# Government Audits and the Implementation of Transparency Policies

Guillermo Lezama

Applied Micro Brown Bag

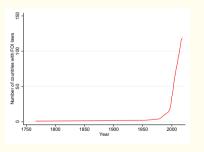
October 18, 2021

### Motivation I

- Government transparency means more information to voters. But also,
  - Provision of public services (Gavazza & Lizzeri, 2007)
  - Information to firms (Colonnelli & Prem, 2020)
  - Corruption

### Motivation I

- Government transparency means more information to voters. But also,
  - Provision of public services (Gavazza & Lizzeri, 2007)
  - Information to firms (Colonnelli & Prem, 2020)
  - Corruption
- Worldwide trend towards increasing the levels of governments' openness.



Source: Own ellaboration. Data from freedominfo.org

How can we foster the implementation of Access to Information Laws?

#### Introduction

- Gap in literature about the determinants of implementing transparency policies.
- I focus on a determinant of the implementation of these laws
- Audits have worked on multiple dimensions (Corruption: Avis, Ferraz, and Finan (2018))

#### Introduction

- Gap in literature about the determinants of implementing transparency policies.
- I focus on a determinant of the implementation of these laws
- Audits have worked on multiple dimensions (Corruption: Avis et al. (2018))

Do federal government audits increase the probability of implementing the Access to Information Law in municipalities?

# **Case Selection**

Why Brazil?

### **Case Selection**

### Why Brazil?

- Decrease in trust to the government
- Concerns about corruption

### **Case Selection**

### Why Brazil?

- Decrease in trust to the government
- Concerns about corruption
- Brazil is very decentralized

### Short version of this talk

- Federal Government agencies have pushed to improve governance in Municipalities.
  - Audits
  - Rankings about compliance to the Access to Information Law

### Short version of this talk

- Federal Government agencies have pushed to improve governance in Municipalities.
  - Audits
  - Rankings about compliance to the Access to Information Law
- Following Avis et al. (2018) strategy I find
  - a positive effect of being previously audited on publishing instructions about how to access to public information

### Short version of this talk

- Federal Government agencies have pushed to improve governance in Municipalities.
  - Audits
  - Rankings about compliance to the Access to Information Law
- Following Avis et al. (2018) strategy I find
  - a positive effect of being previously audited on publishing instructions about how to access to public information
  - effect is not observed after the first ranking was published

# Related work and Hypothesis

- Causes of enacting transparency/FOI laws (Berliner & Erlich, 2015)
- Effects of audits
  - Corruption (Avis et al., 2018)
  - Firms (Colonnelli & Prem, 2020)
  - Bureaucracy quality (Lauletta, Rossi, & Ruzzier, 2020)
  - Audit Probability on Rent Extraction (no in Health Services) (Zamboni & Litschig, 2018)

### Hypothesis:

Audited Municipalities are more likely to implement the Access to Information Law than municipalities that were not audited before by the federal government.

- Brazilian congress approved the Freedom of Information Act in 2011 (Law 12527)

- Brazilian congress approved the Freedom of Information Act in 2011 (Law 12527)
- The law mandated the Municipalities to publish certain minimum information on their websites.

- Brazilian congress approved the Freedom of Information Act in 2011 (Law 12527)
- The law mandated the Municipalities to publish certain minimum information on their websites.
- Municipalities were responsible for implementing this reform by enacting local regulations that guarantee public information access

- Brazilian congress approved the Freedom of Information Act in 2011 (Law 12527)
- The law mandated the Municipalities to publish certain minimum information on their websites.
- Municipalities were responsible for implementing this reform by enacting local regulations that guarantee public information access
- Enforcement of the law is not guaranteed, and it has been weak (Michener & Nichter, 2020)

# **Measuring Transparency**

- Controladoria-Geral da União (CGU) developed a program (Escala Brasil Transparente) (EBT) to measure the compliance with the law in local and state governments.
  - 1. Reviewers inspected municipalities' websites.
  - They checked if the municipality had enacted any local regulation about how citizens could access public information.
  - 3. When it was possible, the reviewer completed 3 or 4 requests to access public information.
  - 4. The reviewer recorded the responses (or the lack of them).
  - 5. They ranked municipalities and assigned a grade (0 to 10). Consequences

# Measuring Transparency: Timeline



### Data: EBT

- CGU's data from Escala Brasil Transparente contains information about how a set of Brazilian Municipalities complies with FOI law.
- Dependent variable ( $Transparency_{mt}$ ): Whether the municipality published how to ask for public information.

	1st editi	on	2	nd e	dition			3rd edition	n	
Jan	15	Apr	15 Jul	15	Nov	15	Jul	16	Jan 17	7
46	5 (G1) M	unicip		1086	5 (G2)	Municipalities	465 (G1) + 1	085 (G2) + 74	40 (G3) Mu	ınicipalities



#### Table: Means of Adoption of Transparency Policies

	Mean	S.E. Mean	Observations	
Edition 1, Group 1	0.33	0.02	465	

Notes: This table shows the means and standard errors of the mean for the dependent variable: the adoption of transparency policies according to each round of reviews and the first time Escala Brasil Transparente reviewed the municipality. Capital cities and cities with a population higher than 500,000 were excluded.



