Government Audits and Campaign Platforms

Guillermo Lezama
Department of Economics
University of Pittsburgh

November 30, 2022

Motivation

- Randomized audits in Brazil gave voters information.
- And it has had consequences for those in policy roles...
  - $\downarrow$ political clientilism $\downarrow$ corruption
  - Affected how public employees were hired and quality

Motivation

- Randomized audits in Brazil gave voters information.
- And it has had consequences for those in policy roles...
  - $\downarrow$ political clientilism $\downarrow$ corruption
  - Affected how public employees were hired and quality

Do government audits affect electoral campaigns?

Motivation

- Randomized audits in Brazil gave voters information.
- And it has had consequences for those in policy roles...
  - $\downarrow$ political clientilism $\downarrow$ corruption
  - Affected how public employees were hired and quality

Do government audits affect electoral campaigns?

If so... Do they affect politicians' communication with voters?

Motivation II: Politicians' platforms framing

- Do politicians respond strategically to more information with their language?
- Supply of populist/polarizing messages by politicians (Gennaro, Lecce, & Morelli, 2019)
  - Issues they focus on.
  - Word-choice use to discuss these issues.
    - How positive.
    - Time references.
    - How populist.
- Information affect:
  - what voters would like to discuss
  - voters' perceptions that politicians may want to change or reinforce with references to the past or emotions.
- Audits reveal good or bad news (e.g., corruption). Is the response different?
- Incumbents and Challengers

Research questions

Do randomized audits about how the incumbent used public funds and its results (high/low corruption) affect politicians' platforms about

1. sentiments? (Positive-Negative)
2. time focus? (Past, Present, Future)
3. populism?
4. agenda? (Health, Social, Economics, Bureaucracy, Security and Urban)

- Data from Audits in Brazil
- Candidates' Manifestos for Mayor Elections in 2012

▸ Examples

Summary of the Results I

- Emotional content is not affected by the audit (even when looking at high-corruption or low-corruption cities)
- Similarly time-references.
- Incumbents in high-corrupt municipalities increase populist rhetoric after the audit.
- Challengers shift their agenda after the audit.

Summary of the Results II: Challengers' Agenda

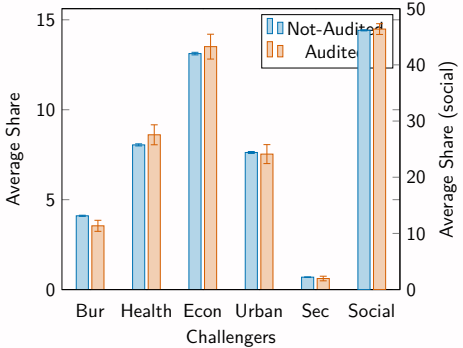


Figure: Average Share for Each Topic

- **Challengers**: focus on health increases and decreases on administration.

Summary of the Results II: Challengers' Agenda

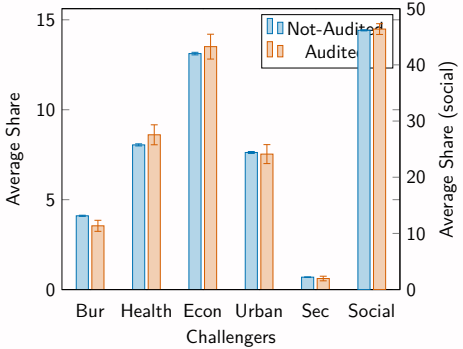


Figure: Average Share for Each Topic

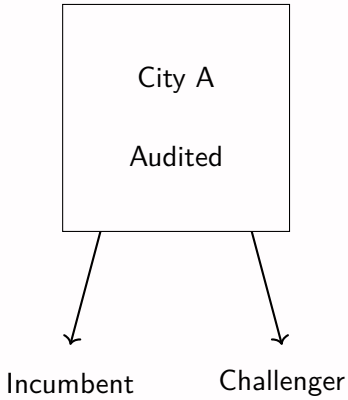
- **Challengers**: focus on health increases and decreases on administration.
- High number of corruption cases, audited:
  - $\Rightarrow$ more about health and urban policy issues.
- Low number of corruption cases, audited:
  - $\Rightarrow$ less about administration issues and more about economic issues.

