



Street-level rule of law: Prosecutor presence and the fight against corruption

Guillermo Toral

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 - Lack of data on prosecutor behavior

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- Highlighting **prosecutors'**
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Empirical:

- **Causally identified evidence of the effects of prosecutorial presence** on anti-corruption action, on public employment, and on corruption
- Complementary insights from in-depth **interviews and surveys** of prosecutors and politicians

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- **Reduces corruption** in municipal finances
- **Does not increase underspending** of local budgets

In sum, this paper provides rare quasi-experimental evidence on the effectiveness of prosecutors in fighting corruption and draws attention to presence as a key driver of effectiveness

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 - More ability to design more locally-relevant actions
- **Politicians perceive a higher probability of detection**, which may deter malfeasance

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- **Rotation** or other designs that avoid long-term relationships and social embeddedness to develop

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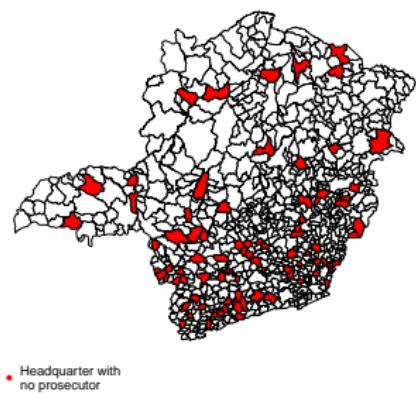
State of Minas Gerais (853 municipalities)



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District headquarters with no prosecutor (2020)

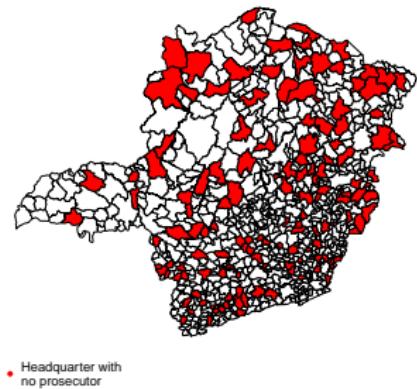


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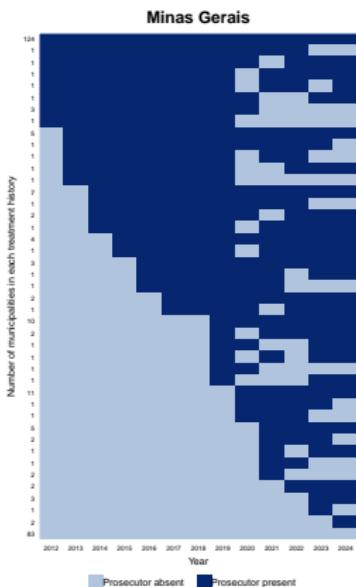
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Correio
Quase 8 mil prefeitos e ex-prefeitos são condenados
16 Jul 2024

A primeira condenação pelo ato aconteceu em 1995, segundo estudo

IMPROBIDADE: Um estudo do Movimento Pessoas à Frente identificou 7901 prefeitos e ex-prefeitos condenados por improbidade administrativa desde 1995, o que representa 33% dos 23.800 punidos com base na lei

Na sequência, 1.156 vereadores (5%) também foram enquadados judicialmente com base na legislação, "confirmando que o foco primordial desse tipo de ação é a esfera municipal", registra o levantamento feito por Fernanda Cardoso de Almeida Dias da Rocha, Vera Monteiro e Luis Pedro Pólesi de Castro.

A improbidade administrativa ocorre quando o agente público atua com intenção de praticar ilicitamente, dar prejuízo ao erário ou atentar contra os princípios da administração pública.

Secretários municipais aparecem

Empirics: Design

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- Focus on variation in presence among **municipalities that are prosecutorial district headquarters**

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- **Presence:** administrative data from the webs of 17 state prosecutor's offices

▶ details

- Treatment = 1 in municipality-years
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States with data on prosecutor presence



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- **Budget execution:** administrative data from the federal government

Results: Effects of prosecutor presence on anti-corruption action targeted at the local government

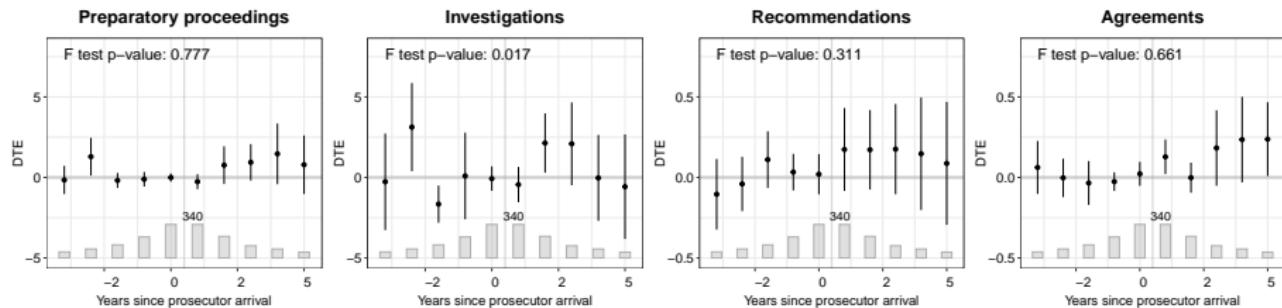
Table: Average Treatment Effect Estimates of Prosecutor Presence on Anti-Corruption Actions