Table: Means of Adoption of Transparency Policies

Mean	S.E. Mean	Observations	
0.33	0.02	465	
0.44	0.02	465	
	0.33	0.33 0.02	

Notes: This table shows the means and standard errors of the mean for the dependent variable: the adoption of transparency policies according to each round of reviews and the first time Escala Brasil Transparente reviewed the municipality. Capital cities and cities with a population higher than 500,000 were excluded.



Table: Means of Adoption of Transparency Policies

	Mean	S.E. Mean	Observations	
Edition 1, Group 1	0.33	0.02	465	
Edition 2, Group 1	0.44	0.02	465	
Edition 3, Group 1	0.72	0.02	465	

Notes: This table shows the means and standard errors of the mean for the dependent variable: the adoption of transparency policies according to each round of reviews and the first time Escala Brasil Transparente reviewed the municipality. Capital cities and cities with a population higher than 500,000 were excluded.



Table: Means of Adoption of Transparency Policies

	Mean	S.E. Mean	Observations		
Edition 1, Group 1	0.33	0.02	465		
Edition 2, Group 1	0.44	0.02	465		
Edition 2, Group 2	0.47	0.02	1086		
Edition 3, Group 1	0.72	0.02	465		

Notes: This table shows the means and standard errors of the mean for the dependent variable: the adoption of transparency policies according to each round of reviews and the first time Escala Brasil Transparente reviewed the municipality. Capital cities and cities with a population higher than 500,000 were excluded.



Table: Means of Adoption of Transparency Policies

	Mean	S.E. Mean	Observations	
Edition 1, Group 1	0.33	0.02	465	
Edition 2, Group 1	0.44	0.02	465	
Edition 2, Group 2	0.47	0.02	1086	
Edition 3, Group 1	0.72	0.02	465	
Edition 3, Group 2	0.77	0.01	1085	

Notes: This table shows the means and standard errors of the mean for the dependent variable: the adoption of transparency policies according to each round of reviews and the first time Escala Brasil Transparente reviewed the municipality. Capital cities and cities with a population higher than 500,000 were excluded.



Table: Means of Adoption of Transparency Policies

	Mean	S.E. Mean	Observations
Edition 1, Group 1	0.33	0.02	465
Edition 2, Group 1	0.44	0.02	465
Edition 2, Group 2	0.47	0.02	1086
Edition 3, Group 1	0.72	0.02	465
Edition 3, Group 2	0.77	0.01	1085
Edition 3, Group 3	0.79	0.02	740

Notes: This table shows the means and standard errors of the mean for the dependent variable: the adoption of transparency policies according to each round of reviews and the first time Escala Brasil Transparente reviewed the municipality. Capital cities and cities with a population higher than 500,000 were excluded.

### **Data: Audits**

#### - Audits

- CGU has performed a randomized program of audits to control the use of public funds.
- I use the audits made by CGU about the use of public funds (2009-2015) ( $Audited_{mst}$ )

#### - Other data

- Data about municipal characteristics come from the Pesquisa de Informações Básicas Municipais MUNIC (2011)(IBGE).
- 2012 election data.

# **Empirical Strategy**

- Few differences in the characteristics of places audited for a first time versus those that had been audited previously
   Means and Differences
- I estimate the following model

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

- $Transparency_{mst}$  is the outcome variable in municipality m in state s
- *Audited<sub>mst</sub>* is a binary variable
- $\nu_s$  represents state fixed effects.
- The vector *Controls<sub>mst</sub>* consists of a set of municipal and mayor characteristics

### Results I: 1st Edition

Table: The Effects of the Audits on Commitment to Transparency

Dependent variable	=1 if published ways to get public information			
	OLS	OLS	Probit	
	(1)	(2)	(3)	
Audited in the past	0.139*	0.140*	0.499*	
	[0.061]	[0.064]	[0.224]	
Observations	465	430	361	
R-sq	0.316	0.382		
Edition	1	1	1	
Municipality Controls	No	Yes	Yes	
Mayor Controls	No	Yes	Yes	
<b>Election Controls</b>	No	Yes	Yes	
State fixed effects	Yes	Yes	Yes	

Notes: The dependent variable is a binary variable equal to 1 if the municipality shows how to ask for public information on its website. Robust standard errors are reported in brackets. + : p < 0.10, \* : p < 0.05

### Results II: Each Group at Each Edition

Table: The Effects of the Audits on Commitment to Transparency for each Round and Group