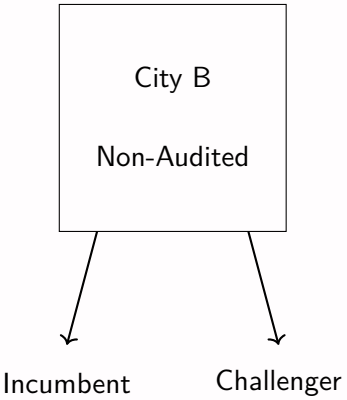
▸ Incumbents

Summary of the Empirical Approach I

Summary of the Empirical Approach I

Summary of the Empirical Approach I

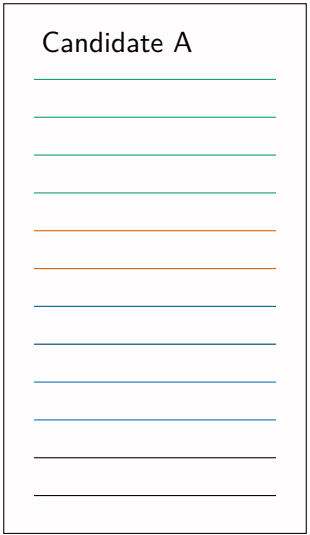




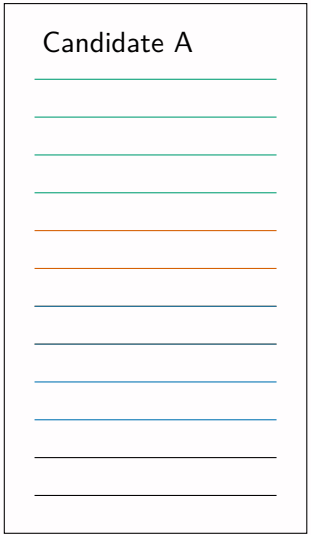
Summary of the Empirical Approach I

Summary of the Empirical Approach I

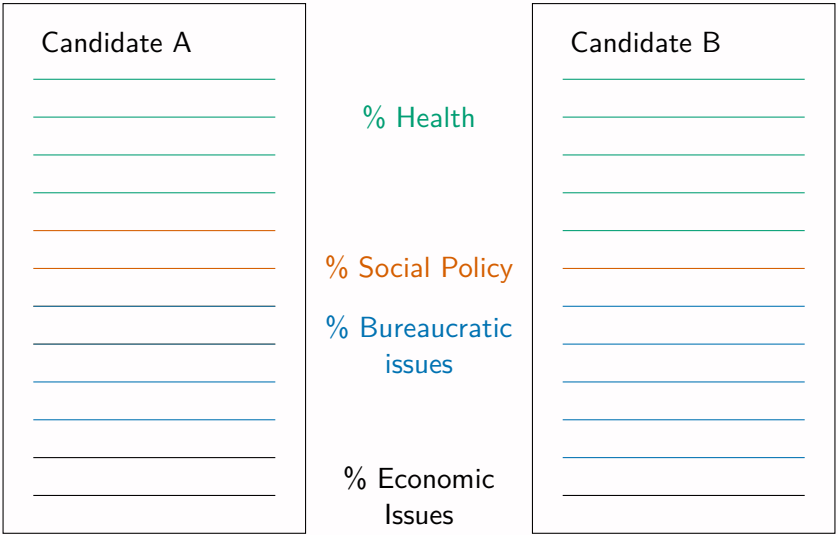
What do I compare?



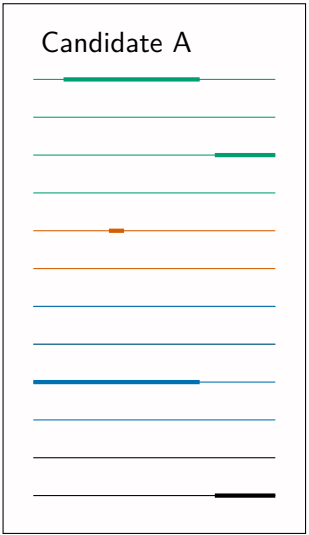
What do I compare?

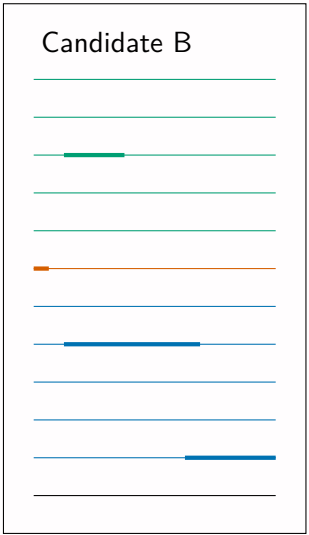


What do I compare?

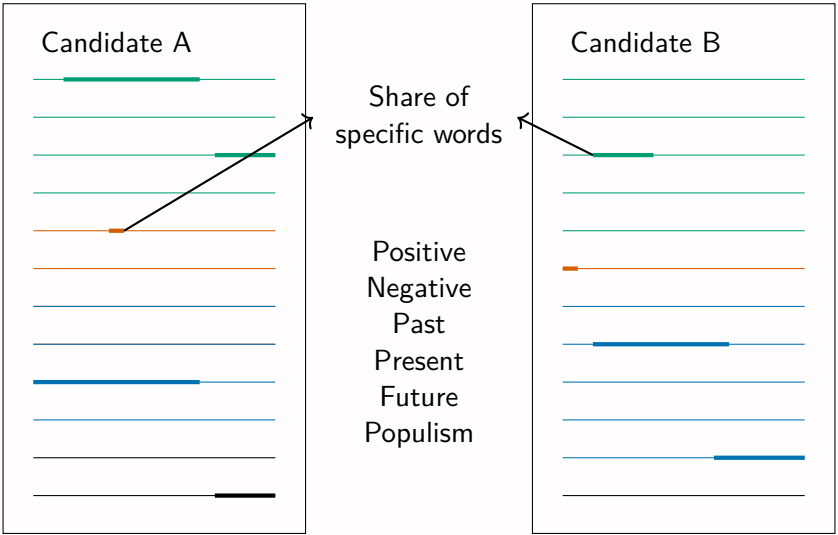


What do I compare?





What do I compare?



Related work

- Politicians frame their communication strategically:
  - populist rethoric (Gennaro et al., 2019)
  - sentiments (Crabtree, Golder, Gschwend, & Indriđason, 2020; Kosmidis, Hobolt, Molloy, & Whitefield, 2019)
  - Temporal dimension (Müller, 2022)
  - economic agenda (Williams, Seki, & Whitten, 2016).

Related work

- Politicians frame their communication strategically:
  - populist rethoric (Gennaro et al., 2019)
  - sentiments (Crabtree et al., 2020; Kosmidis et al., 2019)
  - Temporal dimension (Müller, 2022)
  - economic agenda (Williams et al., 2016).

- Impact of information on electoral accountability.
  - city council candidates' quality (Cavalcanti et al., 2018):
  - campaign spending (Poblete-Cazenave, 2021)

Related work

- Politicians frame their communication strategically:
  - populist rethoric (Gennaro et al., 2019)
  - sentiments (Crabtree et al., 2020; Kosmidis et al., 2019)
  - Temporal dimension (Müller, 2022)
  - economic agenda (Williams et al., 2016).

- Impact of information on electoral accountability.
  - city council candidates' quality (Cavalcanti et al., 2018):
  - campaign spending (Poblete-Cazenave, 2021)

- Effects of audits on what subsequent mayors do:
  - Corruption (Avis et al., 2018); Firms (Colonnelli & Prem, 2020); Bureaucracy quality (Gonzales, 2021; Lauletta et al., 2020); Rent Extraction (Zamboni & Litschig, 2018)

Interplay between Audits and Platforms

Audits $\Rightarrow$? Platforms

1. Emotions:
   - Bad audit $\Rightarrow \uparrow$ competition $\Rightarrow$ emotions and populist language are a way to differentiate (Kosmidis et al., 2019)
   - Vote choice is determined by how individuals perceive the state of the world. Politicians could affect that with their language (Crabtree et al., 2020)
2. Time:
   - Different incentives to focus on different time points (Müller, 2022).
   - Claim past achievements depending on whether the past was good.
3. Agenda:
   - An audit increases the saliency of a topic for voters (Williams et al., 2016).
   - Gives leads to challengers about potential problems.

