

Information About Corruption and Politicians' Proposals

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Politicians' Rhetoric: Why is this Important?

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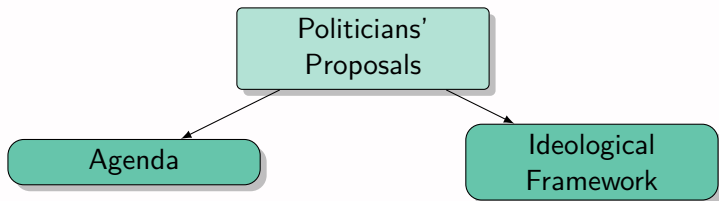
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Research Question

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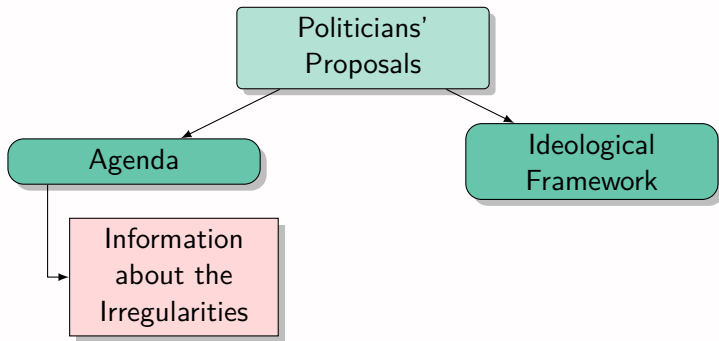
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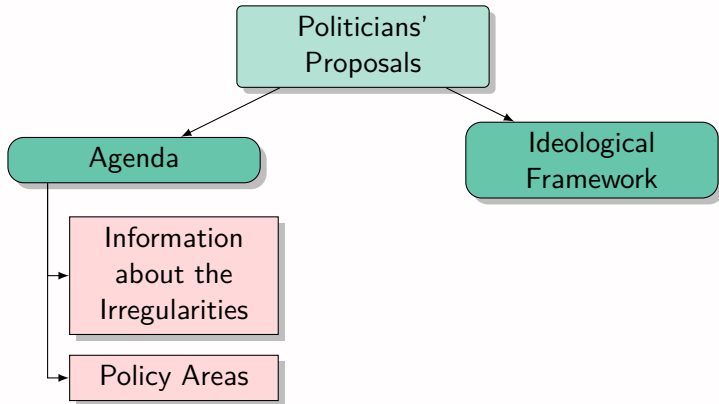
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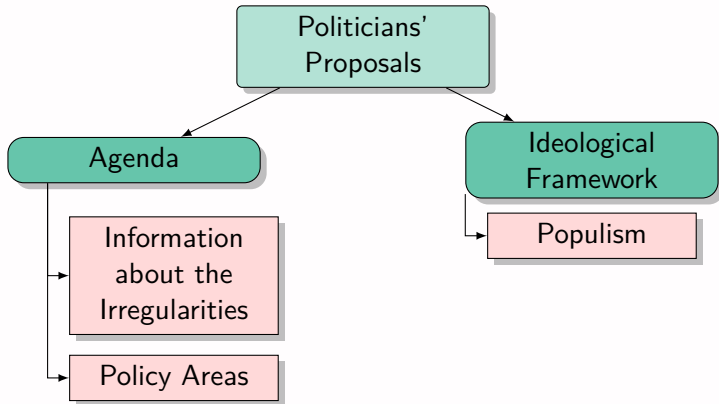
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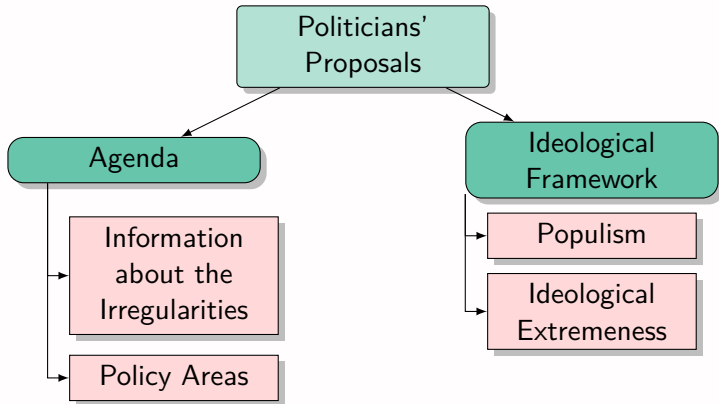
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This Paper

Information about Corruption in **Brazilian Municipalities**



Proposals made by **mayoral** candidates

This Paper

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Proposals made by **mayoral** candidates

- Information about Corruption: Randomized Audits Program in Brazil
 - How many irregularities?
 - In which areas?

► Irregularities

What do I do?



City A

2012 Election

City B

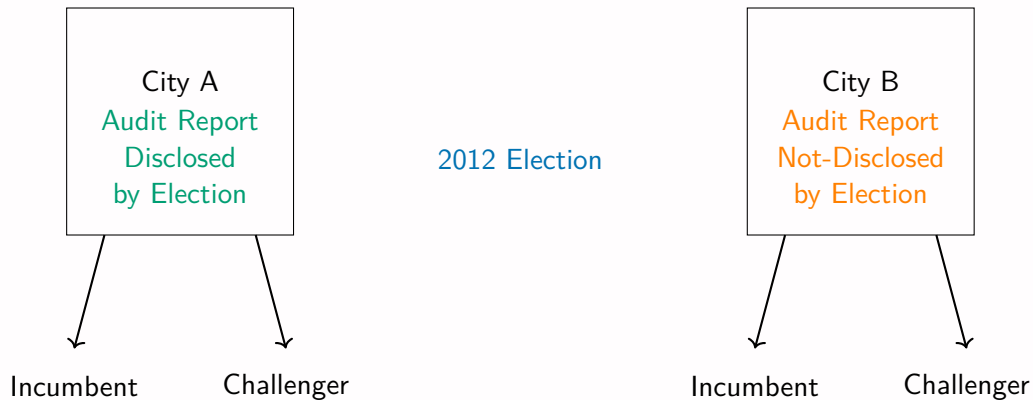
What do I do?

City A
Audit Report
Disclosed
by Election

2012 Election

City B
Audit Report
Not-Disclosed
by Election

What do I do?



What do I Compare?

Candidate A

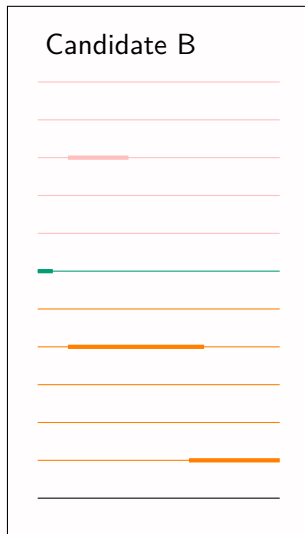
What do I Compare?

Candidate A	Supervised ML
	% Health
	% Social Policy
	% Bureaucratic issues
	% Economic Issues

What do I Compare?