	Proceedings	Investigations	Recommendations	Agreements
\widehat{ATT}	0.611** (0.211)	1.033** (0.392)	0.177** (0.065)	0.103** (0.037)
Mean outcome under control	1.604	6.383	0.312	0.150

* p<0.05; ** p<0.01; *** p<0.001. Municipality-clustered standard errors in brackets.

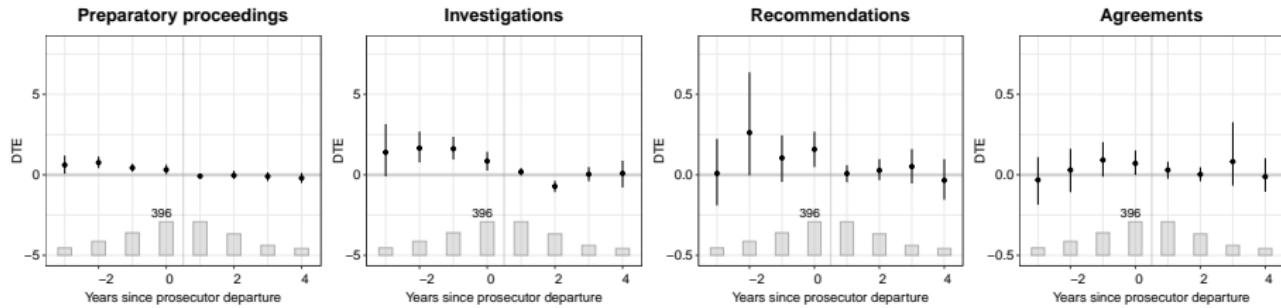
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Results: Effects of prosecutor presence on anti-corruption action targeted at the local government



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Results: Effects of prosecutor exit on anti-corruption action targeted at the local government



Results: Effects of prosecutor presence on hiring decisions by local government officials

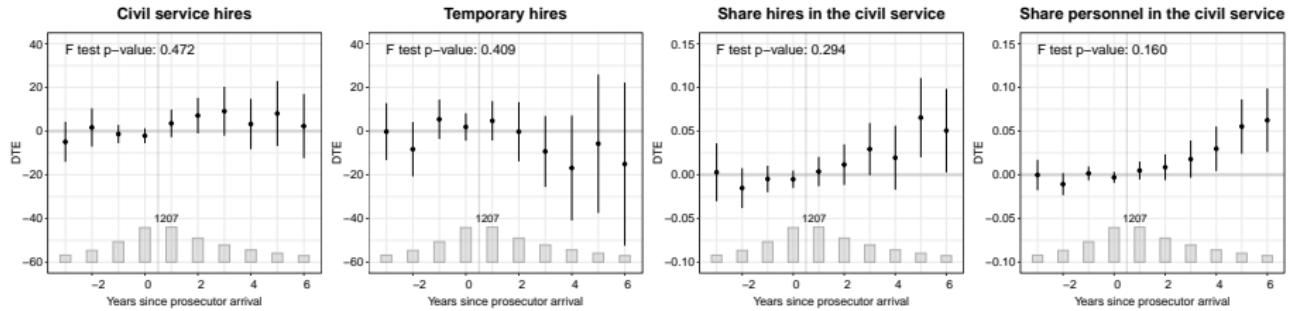
Table: Average Treatment Effect Estimates of Prosecutor Presence on the Hiring of Municipal Bureaucrats

	Civil service hires	Temporary hires	Share hires in the civil service	Share personnel in the civil service
ATT	1.934 (2.875)	-1.171 (5.879)	0.016* (0.009)	0.021** (0.007)
Mean outcome under control	59.183	135.738	0.324	0.662

* p<0.10; * p<0.05; ** p<0.01; *** p<0.001. Municipality-clustered standard errors in brackets.

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Table: Effect of Prosecutor Presence on Corruption Detected by Federal Auditors

	Count (logged)			At least 1 (median)			At least 3 (third quartile)		
Prosecutor present	-0.410** (0.155)	-0.405 (0.248)	-1.370* (0.506)	-0.105* (0.057)	-0.167 (0.110)	-0.455* (0.157)	-0.225*** (0.065)	-0.262* (0.127)	-0.455* (0.157)
Sample Number of observations	All 261	Staggered 61	Switchers 13	All 261	Staggered 61	Switchers 13	All 261	Staggered 61	Switchers 13

* p<0.10; ** p<0.05; *** p<0.01. HC2 standard errors in brackets.