Data: Candidates' Manifestos

- Candidates manifestos at the local level in Brazil for the 2012 election.
  - From the electoral authority website: Scrapped 16,173 pdfs and 13,724 texts (out of 15,874 candidates that got votes)
  - After cleaning: 11,422 candidates from 5,140 municipalities

- Processing: classify lines into topics.
  - Supervised learning: Multinomial naive Bayes classifier (manually codified $\approx 1\%$)
  - Labels: Titles, Introduction, Health, Social Policy, Economic/Sectoral and Environmental Policies, Administrative and Government issues, Infrastructure and Urban issues, and Security.

Measuring Outcomes

I use LIWC dictionary to compute outcomes (Pennebaker, Francis, & Booth, 2001)

Table: Dimension and illustrative words in the English Language

Dimension	**Example words (in English)**
Positive emotion - Negative Emotion (difference of pos and neg)	+(good, love, happy, hope); -(bad, hate, hurt, tired, worry, fear, afraid, nervous, hate, mad, angry, frustr*, :(, sad, disappoint*, cry)
Past Focus	was, had, were, been
Present Focus	is, are, I'm, can
Future Focus	will, going to, have to, may
Populism (Gennaro et al., 2019)	elite, absurd, corrupt, establishment

▸ Examples ▸ Descriptives

Measuring Outcomes: Steps

For each emotional/time-reference/populism dimension:

1. Computed TF-IDF matrix.
2. Sum of the TF-IDF values for each word of a document on each dimension
3. $$Outcome_{imst} = \mathbf{1}\{\text{Sum of total values of words in a specific dimension} > \\ > \text{Median sum of total values of words in a specific dimension}\}$$

For topics:

1. Measure how much of a specific agenda they discuss or time/emotion language they use (shares).

Data: Audits

- Audits
  - State Comptroller (CGU) performed randomized audits (2003 - 2015).
  - Audited municipality if audited in 2009-2012 ($Audited_{mst}$)
  - 478 audited municipalities (out of 5,568) in 2009-2012.
  - Data about corruption and irregularities (Avis et al., 2018)

- Other data
  - Municipal characteristics: Pesquisa de Informações Básicas Municipais - MUNIC (2011)(IBGE).
  - 2012 election data.
    - 2,691 candidates ran for reelection (incumbents)
    - 5,049 candidates were challengers to incumbents (challengers)

▸ Background

Empirical Strategy: Effect of the audit

- Municipalities were randomly drawn to be audited. ▸ Balance

- I estimate the following model for incumbents and challengers

$$Outcome_{imst} = \alpha + \beta Audited_{mst} + \gamma Controls_{imst} + \nu_s + \varepsilon_{imst} \quad (1)$$

  - $Outcome_{mst}$ is the outcome variable in municipality m in state s.
  - $Audited_{mst}$ is a binary variable
  - ν_s represents state fixed effects.
  - The vector $Controls_{mst}$ consists of a set of municipal and mayor characteristics

- The universe is all municipalities where a mayor was allowed to run for re-election.

Results I: Effect of the Audit on the Content

Table: Differences in probabilities of being above the median

	Incumbents					
	(1)	(2)	(3)	(4)	(5)	(6)
VARIABLES	Pos-Neg	Past	Present	Future	Populism	Count
Audited	-0.0361	-0.0190	-0.0133	0.0187	-0.00973	0.0517
	(0.0314)	(0.0357)	(0.0282)	(0.0353)	(0.0280)	(0.0398)
Observations	1,841	1,841	1,841	1,841	1,841	1,873
R-squared	0.330	0.380	0.485	0.360	0.296	0.087

Robust standard errors in parentheses

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

Results I: Effect of the Audit on the Content

Table: Differences in probabilities of being above the median

	Challengers					
	(1)	(2)	(3)	(4)	(5)	(6)
VARIABLES	Pos-Neg	Past	Present	Future	Populism	Count
Audited	-0.000638	-0.0584	0.00797	0.00467	0.00840	0.0146
	(0.0246)	(0.0370)	(0.0227)	(0.0367)	(0.0278)	(0.0236)
Observations	3,360	3,360	3,360	3,360	3,360	3,361
R-squared	0.064	0.203	0.251	0.217	0.149	0.050

Robust standard errors in parentheses

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

▸ Empirical Strategy: Heterogeneous Effects

Results II: Effect of the Audit on the Agenda

Table: Effect on the Share for each Topic

	Incumbents					
	(1)	(2)	(3)	(4)	(5)	(6)
VARIABLES	Adm	Social	Health	Urban	Econ	Secur
Audited	-0.00144	0.00181	0.00296	-0.00314	0.00327	0.000732
	(0.00219)	(0.00755)	(0.00360)	(0.00497)	(0.00456)	(0.000711)
Observations	1,873	1,873	1,873	1,873	1,873	1,873
R-squared	0.045	0.037	0.063	0.171	0.107	0.053
Mean	0.041	0.461	0.081	0.076	0.132	0.007

Robust standard errors in parentheses

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

Results II: Effect of the Audit on the Agenda

Table: Effect on the Share for each Topic

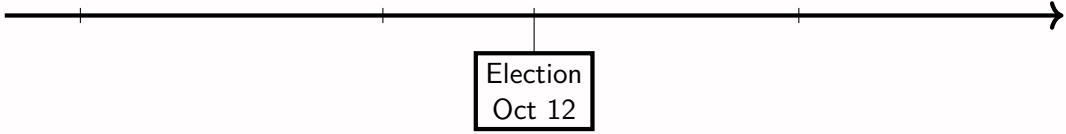
	Challengers					
	(1)	(2)	(3)	(4)	(5)	(6)
VARIABLES	Adm	Social	Health	Urban	Econ	Secur
Audited	-0.00557***	0.00221	0.00561*	-0.000899	0.00387	-0.000756
	(0.00162)	(0.00505)	(0.00293)	(0.00278)	(0.00364)	(0.000676)
Observations	3,361	3,361	3,361	3,361	3,361	3,361
R-squared	0.035	0.035	0.075	0.078	0.095	0.044
Mean	0.033	0.47	0.085	0.091	0.13	0.005