Candidate A		Candidate B
<hr/>		<hr/>
<hr/>	% Health	<hr/>
<hr/>		<hr/>
<hr/>		<hr/>
<hr/>		<hr/>
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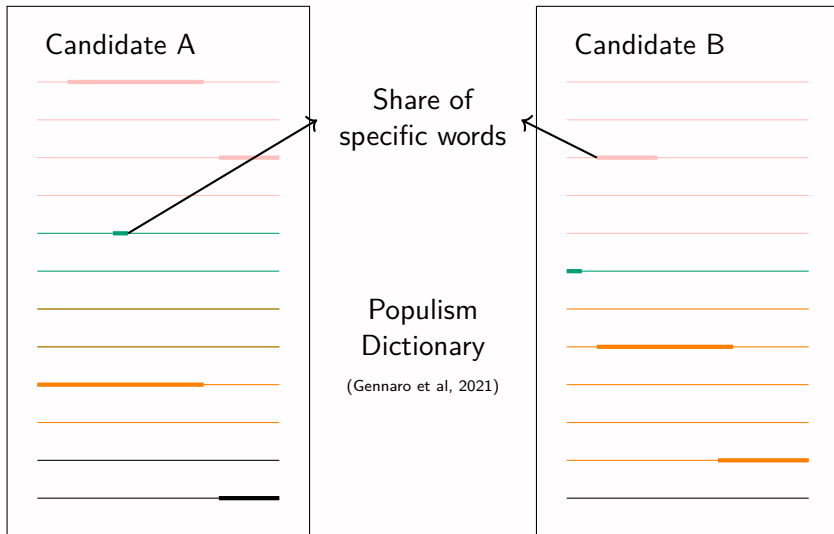
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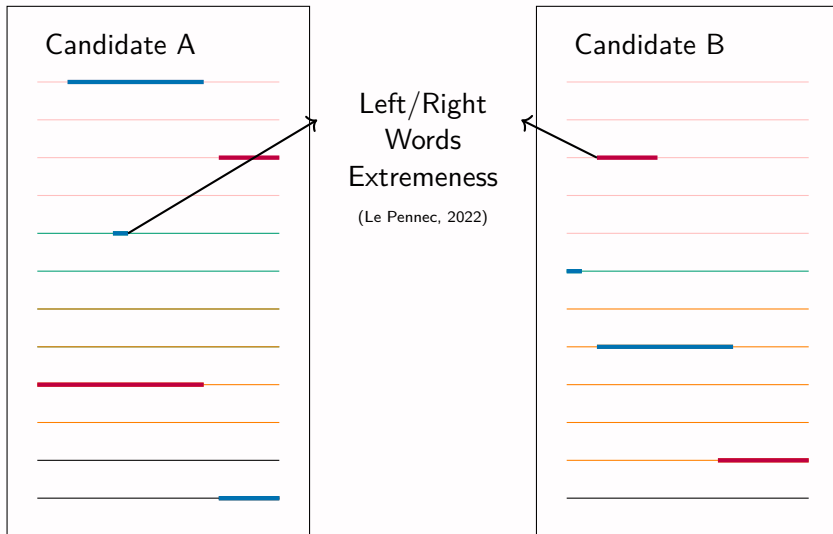
Words in the
Audit Report



What do I Compare?



What do I Compare?



Summary of the Results

- Information about corruption affects the agenda:
 - ↑ % vocabulary used in audit reports: 8-16% of the mean.
 - Disclosure of irregularities on a specific topic:
 - ↑ % focus on that topic **by challengers**
 - ↓ % focus on that topic **by incumbents**

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- Information about corruption affects political positioning:
 - High corruption municipalities:
Incumbents increase the use of populist rhetoric.
 - Low corruption municipalities:
Challengers reduce the use of populist and extreme rhetoric.

Related Work

- Responses with changes in political agenda to changes in reputation (e.g. Aragonès, Castanheira, & Giani, 2015; Dragu & Fan, 2016; Riker, 1996) **Test of what politicians do.**
- Factors driving the rise of populism (Berman, 2021; Gennaro et al., 2021; Guriev & Papaioannou, 2022) and extremism. **Corruption affects populism supply (+ trusted sources).**
- Impact of information on politicians' effort, policy choices, and electoral choices.
 - committees participation (Snyder Jr & Strömberg, 2010)
 - city council candidates' quality (Cavalcanti, Daniele, & Galletta, 2018):
 - campaign spending (Poblete-Cazenave, 2021)
 - Brazilian audits (Amorim, 2022; Avis, Ferraz, & Finan, 2018; Colonnelli & Prem, 2020; Ferraz & Finan, 2008, 2011; Gonzales, 2021; Lauletta, Rossi, & Ruzzier, 2020)

Information from scandals is used in electoral campaigns. This information affects the use of populist/extreme rhetoric.

Interplay between Audits and Platforms

Information about Corruption \Rightarrow ? Proposals

1. More information about the government
2. Reputation shocks

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 - a. Agenda (choice about which issues to emphasize)
 - New information affects focus on or perception about optimal policies (Abou-Chadi et al., 2020; Williams et al., 2016) and candidates choose topics in which they have an advantage (Riker, 1996) or not (Aragonès et al., 2015; Dragu & Fan, 2016).

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 - b. Ideological Positioning
 - Changes in reputation affect electoral competitiveness \Rightarrow positioning (e.g. Bernhardt et al., 2020; Buisseret & Van Weelden, 2022; Groseclose & Milyo, 2005; Serra, 2010)

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 - Corruption accusations are associated with populist rhetoric (Berman, 2021).
 - The existence of accurate information to negatively affect populist rhetoric (fake news are associated with this rhetoric (Guriev & Papaioannou, 2022)

Background: Brazilian's Case

Audits to Municipalities (2003-2015)

- **Randomized** audit policy, revealing local government corruption cases.
- Each audited municipality received a report. ▶ [Irregularities](#)
- Audits are targeted to specific areas for municipalities with population $> 20,000$.
- Had effects (e.g. [Avis et al., 2018](#); [Ferraz & Finan, 2008](#); [Lauletta et al., 2020](#))

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Elections and Manifestos

- Municipal elections every four years.
- Maximum two consecutive periods.
- 2.88 candidates in average.
- 48% municipalities have a candidate going for re-election.
- Since 2009, **manifestos** are required before executive election bids.
[▶ Manifestos in the News](#)

Data

- 2012 election in municipalities in Brazil.
- Audits
 - Municipalities audited in 2009-2013 (11 rounds)
 - 643 audited municipalities (out of 5,568) in 2009-2012.
 - Data about corruption and irregularities ▶ [Irregularities](#)
- Municipal characteristics (IBGE).
- Candidates manifestos at the local level in Brazil for the 2012 election.
 - ▶ [Manifestos in the News](#)
 - From the electoral authority website: Downloaded 16,173 pdfs and 13,724 texts.
 - After cleaning: 13,344 candidates from 5,394 municipalities
 - ▶ [Descriptives](#)

Dependent Variables: Agenda

1. Overlap With Audit Reports

- Measure: Share of words in reports present in manifestos.

2. Agenda: Classified lines into topics

- Supervised learning: Multinomial naive Bayes classifier (manually codified $\approx 1\%$)
- Labels: Titles, Introduction, Health, Social Policy, Economic/Sectoral and Environmental Policies, Bureaucratic issues, Infrastructure and Urban issues, and Crime.
- Measure: how much of a specific agenda they discuss.

► Descriptives

Dependent Variables: Ideological Positioning

3. Populism (Gennaro et al., 2021)

- Example words (in English): elite, absurd, corrupt, establishment

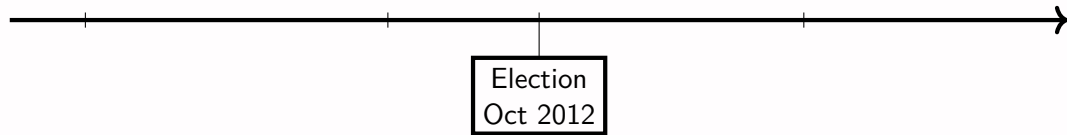
▶ Methodology ▶ Geographical Variation ▶ Example

