Crafting Mass Partisanship — at the Grass Roots

(Supplemental Information)

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This document includes information and analysis not included in the main body of the paper due to space restrictions. It is permanently available along with replication materials in the Dataverse Project, and can be assessed at http://dx.doi.org/10.7910/DVN/23575. It includes three sections:

- Extended Results for Electoral Performance
- Extended Results for Partisanship
- Details and Extended Results for the Civil Society Connection

Extended Results for Electoral Performance

Table 2 in the main body of the paper, reports only the baseline levels of partisanship as well the "effects" of establishing a local presence on national legislative election vote-share. Table A.1 presents the complete estimates.

The most important additional result here is that differences between groups in t_0 are never significant, which suggests that our matching approach succeeded in improving comparability of treatment and control groups.

Table A.1: Effect of Establishing a Local Presence on Party Legislative Vote-Share, (DiD Estimates by Electoral Cycle)

	PT			PMDB			PSDB		
	1994-2002	1998–2006	2002–2010	1994-2002	1998–2006	2002–2010	1994-2002	1998–2006	2002–2010
Baseline t_0	3.70	2.26	4.80	9.49	9.97	10.44	4.40	7.17	2.58
	(0.28)	(0.41)	(1.11)	(1.68)	(2.57)	(2.06)	(1.08)	(1.17)	(0.62)
	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Time Trend in Ctrl Group	4.21	3.33	1.75	-1.89	3.87	-1.17	2.49	-1.01	0.79
	(0.40)	(0.59)	(1.57)	(2.38)	(3.64)	(2.92)	(1.53)	(1.65)	(0.88)
	<0.01	<0.01	0.27	0.43	0.29	0.69	0.10	0.54	0.37
Differences Between Groups in t_0	0.11	0.12	-0.30	-1.72	3.43	-0.09	-0.50	-0.66	0.06
	(0.37)	(0.48)	(1.39)	(2.03)	(3.26)	(2.41)	(1.41)	(1.48)	(0.79)
	0.76	0.79	0.83	0.40	0.29	0.97	0.72	0.66	0.94
Effect of Local Presence	2.56	3.82	5.35	6.61	-2.40	5.94	5.12	6.30	3.40
	(0.52)	(0.68)	(1.96)	(2.88)	(4.61)	(3.41)	(1.99)	(2.10)	(1.11)
	<0.01	<0.01	0.01	0.02	0.60	0.08	0.01	<0.01	<0.01
N	1806	1614	324	348	270	436	578	646	746

Results were obtained after matching municipalities in the control and treatment groups on observed pre-treatment covariates, in each cycle, for each party. Standard errors (in parenthesis) and p-values are shown below the estimates

Extended Results for Partisanship

In the analysis in the latter part of the paper, we pooled surveys taken close to t_0 and to t_1 to determine the impact of establishing a local presence on levels of partisanship. The surveys we used were mostly obtained from CESOP, a repository of survey data maintained by UNICAMP. Two surges, however, were obtained directly from Datafolha. Table A.2, below, indicates the number of respondents, month, year, and the internal identifier (either of CESOP or of Datafolha) of the survey.

Table A.2: Surveys used in the analysis

	N	Month	Year	Identifier
	10905	7	2010	813519†
	4158	3	2010	3292
	4100	7	2009	613485
t_1	5129	5	2009	3281
	11625	3	2009	3280
	2981	8	2008	613419†
	4291	12	2004	2522
	2558	8	2004	2508
	2306	3	2004	2503
	12180	12	2003	2502
t_0	2951	6	2003	2500
	5729	1	2003	2499
	3979	10	2002	2495
	6030	9	2002	1692
	3410	5	2002	1604

†Indicates surveys obtained from Datafolha. All others were obtained from CESOP.

Table A.3 shows the coverage obtained after pooling the surveys. Recall that because we do not really have a panel, we are using different individuals from different municipalities in t_0 and t_1 to estimate essentially four quantitates: partisanship in control and treatment groups (of municipalities) in two periods. Note that we could not adequately identify the municipality of 502 survey respondents—which corresponds to 0.6% of the total number of individual responses in the pooled sample.

Table A.3: Individuals and Municipalities Covered by Surveys

		t_0		t_1	
		Control	Treatment	Control	Treatment
PT	Individuals	109	184	374	296
	Municipalities	5	12	11	16
PMDB	Individuals	204	186	887	685
	Municipalities	4	10	22	41
PSDB	Individuals	285	461	883	979
	Municipalities	9	29	31	58

One of the specifications we presented in Table 3 in the main paper required computation of substantive effects from hierarchical logit estimates, and their standard errors. These were computed by parametric bootstrapping for a hypothetical municipality with "average random effects," following roughly the algorithm of Clarify (Tomz, Wittenberg & King 2003), but also accounting for the random effects. We first drew 1000 thousand hypothetical coefficients from a multivariate normal distribution with mean equal to the estimated fixed effects coefficients and variance obtained from the estimated variance-covariance matrix of the fixed effects. We then computed predicted effects for each of these one thousand simulations, by computed predicted probabilities for treatment and control groups in t_0 and t_1. In each of these cases, we added the contribution of the average random effects. The result was a distribution of 1000 simulated predicted effects, from which we computed the point estimate reported in the table (the mean of the distribution), the standard error (the SE of the distribution), and the p-value (the share of the 1000 simulations smaller or equal to zero). This distribution of simulated predicted effects was skewed positively, therefore even though the standard errors are high relative to the average effect, the effect is significantly different from zero at a relatively high confidence level.