Dependent variable	=1 if published ways to get public information						
	Edition 2,	Edition 3,	Edition 2,	Edition 3,	Edition 3,		
	Group 1	Group 1	Group 2	Group 2	Group 3		
	OLS	OLS	OLS	OLS	OLS		
	(1)	(2)	(3)	(4)	(5)		
Audited in the past	0.007	-0.067	0.047	-0.009	0.016		
	[0.065]	[0.065]	[0.039]	[0.036]	[0.047]		
Observations	430	430	978	977	675		
R-sq	0.385	0.296	0.323	0.185	0.186		
Municipality Controls	Yes	Yes	Yes	Yes	Yes		
Mayor Controls	Yes	Yes	Yes	Yes	Yes		
<b>Election Controls</b>	Yes	Yes	Yes	Yes	Yes		
State fixed effects	Yes	Yes	Yes	Yes	Yes		

Notes: The dependent variable is a binary variable equal to 1 if the municipality shows how to ask for public information on its website. Robust standard errors are reported in brackets. + : p < 0.10, \* : p < 0.05

### **Robustness Checks**

- No results on holding databases on Health and Municipality Workers Results
- Results robust to geographical spillovers of the audits → Results
- Switching municipalities are balanced Results

# After 1st Edition (preliminary)

- Is EBT having any effect for rounds 2 and 3? Preliminary results: No. ▶ Result

### After 1st Edition (preliminary)

- Is EBT having any effect for rounds 2 and 3? Preliminary results: No. ▶ Results
- Are there any effects of audits and EBT on the number of questions answered?

### Final Remarks I

#### **Implications:**

- External monitoring that "opens" the local government to other branches is helpful to make the government disclose information voluntarily.

### Final Remarks I

#### **Implications:**

- External monitoring that "opens" the local government to other branches is helpful to make the government disclose information voluntarily.
- First result consistent with previous literature about the effects of monitoring on multiple outcomes of government activities.

### Final Remarks I

#### **Implications:**

- External monitoring that "opens" the local government to other branches is helpful to make the government disclose information voluntarily.
- First result consistent with previous literature about the effects of monitoring on multiple outcomes of government activities.
- The effects of audits disappear after that first edition.

## Final Remarks II

#### Next:

- Which are the mechanisms at work?

#### Final Remarks II

#### **Next:**

- Which are the mechanisms at work?
- Are the publication of the rankings and grades' effects substituting the effects of audits?

#### Final Remarks II

#### **Next:**

- Which are the mechanisms at work?
- Are the publication of the rankings and grades' effects substituting the effects of audits?
- Could audits and rankings have an effect on other outcomes for later rounds?

# 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.
- Berliner, D., & Erlich, A. (2015). Competing for transparency: political competition and institutional reform in mexican states. *American Political Science Review*, 110–128.
- Colonnelli, E., & Prem, M. (2020). Corruption and firms. Available at SSRN 2931602.
- Gavazza, A., & Lizzeri, A. (2007). The perils of transparency in bureaucracies. *American Economic Review*, 97(2), 300–305.
- 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)
- Michener, G., & Nichter, S. (2020). Variáveis determinantes para cumprimento à lei de acesso à informação nos municípios brasileiros.

#### References II

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

## Measuring Transparency: Consequences



APPM: falta de internet e material humano são dificuldades das cidades. CGU disponibiliza software e assessoria técnica para todos os municípios.

Transparency: 95% of the analyzed cities in Piauí had a 0 grade

## Measuring Transparency: Consequences



Transparency: 95% of the analyzed cities in Piauí had a 0 grade

SP leads for the third time in the CGU's FRT



#### **Balance**

Table: Mean Comparisons between Audited and Non-Audited Municipalities

	Not Audi	ted	Audited		ĺ	
Municipality Characteristics	Mean	S.D.	Mean	S.D.	Difference	S.D.
Population (log)	9.373	1.087	9.429	1.080	0.000	.031
% Urban	0.637	0.220	0.625	0.213	0.000	.0011
% Illiterate	85.396	8.872	83.746	9.109	0.000	0.28
HDI	0.660	0.071	0.646	0.072	0.000	0.0016
Gini	0.501	0.066	0.509	0.063	0.000	0.00051
Income (log)	9.190	0.697	9.046	0.666	0.000	0.040
AM Radio	0.209	0.406	0.196	0.397	0.000	.027
% Female	0.495	0.016	0.495	0.015	0.000	.00091
% Poverty	0.229	0.178	0.263	0.182	0.000	0.00014
% w/ College	0.055	0.031	0.051	0.029	0.000	.00089
% Bureacrats w/ College	0.307	0.114	0.297	0.112	0.000	.0077
North Region	0.076	0.266	0.105	0.307		
Northeast Region	0.313	0.464	0.397	0.490		
Central-West Region	0.083	0.276	0.087	0.282		
Southeast region	0.305	0.460	0.254	0.435		
South	0.223	0.416	0.157	0.364		

Notes: This table shows the means and standard deviations of different variables for municipalities audited in the past (Audited) and municipalities not audited in the past (Not Audited). The difference and corresponding standard error are computed based on a regression that controls for both state and transparency evaluation round fixed effects.