Results: Null effects of prosecutor presence on underspending of municipal budgets

Table: Average Treatment Effect Estimates of Prosecutor Presence on Underspending of the Municipal Budget

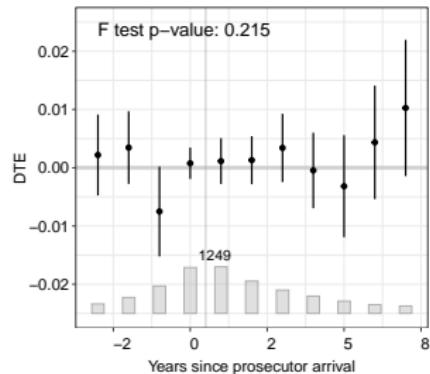
	Share unspent	Underspending above median	Underspending above third quartile
\widehat{ATT}	0.002 (0.002)	0.008 (0.014)	0.007 (0.012)
Mean outcome under control	0.069	0.497	0.249

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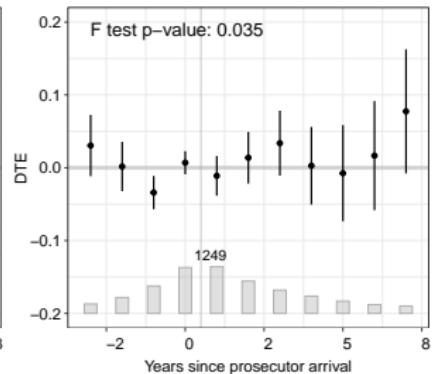
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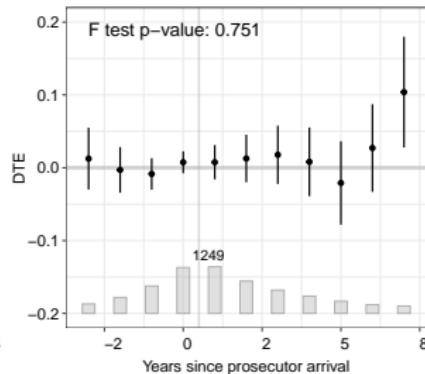
Percent of the budget unspent



Underspending above the median



Underspending above the 3Q



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Results: Correlations from my survey of local politicians are consistent with contact as a mechanism

- Online survey of local politicians (mayors and key secretaries) in 2019 in the state of Rio Grande do Norte

