ONLINE APPENDIX / IBOPE REPLICATION ANALYSIS

The Racialized Effects of Social Programs in Brazil
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One concern that arises when analyzing omnibus surveys is whether such surveys accurately capture electoral behavior, in particular when such surveys are conducted in general election off-years or months away from elections. As discussed in the main text, LAPOP surveys appear to capture well real rates of abstention, while overestimating support for the incumbent PT. To test the robustness of the main findings using LAPOP data, I replicated the analysis using a second source of data. The Brazilian Electoral Study, conducted by the firm IBOPE two weeks following second-round voting in the 2014 general election, is the only other survey to my knowledge that includes questions about electoral behavior, CCT benefits, and racial identification. These data are temporally more limited because they only shed light on one general election. But on its face this survey provides more valid estimates of vote choice among those who turn out and decide to cast valid votes.

		Abstention		Incumbent Vote		Opposition Vote	
Year	Data Source	1st Round	2nd Round	1st Round	2nd Round	1st Round	2nd Round
2014	TSE	27.17%	26.10%	41.59%	51.64%	58.41%	48.36%
2014	IBOPE	14.82%	14.58%	49.90%	56.67%	50.10%	43.33%
2008-14	LAPOP	-	28.03%	-	68.88%	-	31.12%

Table A3: Comparison of Official Election Results (TSE) with IBOPE and LAPOP Survey Data

Table A3 partially reproduces table 1 from the main text, showing that the IBOPE survey better reflects real-world vote choice among Brazilians, though it tends to underestimate abstention. As a robustness measure, this replication analysis aims to test whether the results of the LAPOP analysis are an artifact of those surveys.

In this replication I employ the same matching-weighted logistic regression estimation strategy. The full sample of IBOPE data are pruned using coarsened exact matching algorithm. One difference between IBOPE and LAPOP surveys is the availability of data on first and second-round elections. In this replication analysis I test the robustness of LAPOP findings by separately analyzing both first and second round elections.

	Non-recipients	**Recipients**	**Total**
Matched	1,536 (50%)	749 (24%)	2,285 (74%)
Discarded	6,87 (22%)	104 (3%)	791 (25%)
Total	2,223 (72%)	853 (27%)	3,076 (100%)

Table A4: Results of CEM Pruning

Variable	$\mathcal{L}_1$	**Mean**	**Min**	**25%**	**50%**	**75%**	**Max**
Race	.03476	.03476	0	0	0	0	-
Education	.02203	-.02203	0	0	0	0	-
Income	.01778	-.01778	0	0	0	0	-
Female	.07257	.07257	0	0	1	0	0
Age	.02273	-.0165	0	0	-1	1	-2
Age2	.04019	-.08567	0	0	-71	99	-316
Region	.04953	.04953	0	0	0	0	0

Table A5: Monotonic Imbalance Measures

Dependent variables. Electoral participation and vote choice are coded as they are in the LAPOP analysis. Respondents are coded as abstainers (0) if they do not turn out to the polls or cast blank or spoiled ballots, and coded as voters (1) if they turn out *and* cast valid votes. Voters are then coded as having voted for the incumbent (1) or the opposition (0) in both rounds. In the first round, votes cast for any non-PT party is coded as an opposition vote.

	Subsample	Abstain	Opposition	Incumbent	N
1st Round	Whites	14.94%	48.05%	37.01%	870
	Afro-Brazilians	14.79%	36.02%	49.19%	1,366
	Non-Recipients	16.17%	43.71%	40.12%	1,503
	Recipients	12.26%	34.50%	53.23%	742
	Total	14.85%	40.70%	44.45%	2,245
2nd Round	Whites	15.63%	41.55%	42.82%	864
	Afro-Brazilians	14.74%	30.07%	55.18%	1,370
	Non-Recipients	15.95%	38.38%	45.66%	1,498
	Recipients	13.31%	26.61%	60.08%	744
	Total	15.09%	34.51%	50.40%	2,242

Table A6: Pruned Sample Dependent Variables

Independent variables. In this analysis, CCT is measured as a binary variable, 1 for recipients and 0 for non-recipients. Race is also measured as binary, 0 for whites and 1 for *preto* or *pardo*. In keeping with the household wealth index, income is a 7-category measure of household income. Education is categorical, capturing less than primary (1), primary (2), middle school (3), high school (4), and university or higher (5). Region is coded for each major region of Brazil, north (1), northeast (2), southeast (3), south (4), and center-west (5).