Robust standard errors in parentheses

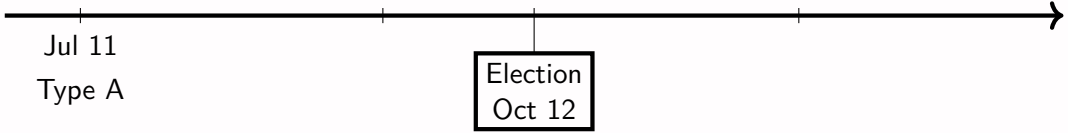
*** p<0.01, ** p<0.05, * p<0.1

▸ Topic of the audit ▸ Summary

Empirical Strategy: Effect of the Audit conditioning on the result I



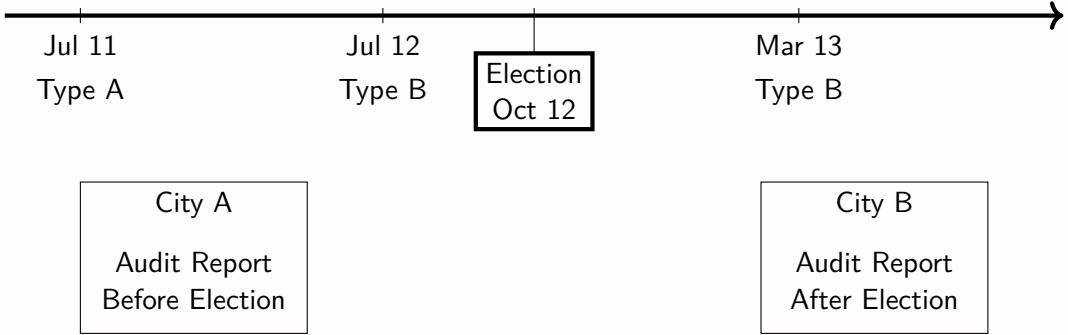
Empirical Strategy: Effect of the Audit conditioning on the result I



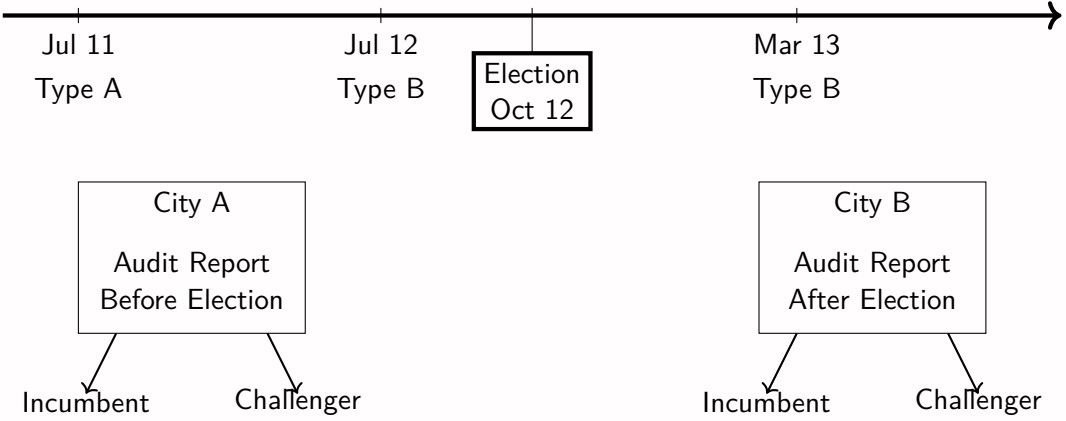
City A

Audit Report
Before Election

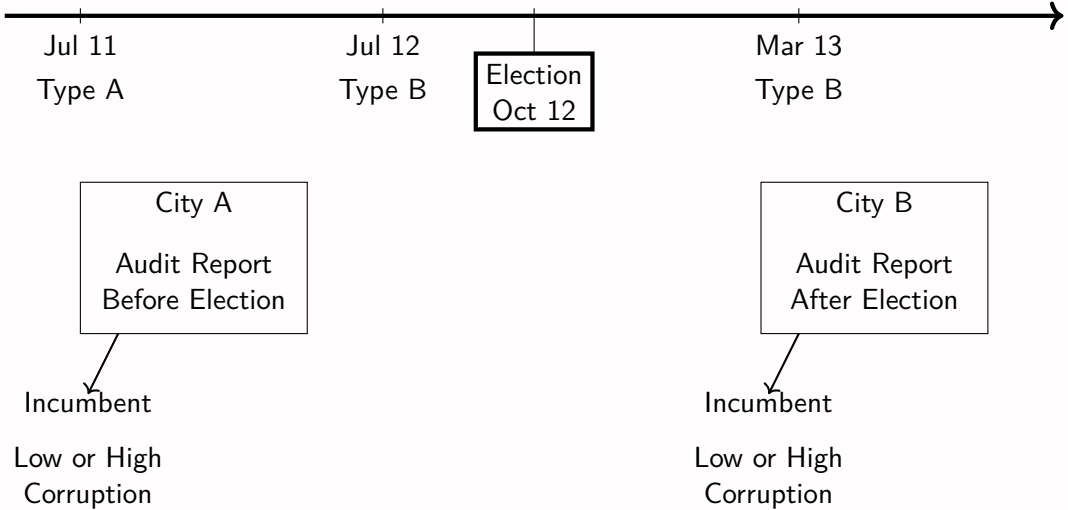
Empirical Strategy: Effect of the Audit conditioning on the result I