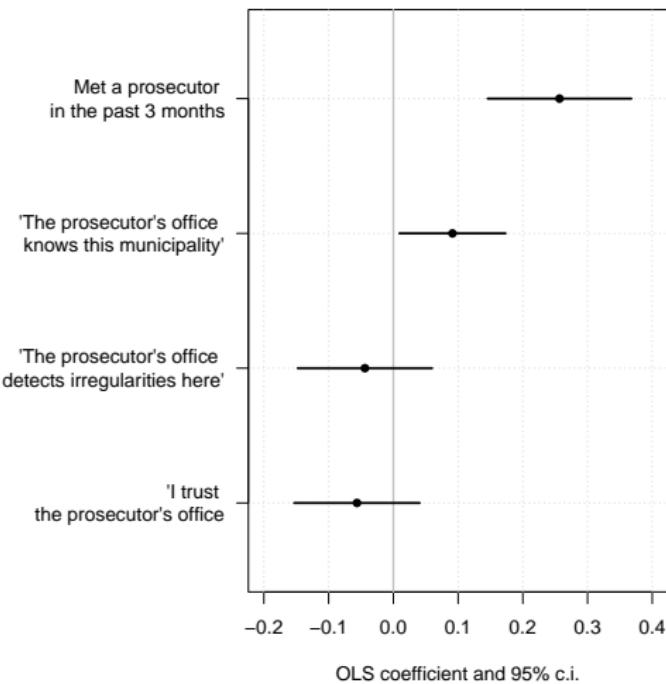
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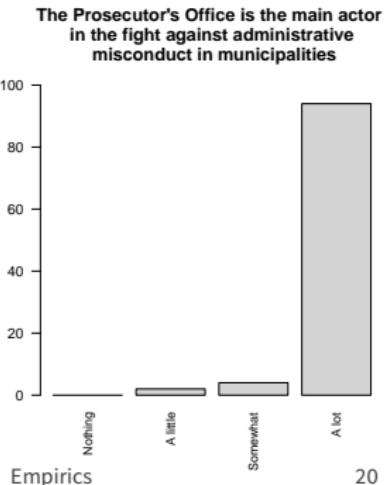
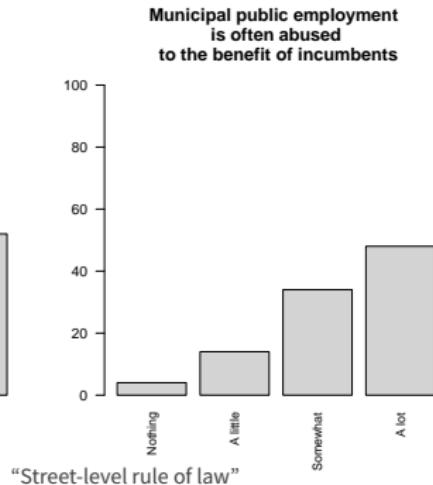
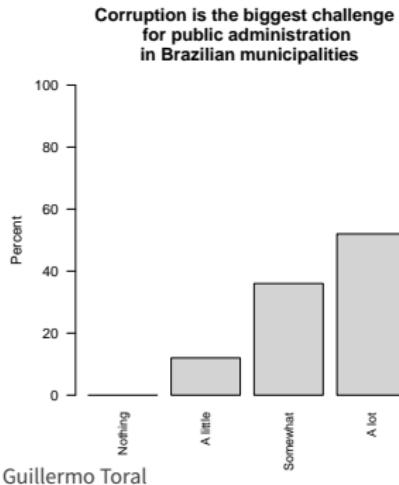
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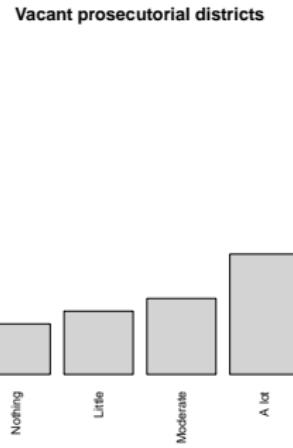
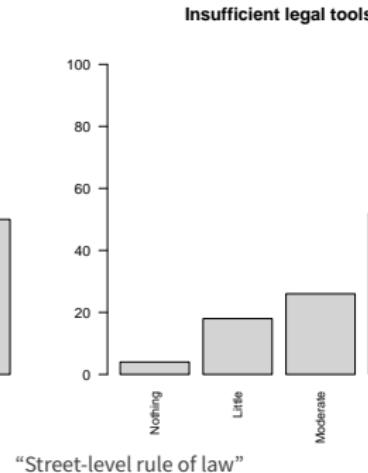
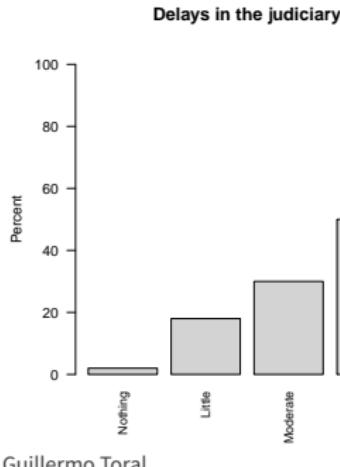
Results: Descriptives from my survey of prosecutors show prosecutors see corruption as a major problem

- Ongoing online survey of state prosecutors in the state of São Paulo. Targeted at those working on public assets. 50 respondents (~17%)
- Responses to the question “*Thinking about the reality of the municipality or municipalities where you work, how much do you agree with the following statements?*”



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- **Increases the prevalence of civil service hiring** by the local government
- **Reduces the levels of corruption** in municipal finances
- **Does not constrain the execution of the budget**

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- Effects on civil service hiring and malfeasance suggest that effective anti-corruption action **can foster local state capacity**

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- Presence in the communities they monitor is an **under-appreciated source of effectiveness** for prosecutors and potentially other accountability actors
- Internal organization in general, and physical presence in the territory in particular, may be an important **complement to the independence and capacity of rule of law institutions**
- Effects on civil service hiring and malfeasance suggest that effective anti-corruption action **can foster local state capacity**
- In contexts with high capacity and autonomy, policies at **expanding the territorial reach of anti-corruption institutions** through hiring, decentralization and rotation may be welfare enhancing

Broader project:

The bright and dark sides of empowered prosecutors

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The bright and dark sides of empowered prosecutors

Four **types of data** on Brazilian prosecutors:

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- **Administrative data on prosecutors'** deployment, actions, turnover, careers (currently scraping more state portals)
- **Text of prosecutors' recommendations and agreements** (requirements, sentiment, parties, etc.)