A note on Party ID. In this sample, more than 97 percent of respondents identify as nonpartisans. This is problematic for estimation because there are too few observations to compute precise estimates of the effect on various party IDs on the dependent variables. As a result, I do not include party ID as a variable in this analysis. I have replicated the results presented in this analysis by first dropping all partisans from the sample and restricting the analysis to nonpartisans, and the findings of this replication do not change.

Variable	Mean	St. Dev.	Min	Max	N
CCT	0.33	0.47	0	1	2,285
Race	0.61	0.49	0	1	2,276
Income	2.53	0.81	1	7	2,101
Education	2.41	0.96	1	5	2,235
Age	39.81	14.60	16	80	2,285
Female	0.53	0.50	0	1	2,285
Region	2.78	0.82	1	5	2,285

Table A7: Summary Statistics of Independent Variables

	Nonrecipients	Recipients	Total
Whites	75.06%	24.94%	886
Afro-Brazilians	62.30%	37.70%	1,390
Total	67.27%	32.73%	2,276

Table A8: Pruned Sample CCT Recipients by Race

Models and estimation. I model electoral participation and vote choice as I do in the LAPOP analysis, with four models: 1) a base model regressing only CCT status and race on the dependent variables; 2) the base model plus controls for wealth, education, age, age^2, sex, and party ID; 3) the base model with controls and region and survey-year fixed effects; and 4) the full model plus an interaction term between CCT status and race. As with the LAPOP analysis, all predicted probabilities and marginal effects are computed as average partial effects.

	(1)	(2)	(3)	(4)
CCT x Race				0.359
				(0.299)
CCT	0.347***	0.235*	0.244*	0.001
	(0.132)	(0.140)	(0.141)	(0.244)
Race	0.055	0.037	-0.022	-0.130
	(0.125)	(0.138)	(0.146)	(0.173)
Education		0.080	0.091	0.090
		(0.078)	(0.079)	(0.079)
Income		0.001	0.057	0.055
		(0.077)	(0.080)	(0.080)
Female		0.323**	0.320**	0.319**
		(0.128)	(0.128)	(0.129)
Age		0.038	0.042*	0.042*
		(0.025)	(0.025)	(0.025)
Age^2		-0.000	-0.000	-0.000
		(0.000)	(0.000)	(0.000)
Constant	1.583***	0.554	0.643	0.730
	(0.107)	(0.552)	(0.588)	(0.593)
Region FX	N	N	Y	Y
Chi-squared	7.530	14.096	24.421	25.849
N	2,272	2,041	2,041	2,041

* p<.1, ** p<.05, *** p<.01

Table A9: Effects of CCTs on 2014 First-Round Electoral Participation

	Afro-Brazilians	Whites	(dy/dx) Race
Recipients	0.88 (0.02)	0.86 (0.02)	0.03 (0.02)
Nonrecipients	0.84 (0.02)	0.86 (0.02)	-0.02 (0.02)
(dy/dx) CCT	0.04 (0.02)**	0.00 (0.03)	

Table A10: Predicted Probabilities of 2014 First-Round Electoral Participation and Marginal Effects of CCTs and Race

	(1)	(2)	(3)	(4)
CCT x Race				0.205
				(0.297)
CCT	0.121	-0.038	-0.027	-0.163
	(0.130)	(0.139)	(0.141)	(0.240)
Race	0.226*	0.199	0.040	-0.029
	(0.126)	(0.140)	(0.148)	(0.179)
Education		0.184**	0.206**	0.205**
		(0.081)	(0.082)	(0.082)
Income		-0.082	0.046	0.045
		(0.078)	(0.082)	(0.082)
Female		0.254*	0.260*	0.259*
		(0.132)	(0.134)	(0.134)
Age		0.060**	0.067***	0.067***
		(0.025)	(0.026)	(0.026)
Age^2		-0.001**	-0.001**	-0.001**
		(0.000)	(0.000)	(0.000)
Constant	1.597***	0.111	0.295	0.349
	(0.108)	(0.563)	(0.614)	(0.620)
Region FX	N	N	Y	Y
Chi-squared	4.175	17.458	57.159	57.636
N	2,262	2,034	2,034	2,034