17/17

## **Balance: Mayor**

Table: Mean Comparisons between Audited and Non-Audited Municipalities

	Not Audited		Audited	Audited		
Mayor's Characteristics	Mean	S.D.	Mean	S.D.	Difference	S.D.
=1 Female Mayor	0.116	0.320	0.131	0.338	-0.000758	0.020
Mayor's age	48.269	17.161	47.825	10.184	-0.155	0.589
=1 Mayor w/ College	0.547	0.498	0.555	0.497	0.00275	0.030
=1 PT (Mayor's party)	0.116	0.320	0.102	0.303	0.0189	0.020
=1 PSDB (Mayor's party)	0.128	0.334	0.112	0.315	-0.00597	0.018
=1 DEM (Mayor's party)	0.050	0.219	0.048	0.215	-0.00214	0.012
=1 PMDB (Mayor's party)	0.182	0.386	0.190	0.392	-0.00286	0.022
=1 Same party as Governor	0.183	0.387	0.179	0.383	-0.0327	0.022

Notes: This table shows the means and standard deviations of different variables for municipalities audited in the past (Audited) and municipalities not audited in the past (Not Audited). The difference and corresponding standard error are computed based on a regression that controls for both state and transparency evaluation round fixed effects.

#### **Balance: Electoral**

Table: Mean Comparisons between Audited and Non-Audited Municipalities

	Not Audited		Audited			
<b>Electoral Results</b>	Mean	S.D.	Mean	S.D.	Difference	S.D.
Number of Candidates (mayor)	2.718	1.080	2.773	1.087	0.0551	0.063
% of Council in Party's mayor	0.215	0.147	0.218	0.147	0.00380	0.008
% Vote Mayor	0.555	0.127	0.557	0.126	0.00273	0.007
% Vote Margin Mayor	0.156	0.178	0.164	0.184	0.00588	0.011
Number of Parties in Council	3.557	1.544	3.603	1.676	-0.0817	0.093
Votes per Legislator	0.184	0.138	0.179	0.137	-0.00146	0.007

Notes: This table shows the means and standard deviations of different variables for municipalities audited in the past (Audited) and municipalities not audited in the past (Not Audited). The difference and corresponding standard error are computed based on a regression that controls for both state and transparency evaluation round fixed effects.

<sup>▶</sup> Back

#### Balance: 1st Edition

	Not Aud	1									
Municipality Characteristics	Mean	S.D.	Mean	S.D.	Difference	S.D.					
Population (log)	9.052	0.814	9.278	0.790	0.188+	0.099					
% Urban	0.613	0.209	0.604	0.217	-0.00451	0.027					
% Illiterate	84.467	8.988	83.720	8.563	-0.196	0.555					
HDI	0.652	0.069	0.649	0.071	0.00238	0.005					
Gini	0.492	0.067	0.499	0.055	0.00122	0.006					
Income (log)	9.149	0.669	9.097	0.719	0.000424	0.071					
AM Radio	0.124	0.330	0.182	0.389	0.0850+	0.052					
% Female	0.493	0.015	0.493	0.015	0.00247	0.002					
% Poverty	0.235	0.180	0.244	0.180	-0.00500	0.013					
% w/ College	0.050	0.024	0.050	0.022	0.00269	0.002					
% Bureacrats w/ College	0.301	0.105	0.283	0.122	-0.00149	0.016					
North Region	0.081	0.274	0.109	0.315							
Northeast Region	0.318	0.466	0.327	0.474							
Central-West Region	0.076	0.266	0.145	0.356							
Southeast region	0.291	0.455	0.291	0.458							
South	0.234	0.424	0.127	0.336							
Mayor's Characteristics	Mean	S.D.	Mean	S.D.	Difference	S.D.					
=1 Female Mayor	0.116	0.321	0.109	0.315	-0.0111	0.046					
Mayor's age	47.595	10.663	48.673	9.017	1.019	1.350					
=1 Mayor w/ College	0.505	0.501	0.455	0.503	-0.0371	0.074					
=1 PT (Mayor's party)	0.105	0.307	0.127	0.336	0.0375	0.049					
=1 PSDB (Mayor's party)	0.100	0.300	0.055	0.229	-0.0375	0.035					
=1 DEM (Mayor's party)	0.063	0.244	0.091	0.290	0.0306	0.041					
=1 PMDB (Mayor's party)	0.183	0.387	0.273	0.449	0.0976	0.063					
=1 Same party as Governor	0.156	0.363	0.127	0.336	-0.0334	0.049					
Electoral Results	Mean	S.D.	Mean	S.D.	Difference	S.D.					
Number of Candidates (mayor)	2.520	0.879	2.673	0.840	0.166	0.116					
% of Council in Party's mayor	0.225	0.154	0.199	0.117	-0.0183	0.019					
% Vote Mayor	0.563	0.134	0.585	0.141	0.0194	0.020					
% Vote Margin Mayor	0.157	0.184	0.196	0.234	0.0302	0.033					
Number of Parties in Council	3.327	1.404	3.491	1.328	0.0355	0.197					
Votes per Legislator	0.211	0.140	0.181	0.132	-0.0241	0.019					
Number of Observations	410		55								
Standard errors in brackets. + p	0.10 * p;0	.05									
Standard errors in brackets. + p <sub>i</sub> 0.10 * p <sub>i</sub> 0.05											