4. Manifestos Positioning in the Left-Right axis: Wordscores (Laver, Benoit, & Garry, 2003; Le Pennek, 2022).

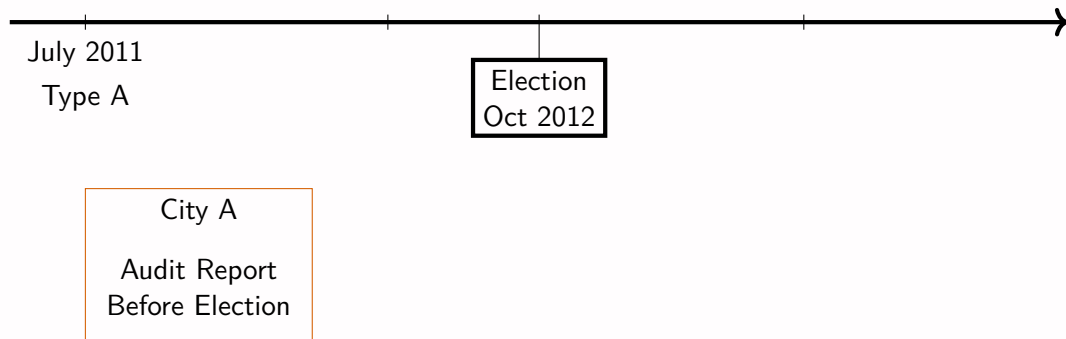
- Which words are used by the Left or the Right?
- Data-driven
- Compute scores for each document. ▶ Methodology ▶ Words ▶ Densities Ideological

▶ Descriptives

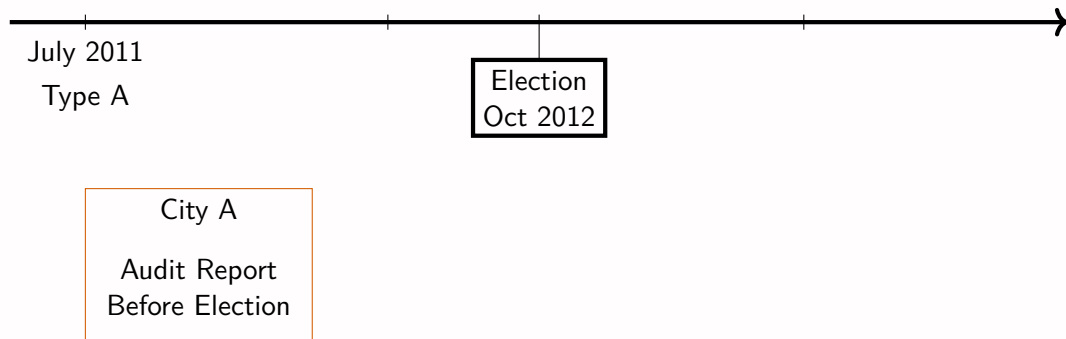
Empirical Strategy: Effect of the Disclosure I



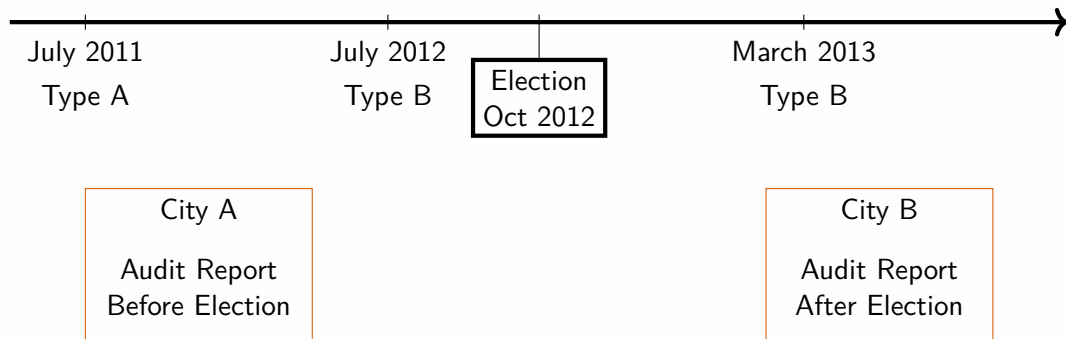
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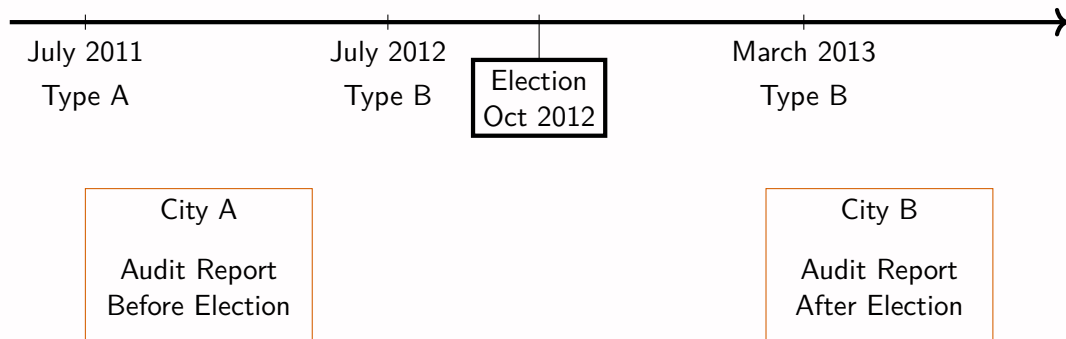
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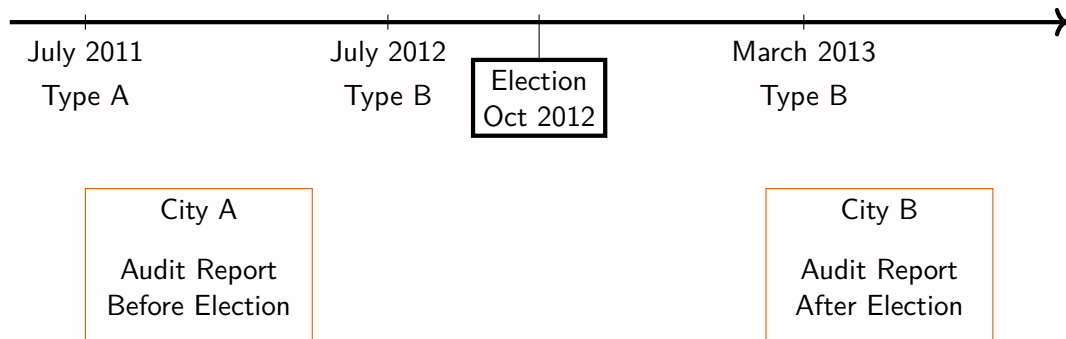
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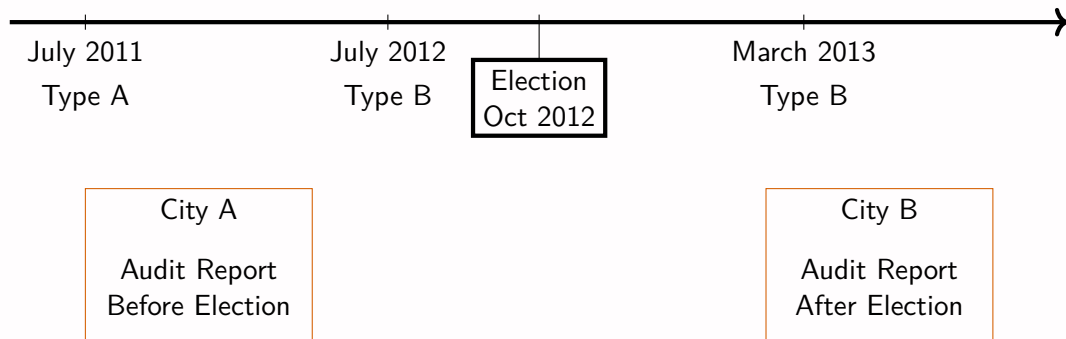
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Empirical Strategy: Effect of the Disclosure I



Empirical Strategy: Effect of the Disclosure II

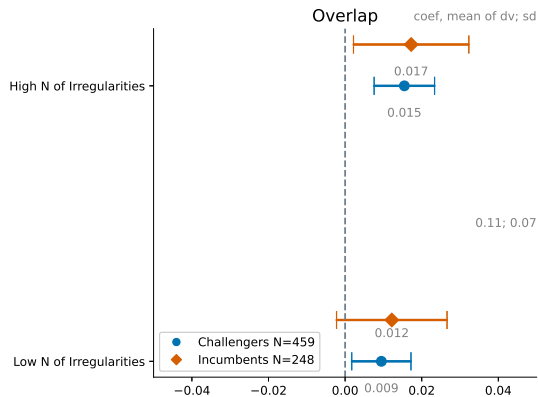
$$\begin{aligned} Outcome_{imst} = & \alpha + \beta_0 Disclosure_{mst} + \beta_1 Disclosure_{mst} \times High_Corruption + \\ & + \beta_2 High_Corruption + \gamma Controls_{imst} + \nu_s + \varepsilon_{imst} \end{aligned}$$

- $Disclosure_{mst} = \mathbb{1}(\text{municipality audit report disclosed before the 2012 election})$
- $High_Corruption = \mathbb{1}(\text{number of acts of corruption higher than the median})$
 - ▶ Controls
- Used in Ferraz and Finan (2008)
 - ▶ Balance
 - ▶ Balance 2
- β_0 : effect of pre-election audit outcomes when corruption was low.
- $\beta_0 + \beta_1$: effect of pre-election audit outcomes when corruption was high.