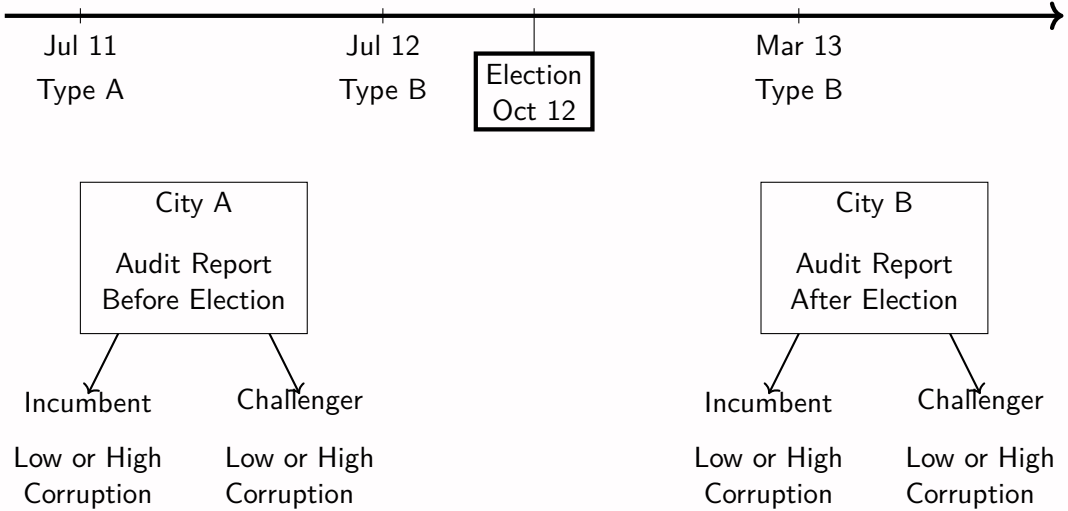
Empirical Strategy: Effect of the Audit conditioning on the result I



Empirical Strategy: Effect of the Audit conditioning on the result I



Empirical Strategy: Effect of the Audit conditioning on the result I



Empirical Strategy: Effect of the Audit condition on the result II

- Used in Ferraz and Finan (2008) ▸ Balance

- I estimate the following model for incumbents and challengers

$$Outcome_{imst} = \alpha + \beta_0 PreElection_{mst} + \beta_1 PreElection_{mst} \times Corruption + \\ + \beta_2 Corruption + \gamma Controls_{imst} + \nu_s + \varepsilon_{imst}$$

  - $PreElection_{mst}$ is a binary variable that represents if a municipality was audited and the result was disclosed before the election.
  - *Corruption* is a **binary** variable that represents whether the audit gave a number of acts of corruption higher than the median.

- $\beta_0 + \beta_1$ measures the effect of the audit results disclosed before the election, given the acts of corruption were above the median.

- β_0 measures the effect of the audit results disclosed before the election, given the acts of corruption were below the median.

▸ Adm & Health

Results III: Effect of the Audit according to the Results of it (Content)

Table: Differences in probabilities of being above the median

	Incumbents					
	(1)	(2)	(3)	(4)	(5)	(6)
VARIABLES	Pos-Neg	Past	Present	Future	Populism	Count
Audited	-0.0154	-0.0102	-0.0274	0.0998	0.0243	0.0292
	(0.0461)	(0.0766)	(0.0999)	(0.0621)	(0.0621)	(0.0886)
Observations	261	261	261	261	261	261
R-squared	0.373	0.502	0.563	0.433	0.394	0.179

Robust standard errors in parentheses

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

Back

Results III: Effect of the Audit according to the Results of it (Content)

Table: Differences in probabilities of being above the median

	Incumbents					
	(1)	(2)	(3)	(4)	(5)	(6)
VARIABLES	Pos-Neg	Past	Present	Future	Populism	Count
Audited	-0.0154	-0.0102	-0.0274	0.0998	0.0243	0.0292
	(0.0461)	(0.0766)	(0.0999)	(0.0621)	(0.0621)	(0.0886)
CorruptionxAudit	0.0694	0.116	0.131	-0.0362	0.259**	-0.180
	(0.149)	(0.156)	(0.123)	(0.135)	(0.0945)	(0.168)
Corruption	-0.0675	-0.113	-0.0762	-0.0247	-0.296***	0.288*
	(0.146)	(0.120)	(0.110)	(0.142)	(0.0884)	(0.139)
$\beta_0 + \beta_1$	0.0540	0.106	0.103	0.0636	**0.283**	-0.151
pval	0.689	0.379	0.403	0.555	**0.000735**	0.295
Observations	261	261	261	261	261	261
R-squared	0.373	0.502	0.563	0.433	0.394	0.179

Robust standard errors in parentheses

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

▸ Back

Results III: Effect of the Audit according to the Results of it (Agenda)

Table: Effect on the Share for each Topic

	Incumbents					
	(1)	(2)	(3)	(4)	(5)	(6)
VARIABLES	Adm	Social	Health	Urban	Econ	Secur
Audited	0.00310	0.0180	-0.00744	-0.000173	0.000368	-0.000487
	(0.00579)	(0.0234)	(0.00795)	(0.00881)	(0.0163)	(0.00150)
Observations	261	261	261	261	261	261
R-squared	0.155	0.203	0.239	0.225	0.151	0.163
Mean	0.039	0.4612	0.083	0.073	0.132	0.006

Robust standard errors in parentheses

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

▸ Content

Results III: Effect of the Audit according to the Results of it (Agenda)

Table: Effect on the Share for each Topic

	Incumbents					
	(1)	(2)	(3)	(4)	(5)	(6)
VARIABLES	Adm	Social	Health	Urban	Econ	Secur
Audited	0.00310	0.0180	-0.00744	-0.000173	0.000368	-0.000487
	(0.00579)	(0.0234)	(0.00795)	(0.00881)	(0.0163)	(0.00150)
CorruptionxAudit	-0.00919	-0.0273	0.0250	0.00253	-0.0131	4.85e-05
	(0.0124)	(0.0461)	(0.0171)	(0.0173)	(0.0234)	(0.00280)
Corruption	0.00682	0.0135	0.00227	0.0186	0.0208	0.000590
	(0.0119)	(0.0476)	(0.0179)	(0.0155)	(0.0219)	(0.00194)
$\beta_0 + \beta_1$	-0.00609	-0.00931	0.0175	0.00235	-0.0127	-0.000438
pval	0.637	0.838	0.279	0.852	0.532	0.856
Observations	261	261	261	261	261	261
R-squared	0.155	0.203	0.239	0.225	0.151	0.163
Mean	0.039	0.4612	0.083	0.073	0.132	0.006

Robust standard errors in parentheses

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

▸ Content

Results III: Effect of the Audit according to the Results of it (Content)

Table: Differences in probabilities of being above the median

	Challengers					
	(1)	(2)	(3)	(4)	(5)	(6)
VARIABLES	Pos-Neg	Past	Present	Future	Populism	Count
Audited	-0.0455	-0.0104	0.0333	-0.0219	-0.0612	0.0745
	(0.0538)	(0.0700)	(0.0642)	(0.0585)	(0.0619)	(0.0743)
Observations	490	490	490	490	490	490
R-squared	0.128	0.298	0.316	0.261	0.177	0.142