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Focus of **other ongoing projects**:

Broader project:

The bright and dark sides of empowered prosecutors

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- Varieties of prosecutor behavior: origins and consequences

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Broader project:

The bright and dark sides of empowered prosecutors

Focus of **other ongoing projects**:

- Varieties of prosecutor behavior: origins and consequences
- Effects of prosecutorial pressures on political selection and competition
- Undesirable consequences of prosecutorial pressures on local governments: compliance vs performance
- Police killings: Between prosecutors' oversight and dependence

Additional materials

Institutional environment

- Public employment
- Perceptions of temporary hires as political appointments

Descriptives on prosecutor's offices

- Treatment histories by state
- Descriptive statistics by state
- Number of prosecutors by state and year
- Distribution of prosecutor-month records
- Descriptive statistics by treatment group

Results with alternative specifications of the outcomes

- Effects on anti-corruption activity
- Effects on municipal employment

Placebo tests

- Effects on anti-corruption activity
- Effects on municipal employment
- Effects on budget execution

Carryover tests

- Effects on anti-corruption activity
- Effects on municipal employment
- Effects on budget execution

Results in states with staggered adoption

- Effects on municipal employment
- Effects on budget execution

Results using alternative estimators

- Effects on municipal employment
- Effects on budget execution

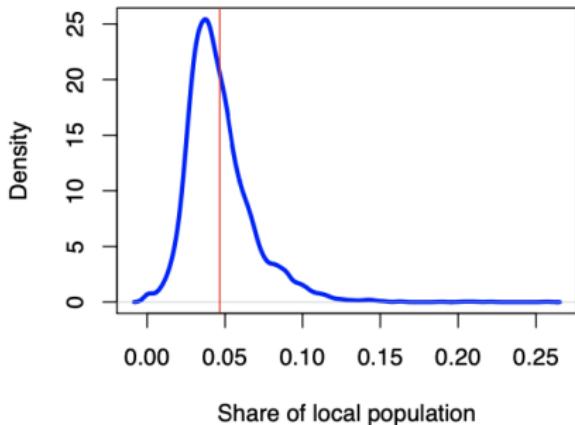
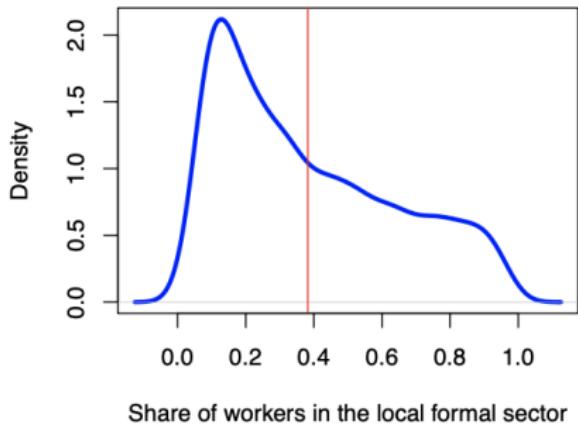
Federal anti-corruption audits

- Null effects of audits on prosecutor presence

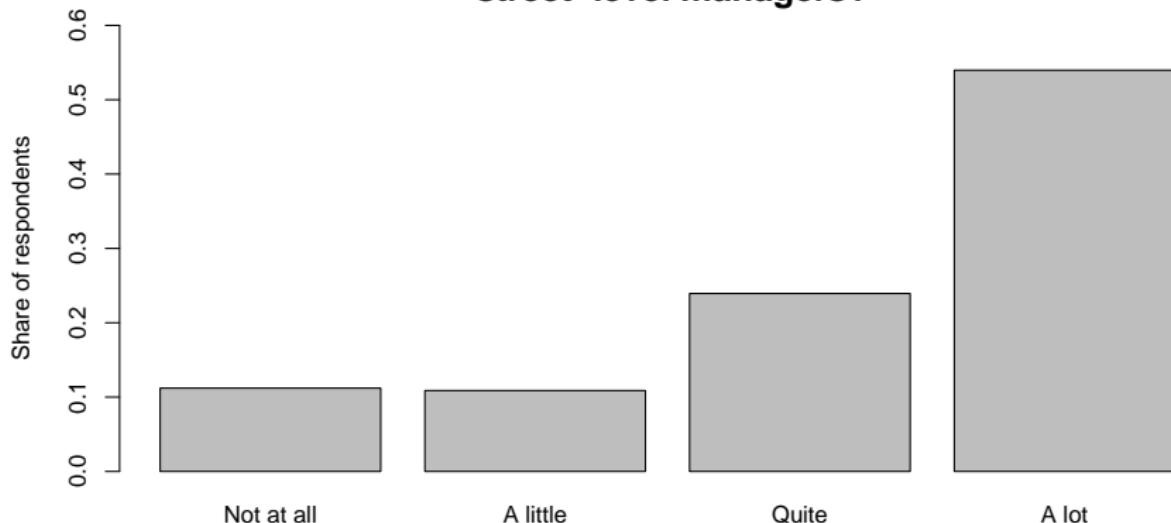
Survey of politicians

- Correlations of prosecutor presence with contact and perceptions of the prosecutor's office