Effects on the Agenda

Results I: Effect of the Disclosure on the Content

DV: Share of words from the audit report that overlap with the manifesto

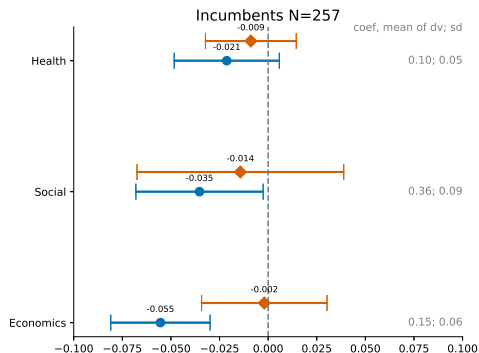
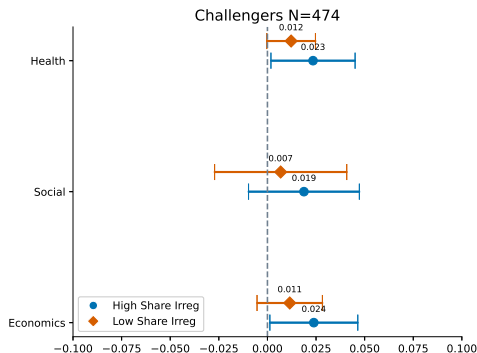


Candidates use information from irregularities on manifestos if the report was disclosed.

95% CI's. ▶ [Table Incumbents](#) ▶ [Table Challengers](#) ▶ [Means](#) ▶ [Irregularities](#)

Results II: Effect of the Disclosure on the Topics

DV: Share of Words on each Topic



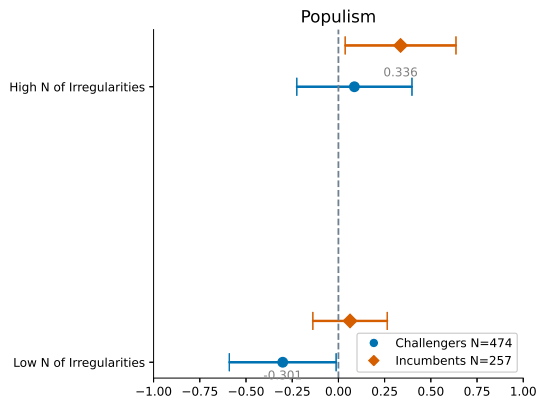
Challengers: Disclosure \Rightarrow Discuss **more** about topics with a large share of irregularities
Incumbents: Disclosure \Rightarrow Discuss **less** about topics with a large share of irregularities

95% CI's. [► Descriptives](#) [► By Population](#) [► Table Incumbents](#) [► Table Challengers](#)

Effects on the Ideological Framework

Results III: Effect of the Disclosure on Populism

DV: Share of Words in the Manifesto used by Populists

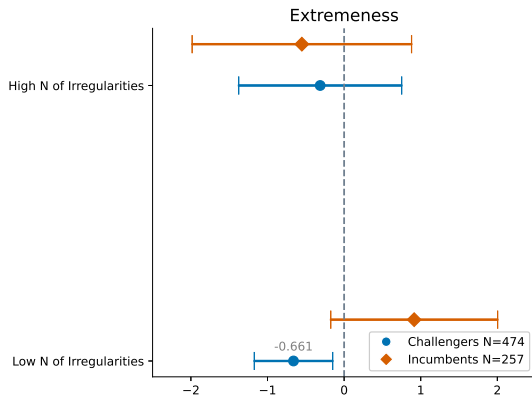


Challengers: Disclosure \Rightarrow Use **less** populist rhetoric in cities with **low** N of irregularities
Incumbents: Disclosure \Rightarrow Use **more** populist rhetoric in cities with **high** N of irregularities 95%

CI's. [▶ Table Incumbents](#) [▶ Table Challengers](#) [▶ Means](#)

Results IV: Effect of the Audit on Extremeness (cond. on Corruption)

DV: Ideological Extremeness ($|\text{Ideological Score} - \text{median}(\text{Ideological Score})|$)



95% CI's. ▶ [Table Incumbents](#) ▶ [Table Challengers](#) ▶ [Means](#)

Challengers: Disclosure \Rightarrow Use **less** ideological extreme vocabulary in cities with **low** N of irregularities

Other Results in Progress

- Number of Words ▶ [Results](#)
- Audits on Health Policy ▶ [Results](#)
- Corruption and Transparency ▶ [Results](#)
- Partisanship ▶ [Results](#)
- Who are the populists? In High-Corruption Incumbents, not correlated with Same Party as Governor or President, and with winning re-election.
- What happens in races without an incumbent? No significant results.
- 75th percentile.

Summary of the Results

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Agenda	Challengers	Incumbents
Information about the Irregularities Topics with a High Share of Irregularities	↑ ↑	↑ ↓

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Information about the Irregularities	↑	↑
Topics with a High Share of Irregularities	↑	↓
Ideological Framework		
Populism	Conditional on Reputation	Conditional on Reputation
Extremeness	Conditional on Reputation	No

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Thank you!

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References I

- Abou-Chadi, T., Green-Pedersen, C., & Mortensen, P. B. (2020). Parties' policy adjustments in response to changes in issue saliency. *West European Politics*, 43(4), 749–771.
- Amorim, G. (2022). *Monitoring transfers to public health: Evidence from randomized audits in brazil* (Tech. Rep.).
- Aragonès, E., Castanheira, M., & Giani, M. (2015). Electoral competition through issue selection. *American journal of political science*, 59(1), 71–90.
- Avis, E., Ferraz, C., & Finan, F. (2018). Do government audits reduce corruption? estimating the impacts of exposing corrupt politicians. *Journal of Political Economy*, 126(5), 1912–1964.
- Batista Pereira, F., Bueno, N. S., Nunes, F., & Pavão, N. (2022). Fake news, fact checking, and partisanship: the resilience of rumors in the 2018 brazilian elections. *The Journal of Politics*, 84(4), 2188–2201.
- Berman, S. (2021). The causes of populism in the west. *Annual Review of Political Science*, 24, 71–88.
- Bernhardt, D., Buisseret, P., & Hidir, S. (2020). The race to the base. *American Economic Review*, 110(3), 922–42.

