} \mathrm{p}<0.01,{ }^{* *} \mathrm{p}<0.05,{ }^{*} \mathrm{p}<0.1$

| Appendix Table 2.5: AMCEs Vote Buy Rating on Color and Black_Round1 Interaction |  |
| :--- | :---: |
| Light | $0.228^{* *}$ |
| Medium | $(0.113)$ |
| Dark | 0.197 |
| Very Dark | $(0.144)$ |
|  | $0.290^{* *}$ |
| Black_Round1 | $(0.126)$ |
| Light\#Black_Round1 | 0.198 |
|  | $(0.123)$ |
| Medium\#Black_Round1 | $0.868^{* * *}$ |
|  | $(0.278)$ |
| Dark\#Black_Round1 | -0.281 |
| Very Dark\#Black_Round1 | $(0.296)$ |
| Constant | -0.234 |
|  | $(0.408)$ |
| Observations | -0.438 |
| R-squared | $(0.278)$ |
| The full model specification includes dummy variables for Teacher, Lawyer, "Maybe Vote", "Will Vote", "Party Match" and dummy |  |
| variables for each conjoint task. The significant Black_Round1 coefficient shows that there were carryover effects for respondents who |  |
| saw 2 black voter profiles in the first round. Robust standard errors in parentheses *** $\mathrm{p}<0.01, * *$ p $<0.05, *$ p $<0.1$ |  |

Part C: Additional Figures from the Conjoint Experiment

Appendix Figure 2.1: AMCEs for Choice and Rating Tasks, full sample for tasks 1, 3, and 6


Sources
Ma, D., et al. (2015). "The Chicago Face Database: A Free Stimulus Set of Faces and Norming Data." Behavior Research Methods 47: 1122-1135.


[^0]:    The figure plots the predicted probabilies of key covariates in the main model for the pooled sample. Predicted probabilities were calculated at the

[^1]:    ${ }^{1}$ https://www.facebook.com/UnimerCentroamerica/?fref=ts