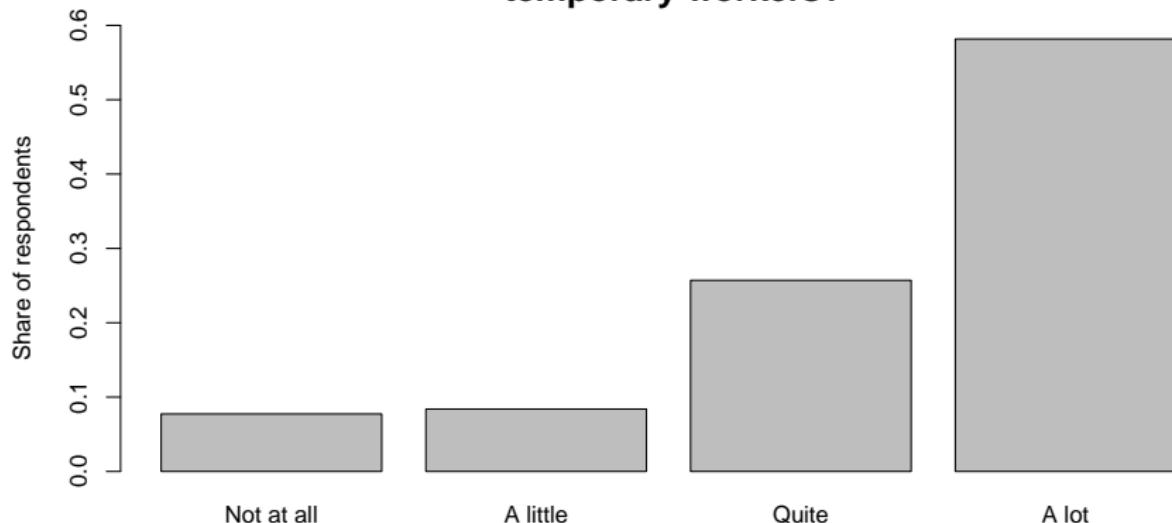
Public employment in Brazilian municipalities

[◀ back](#)[◀ appendix](#)

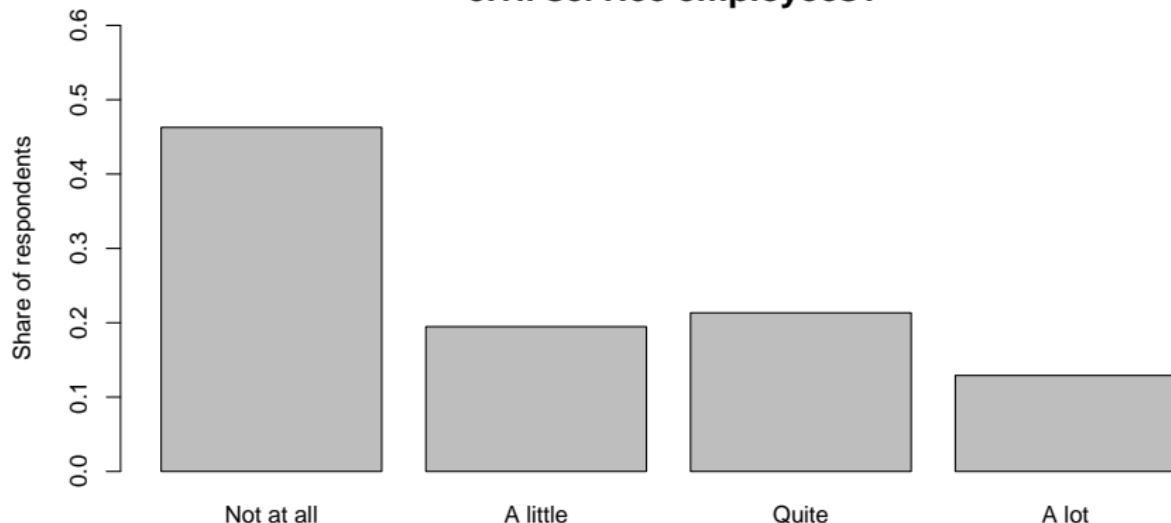
Do political connections influence the hiring of street-level managers?