## Balance: 2nd Edition

9.515 0.632 84.492 0.652 0.515 9.157 0.211 0.494 0.256 0.054 0.306 0.153 0.353	S.D. 1.124 0.221 9.103 0.072 0.068 0.695 0.408 0.016 0.183 0.032 0.115 0.361	9.665 0.615 81.555 0.629 0.524 8.932 0.211 0.496 0.309 0.048 0.303	S.D. 1.122 0.216 9.381 0.066 0.059 0.597 0.409 0.014 0.174 0.026 0.114	0.0394 0.00599 -0.317 -0.00225 -0.00289 -0.0628+ 0.0138 0.00101 0.000695 0.000280	S.D. 0.08 0.01 0.41 0.00 0.00 0.03 0.03 0.00 0.00 0.00 0.00
0.632 84.492 0.652 0.515 9.157 0.211 0.494 0.256 0.054 0.306 0.153	0.221 9.103 0.072 0.068 0.695 0.408 0.016 0.183 0.032 0.115	0.615 81.555 0.629 0.524 8.932 0.211 0.496 0.309 0.048 0.303	0.216 9.381 0.066 0.059 0.597 0.409 0.014 0.174 0.026	0.00599 -0.317 -0.00225 -0.00289 -0.0628+ 0.0138 0.00101 0.000695 0.000280	0.016 0.416 0.003 0.004 0.033 0.036 0.006
84.492 0.652 0.515 9.157 0.211 0.494 0.256 0.054 0.306 0.153	9.103 0.072 0.068 0.695 0.408 0.016 0.183 0.032 0.115	81.555 0.629 0.524 8.932 0.211 0.496 0.309 0.048 0.303	9.381 0.066 0.059 0.597 0.409 0.014 0.174 0.026	-0.317 -0.00225 -0.00289 -0.0628+ 0.0138 0.00101 0.000695 0.000280	0.41e 0.00: 0.00: 0.03: 0.03: 0.00:
0.652 0.515 9.157 0.211 0.494 0.256 0.054 0.306 0.153	0.072 0.068 0.695 0.408 0.016 0.183 0.032 0.115	0.629 0.524 8.932 0.211 0.496 0.309 0.048 0.303	0.066 0.059 0.597 0.409 0.014 0.174 0.026	-0.00225 -0.00289 -0.0628+ 0.0138 0.00101 0.000695 0.000280	0.000 0.000 0.030 0.000 0.000
0.515 9.157 0.211 0.494 0.256 0.054 0.306 0.153	0.068 0.695 0.408 0.016 0.183 0.032 0.115	0.524 8.932 0.211 0.496 0.309 0.048 0.303	0.059 0.597 0.409 0.014 0.174 0.026	-0.00289 -0.0628+ 0.0138 0.00101 0.000695 0.000280	0.004 0.033 0.034 0.005
9.157 0.211 0.494 0.256 0.054 0.306 0.153	0.695 0.408 0.016 0.183 0.032 0.115	8.932 0.211 0.496 0.309 0.048 0.303	0.597 0.409 0.014 0.174 0.026	-0.0628+ 0.0138 0.00101 0.000695 0.000280	0.03 0.03 0.00 0.00
0.211 0.494 0.256 0.054 0.306 0.153	0.408 0.016 0.183 0.032 0.115	0.211 0.496 0.309 0.048 0.303	0.409 0.014 0.174 0.026	0.0138 0.00101 0.000695 0.000280	0.03 0.00 0.00
0.494 0.256 0.054 0.306 0.153	0.016 0.183 0.032 0.115	0.496 0.309 0.048 0.303	0.014 0.174 0.026	0.00101 0.000695 0.000280	0.00
0.256 0.054 0.306 0.153	0.183 0.032 0.115	0.309 0.048 0.303	0.174 0.026	0.000695 0.000280	0.00
0.054 0.306 0.153	0.032 0.115	0.048	0.026	0.000280	
0.306 0.153	0.115	0.303			0.00
0.153			0.114		
	0.361			0.0115	0.00
0.353		0.163	0.370		
	0.478	0.512	0.501		
0.111	0.314	0.122	0.328		
0.207					
0.176	0.381	0.081	0.274		
Mean	S.D.	Mean	S.D.	Difference	S.D.
0.107	0.309	0.157	0.365	0.0385	0.03
					0.85
0.536	0.499	0.552	0.499	0.0138	0.04
0.123	0.329	0.126	0.332	0.00423	0.02
0.114	0.318	0.120	0.326	0.00944	0.02
0.035	0.184	0.011	0.107	-0.0207+	0.01
0.193	0.395	0.183	0.388	-0.000422	0.03
0.196	0.397	0.177	0.383	-0.0172	0.03
Mean	S.D.	Mean	S.D.	Difference	S.D
2.842	1.199	2.920	1.215	0.0568	0.09
0.208	0.152	0.202	0.142	0.00178	0.01
0.557	0.133	0.543	0.115	-0.0121	0.01
0.163	0.188	0.154	0.168	-0.0104	0.01
3.719	1.669	3.803	1.837	-0.0790	0.14
0.171	0.137	0.152	0.114	-0.00257	0.00
910		175			
	0.207 0.176 Mean 0.107 47.967 0.536 0.123 0.114 0.035 0.196 Mean 2.842 0.208 0.557 0.163 3.719 0.171 910	0.207 0.405 0.176 0.381 0.107 0.309 47.967 10.075 0.536 0.499 0.123 0.329 0.114 0.318 0.035 0.184 0.193 0.397 Mean S.D. 0.193 0.397 Mean S.D. 0.193 0.397 0.193 0.397 0.193 0.397 0.193 0.397 0.193 0.397 0.193 0.397 0.193 0.397 0.193 0.397 0.193 0.397 0.193 0.397 0.193 0.397 0.194 0.397 0.195 0.397 0.196 0.397 0.197 0.397 0.	0.207         0.405         0.122           1.176         0.381         0.081           Mean         S.D.         Mean           0.107         0.309         0.157           47.967         10075         47.070           0.556         0.499         0.552           0.112         0.329         0.126           0.114         0.318         0.120           0.139         0.187         0.187           0.140         0.397         0.177           Mean         S.D.         Mean           0.244         1.192         0.202           0.250         0.152         0.202           0.250         0.152         0.202           0.152         0.203         0.543           0.153         0.543         0.543           0.163         0.188         0.154           0.174         0.137         0.152           0.179         0.137         0.152           0.171         0.137         0.152	0.207         0.405         0.122         0.228           Mean         S.D.         Mean         S.D.           J. O.007         0.157         0.365         0.157         0.367           4.7967         10.075         4.707         0.107         0.368           0.47967         10.075         4.707         0.107         0.328           0.123         0.329         0.126         0.329         0.126         0.328           0.114         0.101         0.027         0.177         0.383           Mean         S.D.         Mean         S.D.           242         1.199         2.920         1.215           0.284         1.192         2.920         1.215           0.284         1.192         0.292         0.121           0.284         0.152         0.202         0.142           0.557         0.133         0.543         0.115           0.152         0.123         0.343         0.143           0.153         0.543         0.115         0.143           0.154         0.163         0.543         0.115           0.153         0.543         0.115         0.143	0.207         0.405         0.122         0.328           J.176         0.381         0.081         0.274           Mean         S.D.         Mean         S.D.         Difference           0.107         0.309         0.157         0.365         0.0385           47967         10075         47070         101144         -0.075           0.536         0.499         0.552         0.499         0.0138           0.112         0.329         0.126         0.332         0.00423           0.114         0.318         0.120         0.328         -0.00744           0.139         0.139         0.139         0.038         -0.0172           0.140         0.397         0.177         0.383         -0.0172           0.140         0.397         0.177         0.383         -0.0172           0.150         0.397         0.177         0.383         -0.0172           0.2442         1.199         2.920         1.215         0.0568           0.257         0.133         0.543         0.115         0.00178           0.557         0.133         0.543         0.115         -0.0124           0.152         0.202