References II

- Bolognesi, B., Ribeiro, E., & Codato, A. (2022). A new ideological classification of brazilian political parties. *Dados*, 66.
- Buisseret, P., & Van Weelden, R. (2022). Polarization, valence, and policy competition. *American Economic Review: Insights*, 4(3), 341–352.
- Cavalcanti, F., Daniele, G., & Galletta, S. (2018). Popularity shocks and political selection. *Journal of Public Economics*, 165, 201–216.
- Clayton, K., Davis, N. T., Nyhan, B., Porter, E., Ryan, T. J., & Wood, T. J. (2021). Elite rhetoric can undermine democratic norms. *Proceedings of the National Academy of Sciences*, 118(23), e2024125118.
- Colonnelli, E., & Prem, M. (2020). Corruption and firms. *Available at SSRN 2931602*.
- Dragu, T., & Fan, X. (2016). An agenda-setting theory of electoral competition. *The Journal of Politics*, 78(4), 1170–1183.
- Ferraz, C., & Finan, F. (2008). Exposing corrupt politicians: the effects of brazil's publicly released audits on electoral outcomes. *The Quarterly journal of economics*, 123(2), 703–745.
- Ferraz, C., & Finan, F. (2011). Electoral accountability and corruption: Evidence from the audits of local governments. *American Economic Review*, 101(4), 1274–1311.

References III

- Gennaro, G., Lecce, G., & Morelli, M. (2021). Mobilization and the strategy of populism theory and evidence from the united states.
- Gonzales, M. (2021). Politics never end: Public employment e ffects of increased transparency.
- Groseclose, T., & Milyo, J. (2005). A measure of media bias. *The Quarterly Journal of Economics*, 120(4), 1191–1237.
- Guriev, S., & Papaioannou, E. (2022). The political economy of populism. *Journal of Economic Literature*, 60(3), 753–832.
- Hobbs, W., & Lajevardi, N. (2019). Effects of divisive political campaigns on the day-to-day segregation of arab and muslim americans. *American Political Science Review*, 113(1), 270–276.
- Lauletta, M., Rossi, M., & Ruzzier, C. (2020). *Audits and the quality of government* (Tech. Rep.). (Working Paper N 141, Universidad de San Andrés. Available at <https://webacademicos.udesa.edu.ar/pub/econ/doc141.pdf>)
- Laver, M., Benoit, K., & Garry, J. (2003). Extracting policy positions from political texts using words as data. *American political science review*, 97(2), 311–331.
- Le Pennec, C. (2022). *Strategic campaign communication: Evidence from 30,000 candidate manifestos* (Tech. Rep.).

References IV

- Poblete-Cazenave, R. (2021). Reputation shocks and strategic responses in electoral campaigns. *Available at SSRN 3786253*.
- Riker, W. H. (1996). *The strategy of rhetoric: Campaigning for the american constitution*. Yale University Press.
- Serra, G. (2010). Polarization of what? a model of elections with endogenous valence. *The Journal of Politics*, 72(2), 426–437.
- Snyder Jr, J. M., & Strömberg, D. (2010). Press coverage and political accountability. *Journal of political Economy*, 118(2), 355–408.
- Tarouco, G. d. S., & Madeira, R. M. (2015). Os partidos brasileiros segundo seus estudiosos: análise de um expert survey. *Civitas-Revista de Ciências Sociais*, 15, e24–e39.
- Williams, L. K., Seki, K., & Whitten, G. D. (2016). You've got some explaining to do the influence of economic conditions and spatial competition on party strategy. *Political Science Research and Methods*, 4(1), 47–63.

Manifestos in the News

ELEIÇÕES 2020

Conheça o plano de governo de Pepe Vargas, candidato a prefeito de Caxias

Pioneiro apresenta as propostas dos 11 candidatos à prefeitura de Caxias

[▶ Back to Background](#) [▶ Back to Data](#)

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Propostas

A chapa "Curitiba Inovação e Amor" foi composta por sete partidos: PMN, PSDB, PSB, DEM, PTN, PSDC e PTdoB.

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CURITIBA

	População estimada (2016) 1.893.997
	Eleitores 1.289.215
	IDH* (2010) 0,823
	PIB per capita (2013) R\$ 42.934,38
	Orçamento (2016) R\$ 8,3 bilhões

* medida resumida do progresso em renda, educação e saúde; IDH do país é 0,753



Fontes: IBGE, TSE, prefeituras e câmaras

Em dois anos, afirma Greca no **plano de governo**, pretende criar o Centro de Especialidades Metropolitano no Portão, garantindo consultas especializadas com cardiologistas, endocrinologistas, geriatrias, por exemplo, e equipe multidisciplinar.

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Ainda sobre transporte público, Greca prometeu criar uma tarifa diferenciada, para horários alternativos, diminuindo a sobrecarga nos horários de alto fluxo e revitalizar os terminais de ônibus.

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No **plano de governo**, uma das propostas é colocar Centros Municipais de Educação Infantil

(Cmeis) em funcionamento, abrir turmas de berçário e aumentar as vagas para crianças entre zero e três anos.

► [Back to Background](#)

► [Back to Data](#)

Manifestos in the News

Série traz as propostas de Carlos Eduardo para Natal

Prefeito eleito da capital assume o cargo no dia 1º de janeiro de 2013. Propostas do plano de governo serão mostradas em série de 8 reportagens.

Do G1 RN



Série vai mostrar as promessas de Carlos Eduardo durante a campanha eleitoral (Foto: Alex Regis/Cedida)

O prefeito eleito de Natal, **Carlos Eduardo (PDT)**, assume o comando da cidade no dia 1º de janeiro de 2013. Dentre os desafios que ele se propôs a enfrentar no Plano de Governo estão problemas nas áreas de saúde, educação, acessibilidade, mobilidade, moradia, esgotamento sanitário, drenagem urbana e coleta regular de lixo.

A série "Cópia e Cola" do **G1** irá apresentar as possíveis soluções que **Carlos Eduardo** apresentou aos eleitores. Serão oito reportagens - que irão ao ar de sexta (28) até a próxima segunda-feira (31).

O plano de Carlos Eduardo para Vargas, cidade de Caxias

Entre os 11 candidatos à prefeitura

Propostas

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Descriptives: Candidates

Table: Descriptives for Candidates

	Rounds 28 - 35 (2009-2012)		Rounds 36 - 38 (2012-2013)		Other	
	Mean	SD	Mean	SD	Mean	SD
Age	48.70	10.53	48.13	10.35	48.58	13.66
% College Studies	0.55	0.50	0.58	0.49	0.56	0.50
% Women	0.14	0.35	0.13	0.34	0.13	0.34
% Same party as the President	0.10	0.30	0.11	0.32	0.12	0.32
% Same party as the Governor	0.15	0.35	0.13	0.33	0.15	0.36
Running for re-election	0.18	0.38	0.19	0.39	0.18	0.38
Number of Candidates	3.38	1.50	3.39	1.45	3.29	1.46
Observations	1129		423		11548	

► [Back to Empirical Analysis](#)

Descriptives: Issues and Ideological Content

Table: Descriptives for Manifestos on their content

	Mean	p50	p90	se	N
Bureaucracy	0.08	0.07	0.13	0.04	13344
Social	0.36	0.36	0.47	0.09	13344
Health	0.10	0.10	0.16	0.05	13344
Urban	0.12	0.11	0.19	0.06	13344
Economic	0.15	0.15	0.23	0.06	13344
Crime	0.02	0.02	0.04	0.02	13344
Overlap	0.11	0.10	0.19	0.07	1554
Populism	0.05	0.04	0.12	0.06	13706
Extremeness	2.47	2.14	4.77	2.18	13322
Count	2150	1446	4472	2578	13344

-
- [▶ Back to Data 1](#) [▶ Back to Data 2](#) [▶ Back to Data 3](#) [▶ Back to Exploratory Analysis](#) [▶ Back to Results 1](#) [▶ Back to Results 2](#)
[▶ Back to Results 3](#) [▶ Back to Results 4](#)