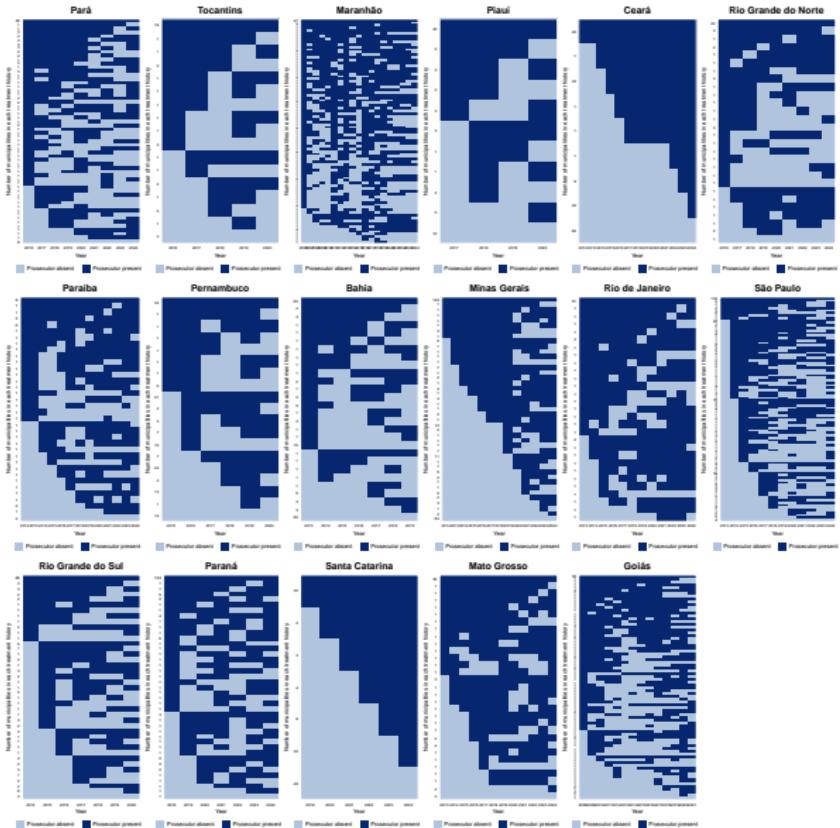
Do political connections influence the hiring of temporary workers?



Do political connections influence the hiring of civil service employees?



Treatment histories by state

[◀ back](#)[◀ appendix](#)

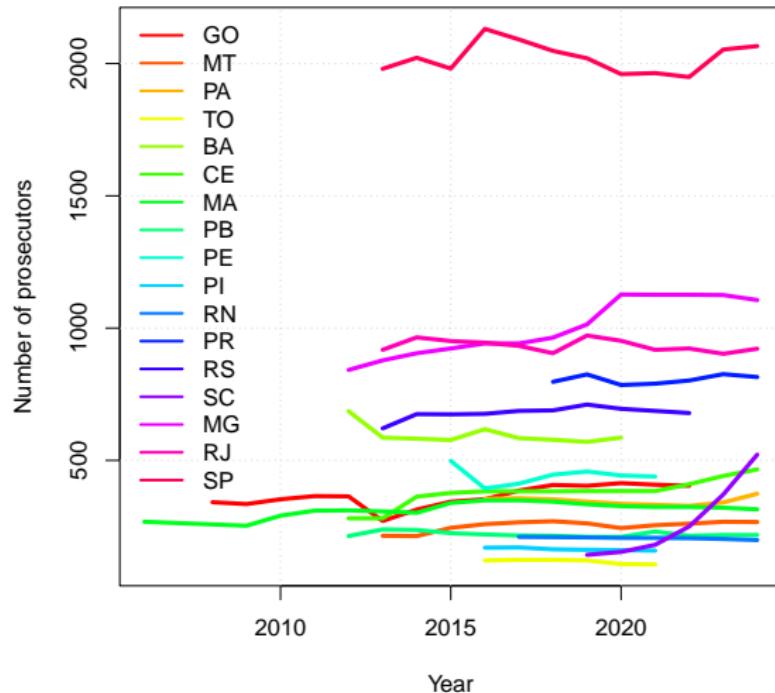
Descriptive statistics of the states in the sample

[◀ back](#)[◀ appendix](#)

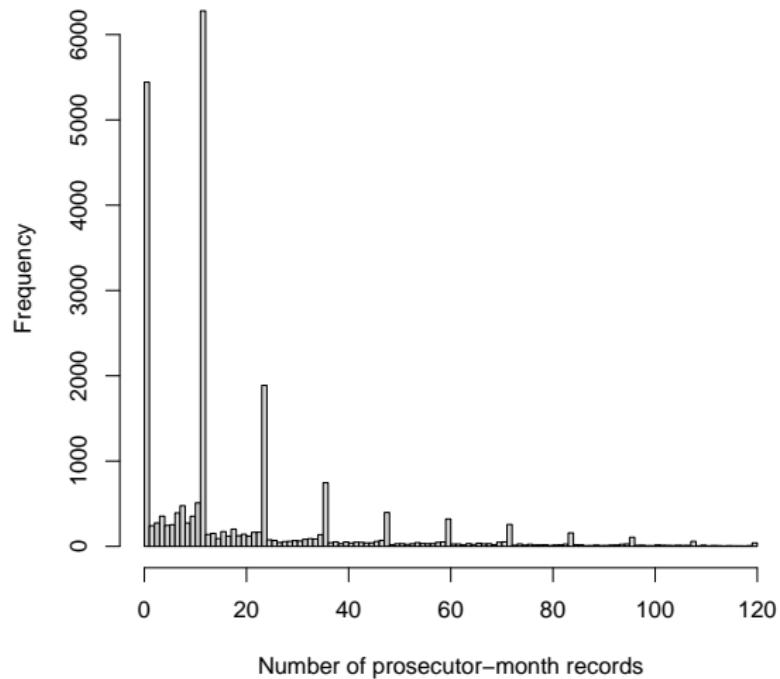
Table: Descriptive Statistics of the States Included in the Dataset