Robust standard errors in parentheses

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

▸ Back

Results III: Effect of the Audit according to the Results of it (Content)

Table: Differences in probabilities of being above the median

	Challengers					
	(1)	(2)	(3)	(4)	(5)	(6)
VARIABLES	Pos-Neg	Past	Present	Future	Populism	Count
Audited	-0.0455	-0.0104	0.0333	-0.0219	-0.0612	0.0745
	(0.0538)	(0.0700)	(0.0642)	(0.0585)	(0.0619)	(0.0743)
CorruptionxAudit	-0.0130	0.00680	-0.129	0.210*	0.0881	-0.262*
	(0.109)	(0.109)	(0.146)	(0.121)	(0.137)	(0.145)
Corruption	0.0843	-0.0974	0.141	-0.201	0.00880	0.299*
	(0.0760)	(0.0980)	(0.133)	(0.121)	(0.121)	(0.167)
$\beta_0 + \beta_1$	-0.0585	-0.00362	-0.0953	0.188	0.0269	-0.188
pval	0.549	0.968	0.440	0.109	0.830	0.250
Observations	490	490	490	490	490	490
R-squared	0.128	0.298	0.316	0.261	0.177	0.142

Robust standard errors in parentheses

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

▸ Back

Results III: Effect of the Audit according to the Results of it (Agenda)

Table: Effect on the Share for each Topic

	Challengers					
	(1)	(2)	(3)	(4)	(5)	(6)
VARIABLES	Adm	Social	Health	Urban	Econ	Secur
Audited	-0.00851**	0.0144	0.00858	0.00356	0.0153*	-5.41e-05
	(0.00390)	(0.0123)	(0.00552)	(0.00523)	(0.00773)	(0.00105)
Observations	490	490	490	490	490	490
R-squared	0.104	0.102	0.183	0.124	0.120	0.081
Mean	0.032	0.473	0.085	0.081	0.13	0.006

Robust standard errors in parentheses

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

Results III: Effect of the Audit according to the Results of it (Agenda)

Table: Effect on the Share for each Topic

Challengers

VARIABLES	(1) Adm	(2) Social	(3) Health	(4) Urban	(5) Econ	(6) Secur
Audited	-0.00851**	0.0144	0.00858	0.00356	0.0153*	-5.41e-05
	(0.00390)	(0.0123)	(0.00552)	(0.00523)	(0.00773)	(0.00105)
CorruptionxAudit	0.00780	-0.0441*	0.0140	0.0196	-0.0296	-0.000103
	(0.00831)	(0.0229)	(0.00941)	(0.0128)	(0.0191)	(0.00259)
Corruption	-0.0101	0.0342	-0.0135	-0.0338**	0.0165	-0.00101
	(0.00951)	(0.0205)	(0.00998)	(0.0121)	(0.0186)	(0.00248)
$\beta_0 + \beta_1$	-0.000705	-0.0296	**0.0226**	**0.0231**	-0.0144	-0.000157
pval	0.902	0.176	**0.0232**	**0.0307**	0.418	0.944
Observations	490	490	490	490	490	490
R-squared	0.104	0.102	0.183	0.124	0.120	0.081
Mean	0.032	0.473	0.085	0.081	0.13	0.006

Robust standard errors in parentheses

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

Summary of the Results

- No effects on emotions and time references.
- Given high corruption, an audit increases the probability of a high frequency of populism in incumbents.

Summary of the Results

- No effects on emotions and time references.
- Given high corruption, an audit increases the probability of a high frequency of populism in incumbents.
- Challengers respond to having more information
  - $\Rightarrow$ Administration is less discussed.
  - $\Rightarrow$ Health policies are more discussed.

Summary of the Results

- No effects on emotions and time references.

- Given high corruption, an audit increases the probability of a high frequency of populism in incumbents.

- Challengers respond to having more information
  - $\Rightarrow$ Administration is less discussed.
  - $\Rightarrow$ Health policies are more discussed.

- and to the result of the audit in their agenda.
  - Low corruption, an audit makes
    - $\Rightarrow$ Administration is less discussed.
    - $\Rightarrow$ Economics is more discussed.
  - High corruption, an audit makes
    - $\Rightarrow$ Health policies are more discussed.
    - $\Rightarrow$ Urban policies are more discussed.

Summary of the Results

- No effects on emotions and time references.

- Given high corruption, an audit increases the probability of a high frequency of populism in incumbents.

- Challengers respond to having more information
  - $\Rightarrow$ Administration is less discussed.
  - $\Rightarrow$ Health policies are more discussed.

- and to the result of the audit in their agenda.
  - Low corruption, an audit makes
    - $\Rightarrow$ Administration is less discussed.
    - $\Rightarrow$ Economics is more discussed.
  - High corruption, an audit makes
    - $\Rightarrow$ Health policies are more discussed.
    - $\Rightarrow$ Urban policies are more discussed.

- Incumbent candidates are less responsive than challengers about their agenda.

Final Remarks

- Almost no effect on framing but challengers shift their focus.
  - Not everything is written.
  - This was the first time they submitted their platforms. Did it change over time?

- Incumbent candidates are less responsive than challengers.
  - Information is already known by the incumbent, and they have other means to affect citizens' perceptions (transfer programs and patronage, Poblete-Cazenave, 2021).
  - Because of incumbency advantage, it could not be necessary to change the language.

- Could more information also affect the distance between the challenger and the incumbent? (Gentzkow, Shapiro, & Taddy, 2016)

Thank you!

gul30@pitt.edu

References I

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.

Cavalcanti, F., Daniele, G., & Galletta, S. (2018). Popularity shocks and political selection. *Journal of Public Economics*, *165*, 201–216.

Colonnelli, E., & Prem, M. (2020). Corruption and firms. *Available at SSRN 2931602*.

Crabtree, C., Golder, M., Gschwend, T., & Indriđason, I. H. (2020). It is not only what you say, it is also how you say it: The strategic use of campaign sentiment. *The Journal of Politics*, *82*(3), 1044–1060.

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.

Gennaro, G., Lecce, G., & Morelli, M. (2019). Intertemporal evidence on the strategy of populism.