As with the analysis for electoral performance, in the main paper we also report only baseline levels and effects of establishing a local branch. Here (Table A.4) we present the full table of coefficients..

Table A.4: Effects of Local Presence on Identification with PT, PMDB, and PSDB (All coefficients)

	PT			PMDB			PSDB		
	OLS Clustered SE	Linear Rand. Effects	Logit Rand. Effects	OLS Clustered SE	Linear Rand. Effects	Logit Rand. Effects	OLS Clustered SE	Linear Rand. Effects	Logit Rand. Effects
Intercept.	0.24	0.224	-1.25	0.07	0.07	-2.94	0.011	0.011	-5.566
SE	0.045	0.058	0.399	0.018	0.023	0.356	0.006	0.01	0.718
p-val	0	0	0.002	0	0.002	0	0.061	0.236	0
Time= t_1	-0.147	-0.13	-1.174	-0.02	-0.016	-1.211	0.002	0.002	-0.258
SE	0.051	0.064	0.468	0.029	0.033	0.727	0.008	0.012	0.832
p-val	0.004	0.042	0.012	0.48	0.622	0.096	0.798	0.858	0.757
Local Presence (t_0)	-0.053	-0.058	-0.545	-0.002	0.015	-0.011	0.02	0.019	1.166
SE	0.06	0.067	0.418	0.021	0.027	0.363	0.008	0.011	0.654
p-val	0.383	0.381	0.192	0.908	0.582	0.975	0.014	0.092	0.074
Time × Local Presence	0.129	0.148	1.264	0.047	0.028	1.21	-0.006	-0.004	0.141
SE	0.073	0.078	0.583	0.036	0.038	0.78	0.012	0.015	0.882
p-val	0.076	0.059	0.03	0.193	0.464	0.121	0.629	0.768	0.873
Age 25–34			-0.171			0.178			0.353
SE			0.244			0.269			0.384
p-val			0.483			0.51			0.358
Age 35–44			-0.479			0.129			0.305
SE			0.256			0.269			0.372
p-val			0.061			0.632			0.412
Age 45–59			-0.919			0.232			0.394
SE			0.394			0.326			0.469
p-val			0.02			0.476			0.4
Age 60+			-1.773			0.102			-0.496
SE			0.471			0.319			0.591
p-val			0			0.749			0.401
Income 02–03sm			0.19			0.018			0.614
SE			0.245			0.265			0.338
p-val			0.438			0.946			0.069
Income 03–05sm			-0.75			-0.088			-0.172
SE			0.385			0.329			0.508
p-val			0.051			0.789			0.736
Income 05–10sm			0.524			-0.278			1.261
SE			0.364			0.502			0.383
p-val			0.15			0.579			0.001
Income 10+sm			-0.863			-0.321			0.896
SE			0.788			0.77			0.771
p-val			0.273			0.677			0.245
Male			0.839			0.521			0.897
SE			0.196			0.192			0.295
p-val			0			0.007			0.002
Individuals	920	920	894	1861	1861	1792	2475	2475	2387
Municipalities	43	43	43	69	69	69	118	118	118

Details and Extended Results for the Civil Society Connection

In Figures 3a and 3b we report results from regressions similar to the those reported in Table A.4, but which include an interaction of the "treatment" with the pre-existing level of civil society density in each municipality.

Our indicator of civil society density was defined as the log number of relevant civil society entities per capita in each municipality. We computed this indicator from a census of non-profits carried out by the Brazilian Geographic and Statistical Institute (IBGE). IBGE's original categorization of non-profits includes 14 different legal categories. Several categories clearly do not fit into the concept of civil society that we want to capture. The IBGE also provides a more limited definition of NGO's called *Fundações e Associações Sem Fins de Lucro* (FASFIL) which correspond to non-profits that meet five criteria that are accepted internationally as the definition of non-profit entities.[1] In table A.5 we present the list of categories, their prevalence, and whether they were included in the definition we ultimately used. For more information, see IBGE—Instituto Brasileiro de Geografia e Estatística (2004). Our definition was somewhere in between, simply excluding *condomínios*, and *cartórios*.