## Balance: 3rd Edition

	Not Audit	Not Audited Audited				
Municipality Characteristics	Mean	S.D.	Mean S.D		D. Difference	
Population (log)	9.452	1.080	9.515	1.054	-0.0422	0.102
% Urban	0.629	0.211	0.621	0.222	0.00774	0.020
% Illiterate	84.085	9.187	82.981	9.153	0.0454	0.542
HDI	0.650	0.071	0.637	0.076	-0.000767	0.004
Gini	0.512	0.064	0.526	0.075	0.000241	0.006
Income (log)	9.114	0.679	9.015	0.712	-0.0285	0.04
AM Radio	0.220	0.415	0.240	0.429	0.0372	0.04
% Female	0.495	0.014	0.495	0.015	0.000511	0.00
% Poverty	0.259	0.181	0.290	0.192	-0.00248	0.00
% w/ College	0.053	0.029	0.051	0.030	0.00240	0.003
% Bureacrats w/ College	0.303	0.120	0.298	0.126	0.0117	0.013
North Region	0.116	0.320	0.157	0.365		
Northeast Region	0.379	0.485	0.422	0.496		
Central-West Region	0.109	0.312	0.088	0.285		
Southeast region	0.200	0.400	0.186	0.391		
South	0.197	0.398	0.147	0.356		
Mayor's Characteristics	Mean	S.D.	Mean	S.D.	Difference	S.D.
=1 Female Mayor	0.122	0.328	0.069	0.254	-0.0653*	0.03
Mayor's age	47.479	9.679	47.118	9.627	-0.137	1.06
=1 Mayor w/ College	0.561	0.497	0.549	0.500	-0.00646	0.05
=1 PT (Mayor's party)	0.116	0.321	0.154	0.363	0.0281	0.03
=1 PSDB (Mayor's party)	0.113	0.317	0.096	0.296	-0.00550	0.034
=1 DEM (Mayor's party)	0.052	0.222	0.058	0.234	0.0147	0.02
=1 PMDB (Mayor's party)	0.184	0.388	0.115	0.321	-0.0589	0.034
=1 Same party as Governor	0.176	0.381	0.144	0.353	-0.0452	0.04
Electoral Results	Mean	S.D.	Mean	S.D.	Difference	S.D.
Number of Candidates (mayor)	2.752	1.086	2.885	1.082	0.0367	0.11
% of Council in Party's mayor	0.208	0.141	0.221	0.139	0.0192	0.014
% Vote Mayor	0.546	0.123	0.557	0.141	0.0156	0.01
% Vote Margin Mayor	0.149	0.175	0.166	0.191	0.0145	0.02
Number of Parties in Council	3.624	1.574	3.548	1.375	-0.0959	0.14
Votes per Legislator	0.174	0.135	0.169	0.131	0.0111	0.013
	636,000	0.000	104.000	0.000		
Number of Observations	030.000	0.000	104.000	0.000		