Gentzkow, M., Shapiro, J., & Taddy, M. (2016). *Measuring polarization in high-dimensional data: Method and application to congressional speech* (Tech. Rep.).

References II

Gonzales, M. (2021). Politics never end: Public employment e ects of increased transparency.

Kosmidis, S., Hobolt, S. B., Molloy, E., & Whitefield, S. (2019). Party competition and emotive rhetoric. *Comparative Political Studies*, *52*(6), 811–837.

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)

Müller, S. (2022). The temporal focus of campaign communication. *The Journal of Politics*, *84*(1), 585–590.

Pennebaker, J. W., Francis, M. E., & Booth, R. J. (2001). Linguistic inquiry and word count: Liwc 2001. *Mahway: Lawrence Erlbaum Associates*, *71*(2001), 2001.

Poblete-Cazenave, R. (2021). Reputation shocks and strategic responses in electoral campaigns. *Available at SSRN 3786253*.

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.

Zamboni, Y., & Litschig, S. (2018). Audit risk and rent extraction: Evidence from a randomized evaluation in brazil. *Journal of Development Economics*, *134*, 133–149.

Are these results driven by the content of the audit?

- The criterion about what to audit was not fixed.
- From audit 28th to audit 36th, large municipalities were audited on fewer dimensions.
- Cities below 50k people were always audited about Health.
- Above 100k, municipalities were never audited on their health policies.

Results I: Effect of the Audit on the Agenda

Table: Effect on the Share for each Topic for Challengers

Pop <50000

VARIABLES	(1) Adm	(2) Social	(3) Health	(4) Urban	(5) Econ	(6) Secur
Audited	-0.00606***	-0.000732	0.00775*	-0.00313	0.00414	-0.000810
	(0.00188)	(0.00619)	(0.00386)	(0.00411)	(0.00383)	(0.000793)
Observations	2,766	2,766	2,766	2,766	2,766	2,766
R-squared	0.040	0.035	0.062	0.086	0.078	0.053

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Pop >100000

VARIABLES	(1) Adm	(2) Social	(3) Health	(4) Urban	(5) Econ	(6) Secur
Audited	0.00449	-0.00276	-0.000979	0.00761	0.000986	-0.00202
	(0.00523)	(0.0219)	(0.00783)	(0.00697)	(0.0143)	(0.00205)
Observations	299	299	299	299	299	299
R-squared	0.194	0.137	0.152	0.119	0.125	0.145

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

▸ Back

Balance Audits

	Non-audited		Audited			
	mean	sd	mean	sd	diff	sd
Income (logs)	9.20	0.70	9.06	0.67	-0.04	[0.030]
Illiteracy (%)	85.49	8.79	84.00	9.09	-0.09	[0.280]
Urban (%)	0.64	0.22	0.63	0.21	0.00	[0.007]
College (%)	0.56	0.50	0.55	0.50	0.00	[0.022]
AM radio	0.21	0.41	0.21	0.40	0.00	[0.030]
Gini	0.50	0.07	0.51	0.06	0.00	[0.002]
Pop (log)	9.41	1.09	9.46	1.10	-0.02	[0.049]
Number of parties	2.85	1.19	2.93	1.25	0.05	[0.067]
	4071		375			

▸ Back

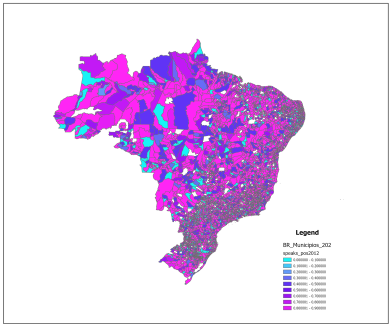
Balance Timing

	After Election		Pre-Election			
	mean	sd	mean	sd	diff	sd
Income (logs)	9.10	0.64	9.04	0.67	0.00	[0.046]
Illiteracy (%)	84.42	8.35	83.81	9.10	0.19	[0.367]
Urban (%)	0.64	0.20	0.63	0.21	0.00	[0.012]
College (%)	0.57	0.50	0.52	0.50	-0.05	[0.044]
AM radio	0.19	0.39	0.20	0.40	0.02	[0.037]
Gini	0.50	0.06	0.51	0.06	0.00	[0.004]
Pop (log)	9.37	1.03	9.48	1.09	0.08	[0.060]
Number of parties	2.86	1.22	2.95	1.24	0.07	[0.125]

▸ Back

Geographical Variation

- Platforms show variation across municipalities.
- Increase in the use of populist vocabulary (Gennaro et al. (2019) dictionary).



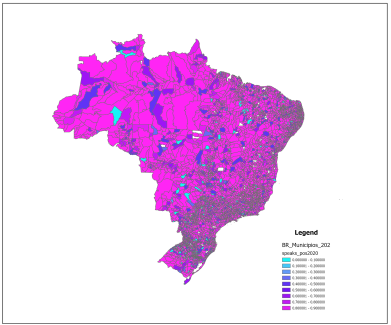


Figure: Percentage of local party manifestos in Brazil that include a populist word (Left: 2012. Right: 2020)

▸ Back

Results IV: Effect of the Audit according to the Results of it Adm Issues (Content)

Table: Differences in probabilities of being above the median

VARIABLES Count	(1) Pos-Neg	(2) Past	(3) Present	(4) Future	(5) Populism
Audited	0.00292	-0.0880**	0.0214	-0.0499	0.0169
	(0.0490)	(0.0416)	(0.0364)	(0.0355)	(0.0305)
CorruptionxAudit	0.0604	0.0324	-0.155	0.141*	-0.0206
	(0.140)	(0.0974)	(0.0995)	(0.0816)	(0.0926)
Corruption	-0.120	0.0256	0.0494	-0.107	0.0456
	(0.148)	(0.0859)	(0.111)	(0.0752)	(0.0880)
Observations	490	490	490	490	490
R-squared	0.181	0.218	0.292	0.291	0.212
$\beta_0 + \beta_1$	0.0633	-0.0556	-0.133	0.0915	-0.00370
pval	0.612	0.465	0.254	0.181	0.963

Robust standard errors in parentheses

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

Results IV: Effect of the Audit according to the Results of it Health Issues (Content)