* p<.1, ** p<.05, *** p<.01

Table A11: Effects of CCTs on 2014 Second-Round Electoral Participation

	Afro-Brazilians	**Whites**	**(dy/dx) Race**
Recipients	0.87 (0.02)	0.85 (0.02)	-0.00 (0.02)
Nonrecipients	0.86 (0.01)	0.87 (0.02)	0.02 (0.03)
(dy/dx) CCT	0.00 (0.02)	-0.02 (0.03)	

Table A12: Predicted Probabilities of 2014 Second-Round Electoral Participation and Marginal Effects of CCTs and Race

	(1)	(2)	(3)	(4)
CCT x Race				-0.399*
				(0.235)
CCT	0.221**	0.199*	0.205*	0.476**
	(0.100)	(0.107)	(0.109)	(0.194)
Race	0.652***	0.490***	0.283**	0.419***
	(0.100)	(0.109)	(0.117)	(0.142)
Education		-0.187***	-0.189***	-0.186***
		(0.062)	(0.063)	(0.063)
Income		-0.379***	-0.279***	-0.275***
		(0.064)	(0.066)	(0.066)
Female		-0.079	-0.063	-0.059
		(0.102)	(0.103)	(0.103)
Age		0.046**	0.048**	0.048**
		(0.021)	(0.021)	(0.021)
Age^2		-0.001**	-0.001**	-0.001**
		(0.000)	(0.000)	(0.000)
Constant	-0.240***	0.445	0.609	0.485
	(0.088)	(0.459)	(0.487)	(0.493)
Region FX	N	N	Y	Y
Chi-squared	49.037	102.932	142.934	145.811
N	1,904	1,719	1,719	1,719

* p<.1, ** p<.05, *** p<.01

Table A13: Effects of CCTs on 2014 First-Round Incumbent Support

	Afro-Brazilians	**Whites**	**(dy/dx) Race**
Recipients	0.60 (0.02)	0.60 (0.02)	0.00 (0.04)
Nonrecipients	0.58 (0.02)	0.49 (0.03)	0.09 (0.04)***
(dy/dx) CCT	0.02 (0.03)	0.11 (0.04)**	

Table A14: Predicted Probabilities of 2014 First-Round Incumbent Support and Marginal Effects of CCTs and Race

	(1)	(2)	(3)	(4)
CCT x Race				-0.475*
				(0.244)
CCT	0.391***	0.350***	0.362***	0.679***
	(0.104)	(0.112)	(0.114)	(0.200)
Race	0.724***	0.523***	0.292**	0.445***
	(0.102)	(0.111)	(0.120)	(0.143)
Education		-0.171***	-0.177***	-0.174***
		(0.064)	(0.065)	(0.065)
Income		-0.335***	-0.232***	-0.229***
		(0.064)	(0.067)	(0.067)
Female		0.001	0.017	0.022
		(0.104)	(0.106)	(0.106)
Age		0.060***	0.059***	0.059***
		(0.021)	(0.021)	(0.021)
Age^2		-0.001***	-0.001***	-0.001***
		(0.000)	(0.000)	(0.000)
Constant	-0.067	0.332	0.554	0.422
	(0.088)	(0.465)	(0.494)	(0.500)
Region FX	N	N	Y	Y
Chi-squared	66.575	103.539	145.792	149.593
N	1,897	1,717	1,717	1,717

* p<.1, ** p<.05, *** p<.01

Table A15: Effects of CCTs on 2014 Second-Round Incumbent Support

	Afro-Brazilians	**Whites**	**(dy/dx) Race**
Recipients	0.69 (0.02)	0.69 (0.03)	-0.01 (0.04)
Nonrecipients	0.65 (0.02)	0.55 (0.03)	0.10 (0.03)***
(dy/dx) CCT	0.04 (0.03)	0.15 (0.04)***	

Table A16: Predicted Probabilities of 2014 Second-Round Incumbent Support and Marginal Effects of CCTs and Race