Partisanship and local fiscal policy

Evidence from Brazilian cities

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Research Question

Do parties matter for local fiscal policy?

- Brazilian cities in 2004-2016;
- RD design to causally identify partisan effects;
- Effect of electing a left-wing mayor on a city's fiscal policy;
- Mechanisms determining convergence/divergence.



Preview of results

Main results:

- Brazilian left-wing mayors do not increase the size of the city government.
- ullet But they modestly increase (pprox 0.6 pp) the share of social spending.
- Stronger social spending effects for lame-duck mayors (\approx 1.3 pp) and in cities experiencing oil windfalls (\approx 2.2 pp).

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- Stronger social spending effects for lame-duck mayors (≈ 1.3 pp) and in cities experiencing oil windfalls (≈ 2.2 pp).
- Mechanisms limiting divergence:
 - Institutional/budget constraints ✓
 - Re-election concerns ✓
 - Fiscal ('Tiebout') competition X
 - Ideologically mixed mayoral coalitions X

Institutional context

- 5,570 cities in Brazil.
- Main responsibilities:
 - childcare & primary education;
 - basic health services;
 - city infrastructures & urban planning;



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- Little self-financing capacity.
 - Transfers = 58% of municipal revenues in 2016.
- Mayor directly elected every four years.
 - Bigger cities (> 200,000): majority rule with runoff;
 - Others: plurality rule.
- Executive branch (mayor) has control over the city budget
 - legislature's role more limited.

Political parties and left-right divide in Brazil

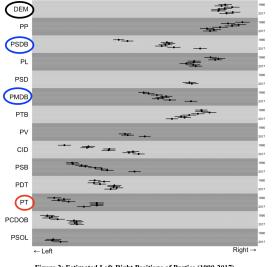


Figure 2: Estimated Left-Right Positions of Parties (1990-2017)

Source: Zucco & Power (forthcoming)

Social and political cleavages

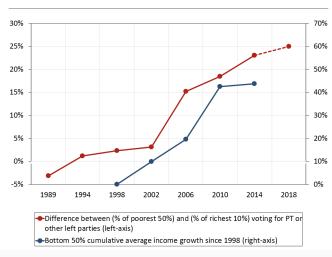


Figure 1. The Rise of Class Cleavages in Brazil, 1989-2018

Source: Gethin & Morgan (2018)

Dataset

Electoral Data:

- Electoral results (*Tribunal Superior Electoral*).
 - \rightarrow Municipal elections of 2004, 2008 and 2012.
- Party ideology (Zucco & Power, forthcoming).

Public Finance:

- Municipal annual revenues and expenditures (FINBRA-STN).
- Oil royalties (STN).

City characteristics:

- Demographic variables (2000 and 2010 Census).
- Municipal GDP (IBGE).
- Bolsa Familia cash transfers (Ministerio da Cidadania).

Sample:

 $\bullet \approx 9,000$ 'usable' city-election observations

Research design

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- RD specification:

$$y_{it} = \beta \mathbb{1}\{ml_{it} > 0\} + f(ml_{it}) + \alpha_i + \tau_t + \varepsilon_{it}$$

 y_{it} = public finance outcome over the mayoral term;

 ml_{it} = left candidate margin;

 $\alpha_i = \text{city fixed effects};$

 $\tau_t = \text{year fixed effects}.$

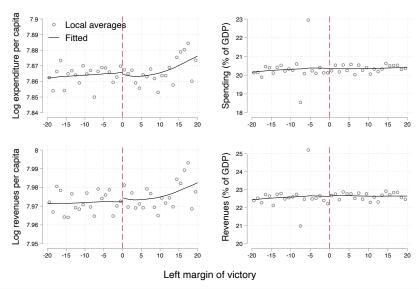
Research design

Difference in city characteristics between left and non-left mayors, by left margin of victory

	All	+/- 40	+/- 10	+/- 5	baseline RD
log(Population) ×100	27.90	3.57	3.45	-0.36	-0.04
	(2.60)	(2.72)	(3.69)	(4.90)	(0.47)
$\log({\sf Median\ earnings}) imes 100$	2.06	-0.41	0.44	-0.08	0.53
	(0.64)	(0.74)	(1.06)	(1.43)	(0.54)
% Urban	1.38	-0.30	-0.30	-0.83	-0.31
	(0.51)	(0.57)	(0.79)	(1.07)	(0.23)
% White	-2.75	-1.78	-1.28	-1.62	-0.42
	(0.52)	(0.60)	(88.0)	(1.20)	(0.23)
Northeast	0.04	0.02	0.01	0.01	-0.03
	(0.01)	(0.01)	(0.02)	(0.02)	(0.04)
log(Bolsa Familia households) ×100	9.56	7.83	1.26	2.07	-0.35
	(1.81)	(2.21)	(3.25)	(4.44)	(1.90)
log(Bolsa Familia receipts) imes 100	10.82	8.32	1.77	2.76	-0.59
	(1.96)	(2.36)	(3.46)	(4.72)	(1.97)
Observations (all)	16427	7849	3400	1809	8943
Observations (effective)	16427	7849	3400	1809	4608