Table: Differences in probabilities of being above the median

VARIABLES Count	(1) Pos-Neg	(2) Past	(3) Present	(4) Future	(5) Populism
Audited	-0.0201	0.0736**	0.0320	0.0930*	-0.0501*
	(0.0529)	(0.0302)	(0.0624)	(0.0474)	(0.0254)
CorruptionxAudit	-0.0771	-0.0112	-9.70e-05	-0.145	0.111***
	(0.188)	(0.0832)	(0.104)	(0.0963)	(0.0329)
Corruption	0.137	0.0375	0.0117	0.0940	-0.0615*
	(0.169)	(0.0913)	(0.107)	(0.0767)	(0.0300)
Observations	490	490	490	490	490
R-squared	0.108	0.169	0.215	0.217	0.099
$\beta_0 + \beta_1$	-0.0972	0.0624	0.0319	-0.0525	0.0611
pval	0.583	0.381	0.738	0.564	0.0466

Robust standard errors in parentheses

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

Examples

Positive "it is an opportunity to reaffirm my confidence in the immense capacity that education professionals have to be part of this challenge". (Ruy Bedson Cifoni Lavor, Sao Luis do Curu/CE)

Negative "the municipality was created in a scenario of serious problems in the regional economy and a poorly managed population migration process" (Antonio Carlos Ferreira Portela, Porto Acre, AC)

Past "Our Government Project will not only focus on social inequalities resulting from ineffective previous administrations" (Paulo Nogueira, Cabedelo/PB)

Future "we will work tirelessly at the service of the entire population" (Jose Vale dos Santos, Barreirinhas/MA)

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 Question ▸ Back to Outcomes

Background

Municipalities in Brazil in 2012.

- Mayor elections every 4 years (city councils at the same time)
- Mayors can be re-elected once.
- Multi-party elections.
- Concerns about corruption that led to an audit program (Ferraz & Finan, 2008)

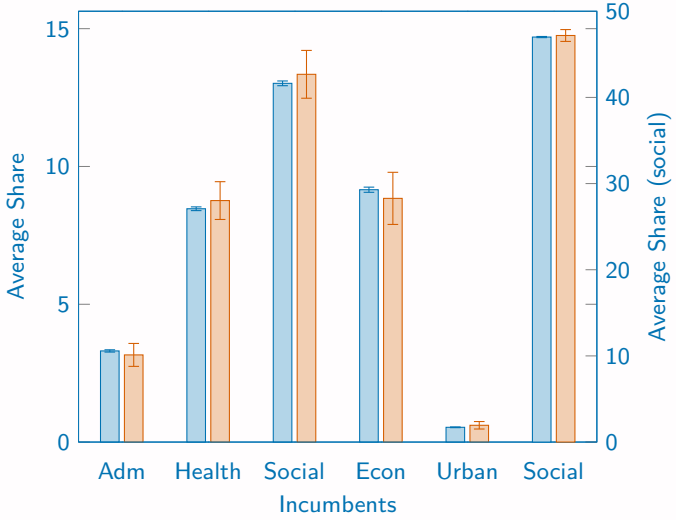
▸ Back to Data

Descriptives

	Mean	sd	p50	as % of count	as % of count (p90)
Word-Count	2447.0	3177.50	1678		
Pos	48.3	46.3	37	2.3%	3.3%
Neg	14.5	22.1	8	0.5%	0.9%
Pos-Neg	33.8	30.41	27	1.7%	2.9%
Past	5.3	9.50	3	0.2%	0.4%
Present	23.1	34.62	14	0.9%	1.5%
Future	6.0	11.73	2	0.2%	0.5%
Populist	2.2	3.81	1	0.1%	0.2%
Adm	98.3	150.51	50	3.8%	8.1%
Social	1113.0	1294.83	753	46.5%	59.6%
Health	167.7	175.11	125	8.2%	14.5%
Econ	162.6	183.44	116	7.9%	14.3%
Urban	289.2	317.73	199	13.2%	22.1%
Secur	14.8	29.98	1	0.7%	2.0%
N	11422				

▸ Geographical Variation ▸ Back

Incumbents results on the Agenda



▸ Back

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

Manifestos in the News

ELEIÇÕES 2020

Conheça o plano d de Pepe Vargas, ca prefeito de Caxias

Pioneiro apresenta as propostas dos 11 candidatos à prefeitura

Propostas

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

Durante a campanha, o candidato afirmou em programas eleitorais, entrevistas e debates que pretende tornar o atendimento na saúde pública municipal mais eficiente. Uma das propostas, que segundo ele, pode ser concretizada em 180 dias, é implantar um modelo de agendamento nos posto de saúde que fará com que as pessoas não precisem passar a madruga na fila para conseguir consulta.

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

Quando falava em mobilidade urbana, Greca era enfático ao afirmar que vai retornar a integração do transporte público de Curitiba com o da Região Metropolitana.

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.

Sobre educação, Greca afirmou que nos primeiros dias de gestão vai identificar a real necessidade de vagas no ensino fundamental e na educação infantil na cidade.

No plano de governo, uma das propostas e colocar Centros Municipais de Educação Infantil (Cmeis) em funcionamento, abrir turmas de berçário e aumentar as vagas para crianças entre zero e três anos.

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 "Copie e Cobre" 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).

ı o plano d
Vargas, ca
de Caxias

stas dos 11 candidatos à prefeitura

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

Durante a campanha, o candidato afirmou em programas eleitorais, entrevistas e debates que pretende tornar o atendimento na saúde pública municipal mais eficiente. Uma das propostas, que segundo ele, pode ser concretizada em 180 dias, é implantar um modelo de agendamento nos posto de saúde que fará com que as pessoas não precisem passar a madruga na fila para conseguir consulta.

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 0,755

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, geriatras, por exemplo, e equipe multidisciplinar.

Quando falava em mobilidade urbana, Greca era enfático ao afirmar que vai retornar a integração do transporte público de Curitiba com o da Região Metropolitana.

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.

Sobre educação, Greca afirmou que nos primeiros dias de gestão vai identificar a real necessidade de vagas no ensino fundamental e na educação infantil na cidade.

No plano de governo, uma das propostas e colocar Centros Municipais de Educação Infantil (Cmeis) em funcionamento, abrir turmas de berçário e aumentar as vagas para crianças entre zero e três anos.