## Robustness Check: Switching Municipalities Balance

Table: Effect of Audits on Switching from Transparent to Not-Transparent

Dependent variable	=1 switche	if they ed
	Edition 1	Edition 2
	OLS	OLS
	(1)	(2)
Audited in the past	0.067 [0.085]	0.052 [0.034]
Observations R-sq	155 0.489	715 0.121
State fixed effects	Yes	Yes

Notes: The dependent variable is a binary variable equal to 1 if the municipality shows how to ask for public information on its website at a specific time, but after that measurement, changes that. +:p<0.10,\*:p<0.05

# Robustness Check: Switching Municipalities Driving the Results

Table: The Effects of the Audits on Commitment to Transparency without Switching Municipalities

Dependent variable	ways	f published to get public nation
	Edition 1, Group 1	Edition 2, Group 1
	OLS	OLS
Audited in the past	0.112+ [0.066]	0.027 [0.067]
Observations R-sq	402 0.432	411 0.406
Municipality Controls Mayor Controls Election Controls State fixed effects	Yes Yes Yes Yes	Yes Yes Yes

Notes: The dependent variable is a binary variable equal to 1 if the municipality shows how to ask for public information on its website. Municipalities that show to be transparent and one round and change to not transparent on a subsequent one are excluded from the sample. +: p < 0.10, \*: p < 0.05

## Robustness Check: Geographical Spillovers

Table: Spillover Effects of neighbouring audits on Commitment to Transparency

Dependent variable	=1 if published ways to get public information							
	Edition 1,	Edition 2,	Edition 3,	Edition 2,	Edition 3,	Edition 3,		
	Group 1	Group 1	Group 1	Group 2	Group 2	Group 3		
	(1)	(2)	(3)	(4)	(5)	(6)		
Audited in the past	0.153*	0.018	-0.062	0.043	-0.004	0.015		
	[0.067]	[0.068]	[0.067]	[0.039]	[0.036]	[0.047]		
Neighbors Audited	0.024	0.025	0.016	-0.000	0.003	0.012		
	[0.025]	[0.027]	[0.027]	[0.017]	[0.016]	[0.020]		
Observations	430	430	430	978	977	675		
R-sq	0.391	0.405	0.302	0.332	0.192	0.199		
Municipality Controls	Yes	Yes	Yes	Yes	Yes	Yes		
Mayor Controls	Yes	Yes	Yes	Yes	Yes	Yes		
Election Controls	Yes	Yes	Yes	Yes	Yes	Yes		
State fixed effects	Yes	Yes	Yes	Yes	Yes	Yes		

Notes: The dependent variable is a binary variable equal to 1 if the municipality shows how to ask for public information on its website. In cols. 2 and 3, I control for indicator variables for the total number of neighbors. + : p < 0.10, \* : p < 0.05

▶ Back 17/17

# The effects on holding Databases

Table: The Effects of audits on holding Databases

Dependent Variable	Health	Workers			
	(1)	(2)	(3)	(4)	
Audited in the Past	-0.053 [0.077]	0.031 [0.026]	-0.085 [0.061]	-0.014 [0.022]	
Observations R-sq	415 0.197	2027 0.074	415 0.237	2027 0.083	
Editions Municipality Controls	1 Yes	1, 2, 3 Yes	1 Yes	1, 2, 3 Yes	
Municipality Controls  Mayor Controls	Yes	Yes	Yes	Yes	
Election Controls	Yes	Yes	Yes	Yes	
State fixed effects	Yes	Yes	Yes	Yes	
Round Fixed Effects		Yes		Yes	