Balance Audits

Table: Mean Comparisons between Audited and Nonaudited Municipalities

	Control	Treatment	Difference
GDP pc	12886.52 [14487.15]	10805.9 [9571.88]	-819.3 [569.971]
Share Illiterate (%)	85.3472 [8.86]	83.51522 [9.33]	-0.0758 [0.258]
Share Urban	0.6374198 [0.22]	0.6262824 [0.21]	0.00446 [0.007]
Share Secondary Education and above	0.2156972 [0.08]	0.2083799 [0.08]	0.000671 [0.003]
Share of Bureaucrats with Superior Education	0.3069009 [0.11]	0.2967605 [0.11]	-0.00219 [0.004]
HDI	0.6598012 [0.07]	0.6443488 [0.07]	-0.00108 [0.002]
AM radio	0.2092931 [0.41]	0.1987315 [0.4]	-0.00137 [0.025]
Gini	0.5013802 [0.07]	0.5095829 [0.06]	-0.0014 [0.002]
Population (logs)	9.377024 [1.09]	9.470213 [1.1]	0.00526 [0.032]
Audited Previously	0.2499018 [0.43]	0.2635983 [0.44]	-0.0113 [0.021]
Observations	5090	478	

Balance Timing

Table: Mean Comparisons between Audited and Nonaudited Municipalities

	Control	Treatment	Difference
GDP pc	11700.37 [14514.56]	10805.9 [9571.88]	-483.2 [1320.197]
Share Illiterate (%)	84.28 [8.84]	83.52 [9.33]	-0.16 [0.546]
Share Urban	0.64 [0.22]	0.63 [0.21]	0 [0.014]
Share Secondary Education and above	0.22 [0.08]	0.21 [0.08]	0 [0.005]
Share of Bureaucrats with Superior Education	0.31 [0.11]	0.3 [0.11]	-0.01 [0.009]
HDI	0.65 [0.07]	0.64 [0.07]	0 [0.004]
AM radio	0.2 [0.4]	0.2 [0.4]	0 [0.041]
Gini	0.5 [0.06]	0.51 [0.06]	0 [0.004]
Population (logs)	9.41 [1.11]	9.47 [1.1]	0.07 [0.053]
Audited Previously	0.24 [0.43]	0.26 [0.44]	0.03 [0.043]
Observations	165	478	

Geographical Variation

- Platforms show variation across municipalities.
- Increase in the use of populist vocabulary (? dictionary).

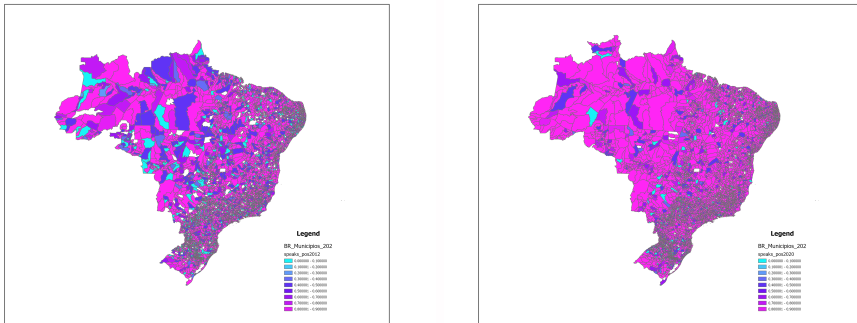


Figure: Percentage of local party manifestos in Brazil that include a populist word (Left: 2012. Right: 2020)

Examples

Populism “It is a summarized and serious platform that I present to the people from serrano, who wish to see true progress in our municipality, coming to put an end to the excesses, corruption and dishonesty of politicians who have no commitment to the people from serrano.” (Jesus dos Passos Vaz, Serra/ES)

► [Back to Data](#)

Ideological Positioning

- Classification of parties given by the literature, [► Parties](#)
- For each word w , frequency of w in all the manifestos in the right

$$p_w^R = \frac{\sum_{j \in R} c_{wj}}{\sum_{j \in R} m_j}$$

c_{wj} is the count of word w in document j ; m_j is the word-count of j .

- Using these frequencies, I can compute the right-wing score of each word w

$$s_w^R = \frac{p_w^R}{p_w^R + p_w^L} - \frac{p_w^L}{p_w^R + p_w^L} \quad (1)$$

- A manifesto j score is then calculated by:

$$S_j^R = \frac{\sum_w p_{wj}^R \times s_w^R}{S_R} \quad (2)$$

- Extremeness is computed as $|S_j|$
- Partisanship is measured by performing this for each party q (q vs. others instead of right vs. left)

Populism

What is populism?

- the people as a homogeneous and pure entity (e.g., “people”)
- the elite as a homogeneous and corrupt entity (e.g., “establishment”, “corruption”)
- the people and the elite as two antagonistic groups (e.g., “arrogant”, “betray”)
- the need to give power back to the people (e.g., “direct”, “referendum”).

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- the need to give power back to the people (e.g., “direct”, “referendum”).

Procedure

- (i) Computed TF-IDF matrix.
- (ii) Sum of the TF-IDF values for each word of a document on each dimension
- (iii) Standardized Variable

[▶ Back to RQ](#) [▶ Back to Data](#)

Irregularities

Table: Number of Irregularities per Policy Area

	N	Percentage
Bureaucracy	58	0.2%
Crime	138	0.4%
Economics	1,494	4.1%
Health	10,207	28.2%
Social	21,644	59.8%
Urban	1,818	5.0%
Other	811	2.2%

- Source: CGU

[▶ Back to Background](#) [▶ Back to Data](#)

Party Classification: Parties

Table: Parties in the 2012 Election and how they are labeled to measure extremeness

Left	Center	Right
PCO	MDB	PTB
PSTU	Avante	SDD
PSOL	PMN	Podemos
PCB	PHS	PRTB
PCdoB	PSDB	PRB
PT	PSD*	PTC
PSB		PRP
PDT		PR
PV		PSL
PPS		PSC
UP*		DC
PPL*		Progre
		DEM

a Notes: This table shows distribution of parties in the left, center and right-wing groups following Tarouco and Madeira (2015). They are ordered from left (above) to right (below).

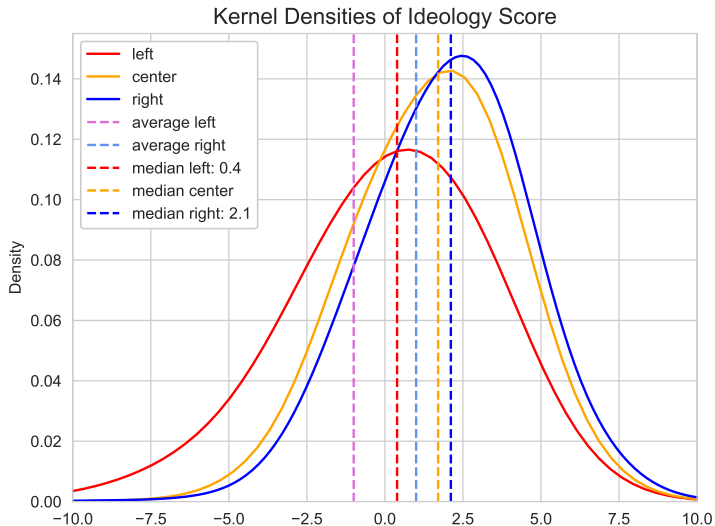
* Parties classified using Bolognesi, Ribeiro, and Codato (2022).