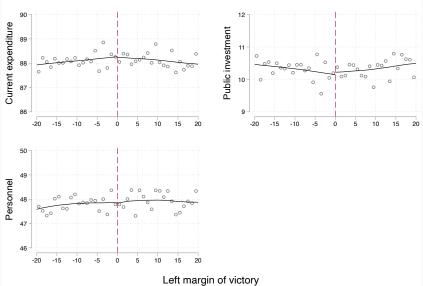
Results: Size of government

Effect of a left-wing mayor on the size of government



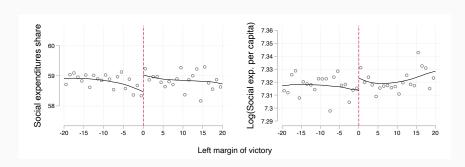
Results: budget allocation among categories

Effect of a left-wing mayor on budget categories (shares)



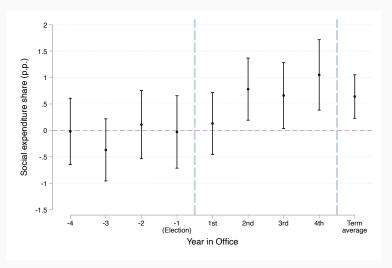
Results: budget allocation among functions

Effect of a left-wing mayor on social spending



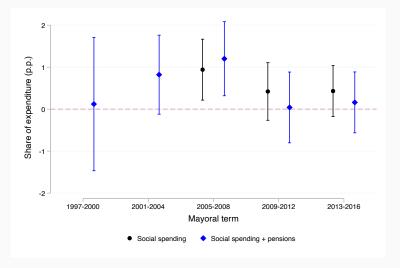
Social spending effects - Dynamics

Effect of a left-wing mayor on the social spending share, by year in office



Effects by mayoral term and extended time period

Effect of a left-wing mayor on the social spending share, by mayoral term



Re-election concerns?

- Consistent with models of political competition with reputation-building (Enelow & Munger 1993; Besley & Case 1995);
- **Test**: lame-duck mayors.

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Effect of a left-wing mayor

	tot spending (% of GDP)	social exp (% of tot spending)	social exp per capita
Baseline (all cities-elections)	0.01	0.64	1.16
	(0.24)	(0.21)	(0.61)
Lame ducks mayors (N $=$ 2,395 $/$ 1,227)	-1.05	1.27	3.34
	(1.18)	(0.40)	(1.36)

Fiscal ('Tiebout'-type) competition within local areas?

- Ferreira & Gyourko (2009, QJE): Tiebout competition explains policy convergence between D and R mayors in US cities;
- **Test:** Cities facing lower Tiebout-competition.
 - $\rightarrow\,$ commuting-zone level Herfindahl index as a proxy for competition intensity.

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Baseline (all cities-elections)	0.01	0.64	1.16
	(0.24)	(0.21)	(0.61)
$Tiebout < median \; \big(N \!\!=\!\! 4,\!158/2,\!367 \big)$	-0.36	0.71	0.25
	(0.43)	(0.30)	(0.86)
Tiebout $<$ 25th pct (N=2,081/1,347)	-1.10	0.20	-0.74
	(0.89)	(0.41)	(1.37)

Institutional constraints?

- Public finance regulations, limited self-financing capacity & 'hardwired' expenditures;
- Test: Cities experiencing oil windfalls.
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	(0.24)	(0.21)	(0.61)
Oil windfalls (N = $919/451$)	-0.13	2.19	6.48
	(0.47)	(0.87)	(2.40)

Ideologically ambiguous coalitions?

- Pre-electoral coalition-building might lead to internally heterogeneous coalitions
- Test: Identify more 'polarized' elections.
 - → Index of coalition ideology based on Zucco & Power. Ideology Score Graph

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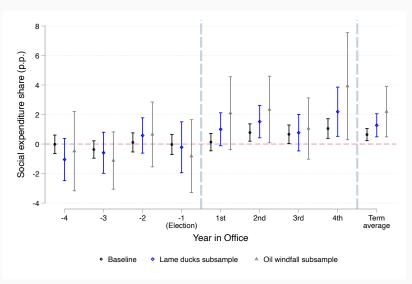


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	tot spending (% of GDP)	social exp (% of tot spending)	social exp per capita
Baseline (all cities-elections)	0.01	0.64	1.16
	(0.24)	(0.21)	(0.61)
Ideology distance $>$ median (N=3,105/1,660)	-0.02	0.91	1.92
	(0.25)	(0.39)	(0.93)
Ideology distance $>$ 75th pct (N=1,545/814)	0.43	0.78	0.77
	(0.40)	(0.49)	(1.36)

Dynamics

Social expenditure effects by year in office



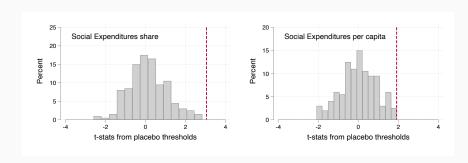
Robustness

Robustness tests:

- Differenced outcomes;
- Excluding first year of the term;
- Bandwith selection criteria;
- Estimates by city size;
- Falsification tests using placebo thresholds;

Falsification test

Effect on social expenditures: Distribution of t-stats from 200 randomly drawn placebo thresholds



Vertical red dotted line = t-stat from the true threshold

Discussion

Some takeaways

- Brazilian parties attempt to shape allocation of municipal resources to favor their electoral base...
- ...but are severely constrained by institutional constraints and re-election concerns.
- Strong parallel with national political dynamics
 - → PT party of pro-poor welfare policies
- Relevant for debate on political cleavages in newly democratized developing countries.

Additional Results: ideology score

Ideology score for the coalition of the elected mayor