# Balance on EBT: Municipal Characteristics

	Not E by EBT	valuated	Evaluat EBT	ed by		
Municipality Characteristics	Mean	S.D.	Mean	S.D.	Difference	S.D.
Population (log)	9.35	1.10	9.42	1.07	-0.0134	0.013
% Urban	0.64	0.22	0.63	0.22	0.00574	.0057
% Illiterate	85.96	8.68	84.07	9.14	0.0417	.041
HDI	0.66	0.07	0.65	0.07	0.000641	.00064
Gini	0.50	0.06	0.51	0.07	-0.00215	0.0021
Income (log)	9.21	0.70	9.12	0.68	-0.000671	0.00067
AM Radio	0.21	0.41	0.20	0.40	-0.00781	0.0078
% Female	0.50	0.02	0.49	0.02	-0.0000544	0.000054
% Poverty	0.22	0.17	0.26	0.18	-0.00349	0.0034
% w/ College	0.06	0.03	0.05	0.03	-0.0000281	0.000028
% Bureacrats w/ College	0.31	0.11	0.30	0.12	-0.000529	0.00052
North Region	0.05	0.21	0.13	0.34	0	
Northeast Region	0.29	0.45	0.37	0.48	0	
Central-West Region	0.07	0.25	0.11	0.31	0	
Southeast region	0.36	0.48	0.21	0.41	0	
South	0.24	0.42	0.18	0.39	0	

# Balance on EBT: Mayor Characteristics

	Not Evaluated by EBT		Evaluat	ed by EBT		
Mayor's Characteristics	Mean	S.D.	Mean	S.D.	Difference	S.D.
=1 Female Mayor	0.12	0.32	0.11	0.32	-0.0178+	0.0178
Mayor's age	48.59	19.69	47.67	10.03	-0.276	0.27
=1 Mayor w/ College	0.56	0.50	0.54	0.50	-0.0155	0.015
=1 PT (Mayor's party)	0.11	0.31	0.12	0.32	0.0222*	.0222
=1 PSDB (Mayor's party)	0.14	0.34	0.11	0.31	-0.0109	0.010
=1 DEM (Mayor's party)	0.05	0.23	0.05	0.21	-0.00479	0.0047
=1 PMDB (Mayor's party)	0.18	0.39	0.19	0.39	-0.00979	0.0097
=1 Same party as Governor	0.19	0.39	0.18	0.38	-0.00660	0.0066

## Balance on EBT: Political Characteristics

Table: Mean Comparisons between EBT and Non-EBT Municipalities

	Not Ev EBT	aluated by	Evaluat	ed by EBT		
Electoral Results	Mean	S.D.	Mean	S.D.	Difference	S.D.
Number of Candidates (mayor)	2.70	1.06	2.76	1.11	0.00332	.0033
% of Council in Party's mayor	0.22	0.15	0.21	0.15	0.00303	.0030
% Vote Mayor	0.56	0.12	0.55	0.13	0.00514	.0051
% Vote Margin Mayor	0.16	0.17	0.16	0.18	0.00625	.0062
Number of Parties in Council	3.53	1.54	3.62	1.60	-0.0894*	0.0894
Votes per Legislator	0.19	0.14	0.18	0.14	-0.00110	0.0011
Observations	3229		2291		1	I

<sup>▶</sup> Back

## Results: Effects of EBT

Table: The Effects of EBT on Commitment to Transparency

Dependent Variable	=1 if published ways to get public information				
	(1)	(2)	(3)	(4)	
Ranked E1	0.002	-0.032	0.000	-0.032	
	[0.026]	[0.024]	[0.026]	[0.024]	
Ranked E2		-0.007 [0.020]		-0.007 [0.020]	
Observations	1408	2082	1408	2082	
R-sq	0.301	0.157	0.302	0.158	
Edition	1	1, 2, 3	1	1, 2, 3	
Municipality Controls	Yes	Yes	Yes	Yes	
Mayor Controls	Yes	Yes	Yes	Yes	
Election Controls	Yes	Yes	Yes	Yes	
State fixed effects	Yes	Yes	Yes	Yes	
Neighbors	No	No	Yes	Yes	

## Results: All editions pooled

Table: The Effects of the Audits on Commitment to Transparency

Dependent variable	=1 if published ways to get public information				
	OLS	OLS	Probit		
	(1)	(2)	(3)		
		0.045	0.470*		
Audited in the past	0.032	0.045+	0.178*		
	[0.026]	[0.027]	[0.090]		
Observations	2290	2083	2079		
R-sq	0.286	0.304			
Editions	1, 2 and 3	1, 2 and 3	1, 2 and 3		
Municipality Controls	No	Yes	Yes		
Mayor Controls	No	Yes	Yes		
<b>Election Controls</b>	No	Yes	Yes		
State fixed effects	Yes	Yes	Yes		
Round Fixed Effects	Yes	Yes	Yes		

Notes: The dependent variable is a binary variable equal to 1 if the municipality shows how to ask for public information on its website. Robust standard errors are reported in brackets. + : p < 0.10, \* : p < 0.05