Party Classification: Words

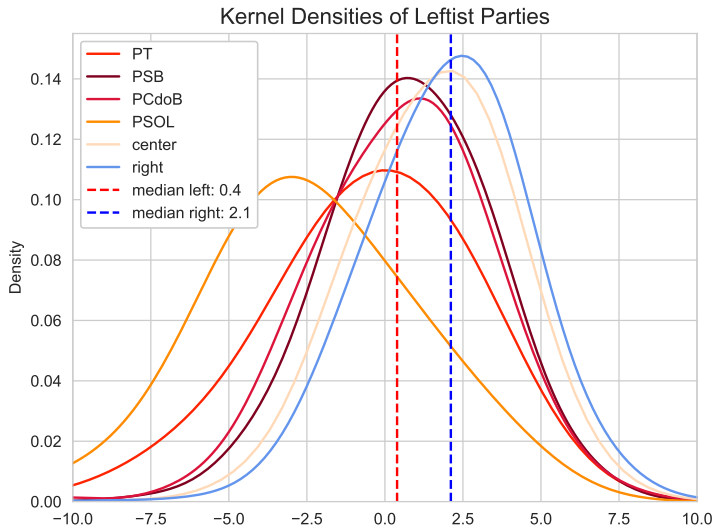
Table: Words with the lowest (left-wing) and highest (right-wing) scores

Leftist Words	Right-wing Words
cidasc	democratas
petista	cristao
capitalista	crista
petistas	democrata
socialismo	republicano
inverter	farei
deliberativos	indeb
desiguais	renova
socialistas	equoterapia
dominante	grafias

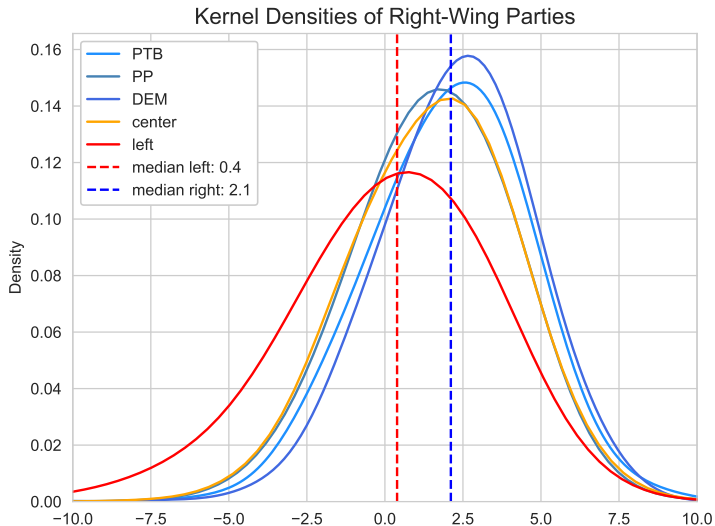
Party Classification: Densities



Party Classification: Densities (Left)



Party Classification: Densities (Right)



Effect of the Audits According to the Areas Inspected

Table: Effect of the Audit on Share Dedicated to Health Policies

	(1)	(2)	(3)	(4)
Audited	0.009*** (0.003)	0.002 (0.007)	0.001 (0.004)	0.011 (0.017)
Candidate Population	Challengers Below 50K	Challengers Above 100K	Incumbents Below 50K	Incumbents Above 100K
Observations	3,283	325	2,053	110
R-squared	0.063	0.140	0.053	0.413
Mean of DV	0.106	0.0875	0.111	0.0900

Effect of the Audit on the Use of Specific Words

Table: Outcome: Frequency of words on Manifestos (% of Words on the Manifesto)

	Panel A: Challengers					Panel B: Incumbents			
	(1) Corruption	(2) Transparency	(3) Corruption	(4) Transparency		(1) Corruption	(2) Transparency	(3) Corruption	(4) Transparency
Disclosure	-0.000 (0.000)	-0.000 (0.000)	-0.000 (0.000)	0.000 (0.000)	Disclosure	-0.000* (0.000)	-0.000 (0.000)	-0.000 (0.000)	-0.000 (0.000)
High-Corruption x Disclosure			0.000 (0.000)	0.000 (0.000)	High-Corruption x Disclosure			-0.000 (0.000)	0.000 (0.000)
High-Corruption			0.000 (0.000)	-0.001* (0.000)	High-Corruption			0.000 (0.000)	-0.000 (0.000)
Observations	3,948	3,948	474	474	Observations	2,298	2,298	257	257
R-squared	0.027	0.069	0.130	0.107	R-squared	0.010	0.056	0.093	0.254
Mean of DV	5.46e-05	0.00200	6.14e-05	0.00181	Mean of DV	2.03e-05	0.00185	1.01e-05	0.00173
$\beta_0 + \beta_1$			-4.81e-05	0.000499	$\beta_0 + \beta_1$			-3.13e-05	0.000276
p-value			0.605	0.261	p-value			0.556	0.419

► Other Results

Effect of the Audit on the Number of Words

Table: Outcome: Number of Words on the Manifesto

	(1)	(2)	(3)	(4)
Disclosure	169.3 (146.4)	65.533 (228.117)	183.5 (113.5)	66.836 (264.176)
High-Corruption x Disclosure		121.428 (225.223)		-109.060 (510.371)
High-Corruption		4.414 (337.023)		133.891 (706.177)
Candidate	Challengers	Challengers	Incumbents	Incumbents
Observations	3,948	474	2,298	257
R-squared	0.1	0.619	0.1	0.788
Mean	2164	2288	1907	2051
$\beta_0 + \beta_1$		187		-42.22
pval		0.226		0.920

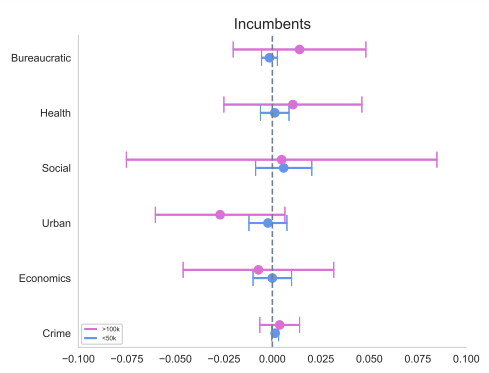
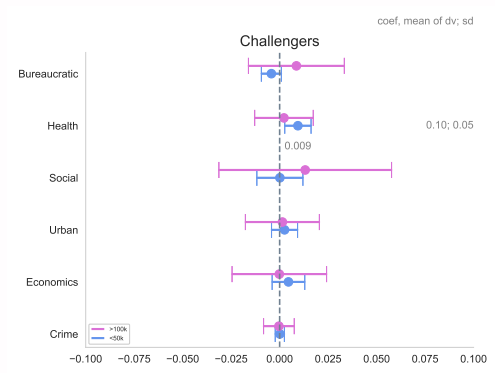
Effect of the Audit on the Ideological Framework

Table: Outcome: Frequency of words on Manifestos (% of Words on the Manifesto)

	Panel A: Challengers							Panel B: Incumbents					
	(1) Populism	(2) Extremeness	(3) Partisanship	(4) Populism	(5) Extremeness	(6) Partisanship		(1) Populism	(2) Extremeness	(3) Partisanship	(4) Populism	(5) Extremeness	(6) Partisanship
Disclosure	0.002 (0.046)	-0.183* (0.096)	-0.055 (0.087)	-0.301** (0.138)	-0.661** (0.244)	-0.254 (0.266)	Disclosure	-0.023 (0.058)	0.212 (0.250)	0.073 (0.214)	0.063 (0.096)	0.914* (0.520)	0.781 (0.657)
High-Corruption x Disclosure				0.387** (0.154)	0.348 (0.465)	0.194 (0.611)	High-Corruption x Disclosure				0.273 (0.170)	-1.466* (0.721)	-1.881* (1.048)
High-Corruption				-0.279** (0.110)	-0.026 (0.368)	0.105 (0.630)	High-Corruption				-0.322 (0.206)	1.233* (0.628)	1.067 (1.092)
Observations	3,948	3,946	3,489	474	474	422	Observations	2,298	2,261	2,181	257	254	238
R-squared	0.111	0.058	0.025	0.134	0.154	0.126	R-squared	0.15	0.05	0.03	0.28	0.16	0.15
Mean of DV	0.0800	2.248	-0.0933	0.130	2.185	-0.191	Mean of DV	-0.18	2.13	-0.04	-0.18	2.24	-0.06
$\beta_0 + \beta_1$				0.0861	-0.313	-0.0599	$\beta_0 + \beta_1$				0.34	-0.55	-1.10
p-value				0.569	0.546	0.894	p-value				0.03	0.43	0.30