Table A.5: Distribution of Non-Profit Organizations by Type (2006)

	# of Org.	# of Mun.	FASFIL	In Paper
Notary Public (Cartório)	8798	3617	No	No
Social Organization (OS)	4144	1508	Yes	Yes
Public Interest Social Organization (OSCIP)	1557	599	Yes	Yes
Other Foundations maintained with Private Funds	7466	1810	Yes	Yes
Autonomous Social Service Provider	2432	605	No	Yes
Condominiums Owner Associations (Condomínio)	140167	1135	No	No
Implementing Agency (Progr. Dinheiro Direto na Escola)	9301	1496	No	Yes
Extra-Judicial Conciliation Commission	14	14	No	Yes
Mediation/Negotiation Agency	123	85	No	Yes
Political Party	6341	2778	No	Yes
Union	20222	4290	No	Yes
Domestic Office of Foreign Foundation/Association	90	58	Yes	Yes
Foreign Foundation/Association	43	28	No	Yes
Other Associative Groups	414187	5546	Yes	Yes

Figure A.1 is the PSDB equivalent to figures 3a and 3b, shown in the main body of the paper, and omitted from the main body of the paper for parsimony. It shows that there are no effects of opening a PSDB branch on identification with the PSDB at any level of civil society density.

Table A.6 reports the complete regression results for the figures displayed graphically in Figures 3a, 3b (main body of the paper), and A.1.

[1] The five criteria are that organization be (i) entirely private (ii) not primarily for profit, and any profit generated is reinvested entirely; (iii) legally incorporated; (iv) self-administered; and (v) voluntary.

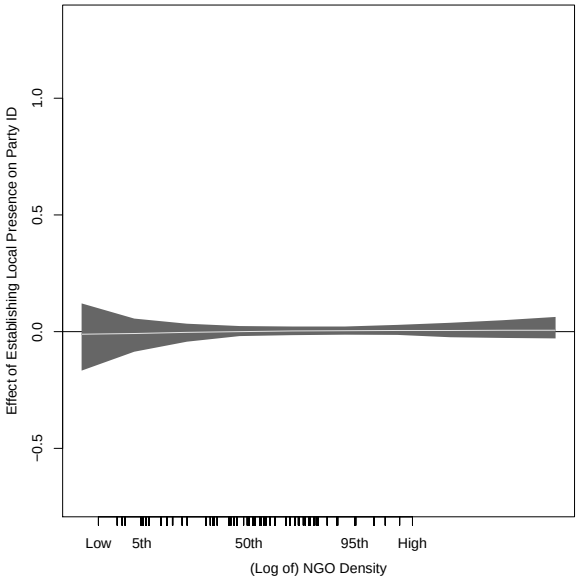

Figure A.1: Effects of Establishing Local Presence on Identification with the PSDB, by Levels of Civil Society Density

Estimates were obtained from a DiD logit with random effects by municipality and the addition of (log of) civil society density in a three way interaction with treatment and time, and all lower dimension interaction terms. Effects were computed by parametric bootstrapping.

Table A.6: Effects of Local Presence and Civil Society Densitiy on Identification (All coefficients)

	PT	PMDB	PSDB
Intercept.	-5.766	-2.929	-4.671
SE	1.989	0.814	1.523
p-val	0.004	0	0.002
Time= t_1	5.1	1.515	-0.281
SE	2.286	1.469	2.261
p-val	0.026	0.303	0.901
log(NGO density)	3.026	-0.008	-0.589
SE	1.271	0.888	1.038
p-val	0.017	0.993	0.571
Local Presence (t_0)	5.069	-0.758	1.219
SE	2.134	1.027	1.572
p-val	0.018	0.46	0.438
Local Presence (t_0) $\times$ log(NGO density)	-3.961	0.692	-0.348
SE	1.413	1.048	1.143
p-val	0.005	0.509	0.761
Time $\times$ log(NGO density)	-4.495	-2.761	0
SE	1.591	1.766	1.554
p-val	0.005	0.118	1
Time $\times$ Local Presence	-6.195	-0.597	-0.266
SE	2.483	1.669	2.391
p-val	0.013	0.72	0.911
Time $\times$ Local Presence $\times$ log(NGO density)	5.535	1.874	0.457
SE	1.781	1.91	1.696
p-val	0.002	0.326	0.788
Male	0.843	0.512	0.905
SE	0.197	0.191	0.293
p-val	0	0.008	0.002
Income02.03.sm	0.236	0.018	0.651
SE	0.247	0.265	0.336
p-val	0.339	0.945	0.053
income03.05.sm	-0.694	-0.062	-0.123
SE	0.387	0.329	0.506
p-val	0.073	0.851	0.808
income05.10.sm	0.6	-0.275	1.34
SE	0.37	0.503	0.384
p-val	0.104	0.584	0
income10..sm	-0.738	-0.261	1.04
SE	0.794	0.774	0.774
p-val	0.353	0.736	0.179
age25.34	-0.166	0.176	0.371
SE	0.246	0.27	0.383
p-val	0.501	0.513	0.333
age35.44	-0.459	0.125	0.338
SE	0.257	0.27	0.371
p-val	0.075	0.642	0.362
age45.59	-0.906	0.231	0.436
SE	0.397	0.326	0.467
p-val	0.022	0.479	0.351
age60.	-1.741	0.103	-0.483
SE	0.471	0.319	0.589
p-val	0	0.747	0.412
Individuals	894	1792	2387
Municipalities	43	69	118

References

IBGE—Instituto Brasileiro de Geografia e Estatística. 2004. "As Fundações Privadas e Associações sem Fins Lucrativos no Brasil, 2002." Rio de Janeiro: Estudos E Pesquisas: Informacao Econômica 4.

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