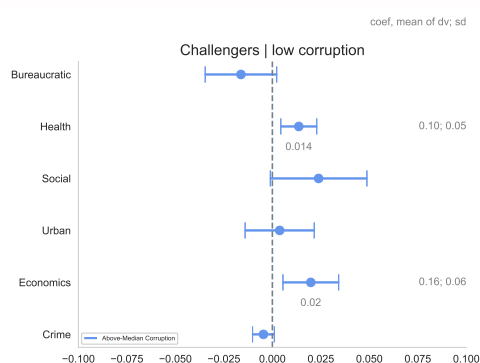
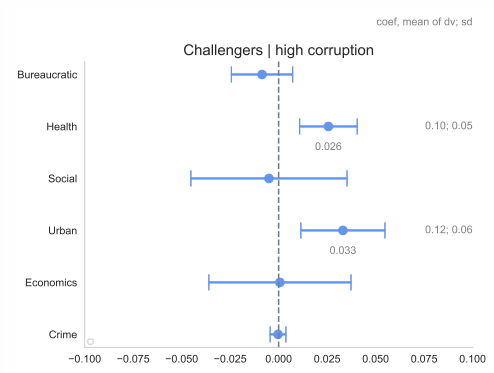
► Other Results

Effect of the Audit on the Agenda (cond. on Corruption) - Population



95% CI's. [▶ Back to Results](#)

Effect of the Audit on the Agenda (cond. on Corruption) for Challengers



95% CI's. ▶ Robustness: Corruption in Health ▶ Table Incumbents ▶ Table Challengers ▶ Means

Effect of the Audit on the Agenda (cond. on Corruption) for Incumbents

table4_inc-eps-converted-to.pdf

95% CI's. ▶ Robustness: Corruption in Health ▶ Table Incumbents ▶ Table Challengers ▶ Means

Challengers Agenda

Table: Audits on Shares - Challengers

	(1) Bureaucratic	(2) Social	(3) Health	(4) Urban	(5) Economy	(6) Crime	(7) count	(8) overlpa
Audited	-0.016* (0.009)	0.024* (0.012)	0.014*** (0.004)	0.004 (0.009)	0.020*** (0.007)	-0.005 (0.003)	65.533 (228.117)	0.009** (0.004)
corrup_au	0.008 (0.011)	-0.029* (0.016)	0.012 (0.007)	0.029** (0.013)	-0.019 (0.016)	0.004 (0.004)	121.428 (225.223)	0.006 (0.006)
corr	-0.009 (0.013)	0.016 (0.014)	-0.016* (0.009)	-0.039** (0.015)	0.009 (0.015)	-0.005 (0.003)	4.414 (337.023)	-0.021*** (0.005)
Observations	474	474	474	474	474	474	474	459
R-squared	0.116	0.138	0.204	0.189	0.137	0.167	0.619	0.856
\$\beta_0 + \beta_1\$	-0.00856	-0.00500	0.0257	0.0331	0.000665	-0.000311	187	0.0155
pval	0.271	0.798	0.00181	0.00471	0.970	0.874	0.226	0.000605

Robust standard errors in parentheses

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

[Back to Results](#)

Incumbents Agenda

Table: Audits on Shares - Incumbents

	(1) Bureaucratic	(2) Social	(3) Health	(4) Urban	(5) Economy	(6) Crime	(7) count	(8) overlpa
Audited	0.010 (0.007)	-0.023 (0.020)	-0.019 (0.011)	-0.004 (0.010)	0.002 (0.019)	-0.000 (0.003)	66.836 (264.176)	0.012* (0.007)
corrup_au	-0.000 (0.016)	-0.014 (0.025)	0.016 (0.020)	0.013 (0.022)	-0.021 (0.024)	-0.009 (0.013)	-109.060 (510.371)	0.005 (0.011)
corr	-0.002 (0.017)	-0.004 (0.029)	0.000 (0.016)	-0.007 (0.022)	0.023 (0.019)	0.008 (0.012)	133.891 (706.177)	-0.018 (0.013)
Observations	257	257	257	257	257	257	257	248
R-squared	0.225	0.165	0.227	0.368	0.213	0.168	0.788	0.846
$\beta_0 + \beta_1$	0.00955	-0.0371	-0.00298	0.00843	-0.0194	-0.00957	-42.22	0.0172
pval	0.553	0.0124	0.854	0.708	0.264	0.475	0.920	0.0270

Robust standard errors in parentheses

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

[Back to Results](#)

Challengers Agenda, Cases on same Area

Table: Audits on Shares - Challengers

VARIABLES	(1) Bureaucratic	(2) Social	(3) Health	(4) Urban	(5) Economy	(6) Crime
Audited	-0.014** (0.007)	0.007 (0.016)	0.012* (0.006)	0.009 (0.008)	0.011 (0.008)	-0.004* (0.002)
corrup_au	0.016 (0.016)	0.012 (0.019)	0.011 (0.014)	0.001 (0.007)	0.009 (0.013)	0.006 (0.007)
corr		-0.018 (0.016)	-0.001 (0.012)		0.007 (0.013)	
Observations	474	474	474	474	474	474
R-squared	0.117	0.136	0.207	0.183	0.146	0.169
$\beta_0 + \beta_1$	0.00178	0.0190	0.0235	0.0105	0.0198	0.00247
pval	0.928	0.184	0.0378	0.255	0.0684	0.731

Robust standard errors in parentheses

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

Challengers Agenda, Cases on same Area

Table: Audits on Shares - Incumbents

	(1) Bureaucratic	(2) Social	(3) Health	(4) Urban	(5) Economy	(6) Crime	(7) count	(8) overlpa
Audited	0.010 (0.007)	-0.023 (0.020)	-0.019 (0.011)	-0.004 (0.010)	0.002 (0.019)	-0.000 (0.003)	66.836 (264.176)	0.012* (0.007)
corrup_au	-0.000 (0.016)	-0.014 (0.025)	0.016 (0.020)	0.013 (0.022)	-0.021 (0.024)	-0.009 (0.013)	-109.060 (510.371)	0.005 (0.011)
corr	-0.002 (0.017)	-0.004 (0.029)	0.000 (0.016)	-0.007 (0.022)	0.023 (0.019)	0.008 (0.012)	133.891 (706.177)	-0.018 (0.013)
Observations	257	257	257	257	257	257	257	248
R-squared	0.225	0.165	0.227	0.368	0.213	0.168	0.788	0.846
$\beta_0 + \beta_1$	0.00955	-0.0371	-0.00298	0.00843	-0.0194	-0.00957	-42.22	0.0172
pval	0.553	0.0124	0.854	0.708	0.264	0.475	0.920	0.0270

Robust standard errors in parentheses

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

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Political Positioning - Challengers

Table: Effect of the Audit on Political Positioning

VARIABLES	(1) Standardized values of populis	(2) extremeness_med	(3) partisan_prob
Audited	-0.301** (0.138)	-0.661** (0.244)	-0.254 (0.266)
corrup_au	0.388** (0.154)	0.348 (0.465)	0.194 (0.611)
corr	-0.279** (0.110)	-0.026 (0.368)	0.105 (0.630)
Observations	474	474	422
R-squared	0.134	0.154	0.126
$\beta_0 + \beta_1$	0.0864	-0.313	-0.0599
pval	0.569	0.546	0.894

Robust standard errors in parentheses

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

Political Positioning - Incumbents

Table: Effect of the Audit on Political Positioning

VARIABLES	(1) Standardized values of populis	(2) extremeness_med	(3) partisan_prob
Audited	0.063 (0.096)	0.914* (0.520)	0.781 (0.657)
corrup_au	0.273 (0.170)	-1.466* (0.721)	-1.881* (1.048)
corr	-0.322 (0.206)	1.233* (0.628)	1.067 (1.092)
Observations	257	254	238
R-squared	0.283	0.157	0.148
$\beta_0 + \beta_1$	0.336	-0.552	-1.100
pval	0.0298	0.430	0.302

Robust standard errors in parentheses

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