Region	State	Municipalities	Residents (millions)	Prosecutorial districts	Prosecutors	Data on activity
Northeast	Bahia (BA)	417	14.2	203	586	✓
	Piauí (PI)	224	3.3	64	161	✓
	Paraíba (PB)	223	4	51	211	
	Maranhão (MA)	217	6.8	110	327	
	Ceará (CE)	184	8.8	139	384	
	Pernambuco (PE)	184	9.1	152	443	
	Rio Grande do Norte (RN)	167	3.3	57	207	
Southeast	Minas Gerais (MG)	853	20.5	297	1127	✓
	São Paulo (SP)	645	44.4	318	1982	✓
	Rio de Janeiro (RJ)	92	16.1	81	952	
South	Rio Grande do Sul (RS)	497	10.9	164	695	✓
	Paraná (PR)	399	11.4	162	785	
	Santa Catarina (SC)	295	7.6	111	154	
Center-West	Goiás (GO)	246	7.1	127	414	
	Mato Grosso (MT)	142	3.7	76	244	
North	Pará (PA)	144	8.1	120	336	
	Tocantins (TO)	139	1.5	41	108	
Total		5068	180.8	2273	9116	

Prosecutors by state and year



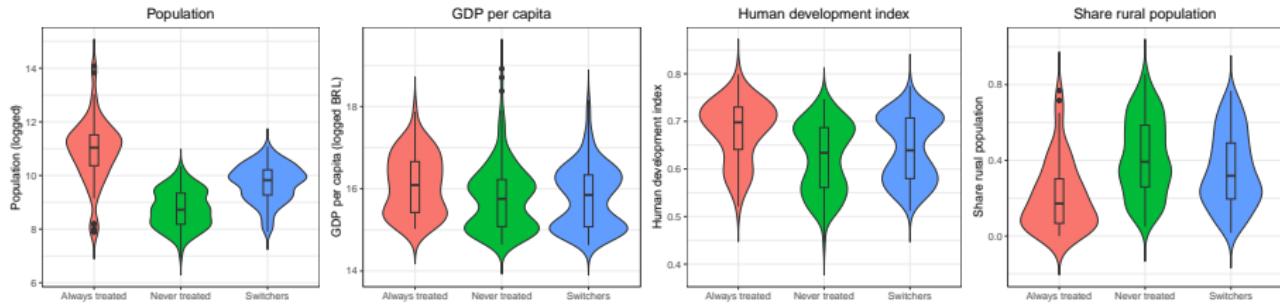
Distribution of prosecutor-month records



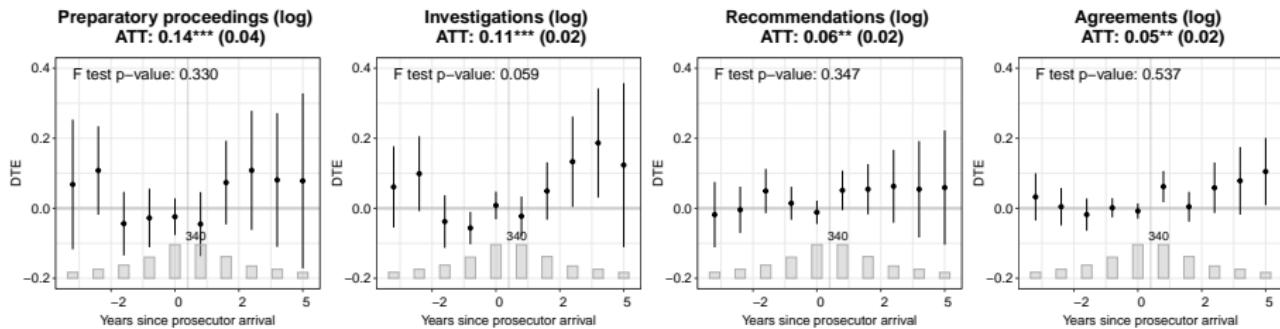
Descriptive statistics of municipalities by treatment group

[◀ back](#)

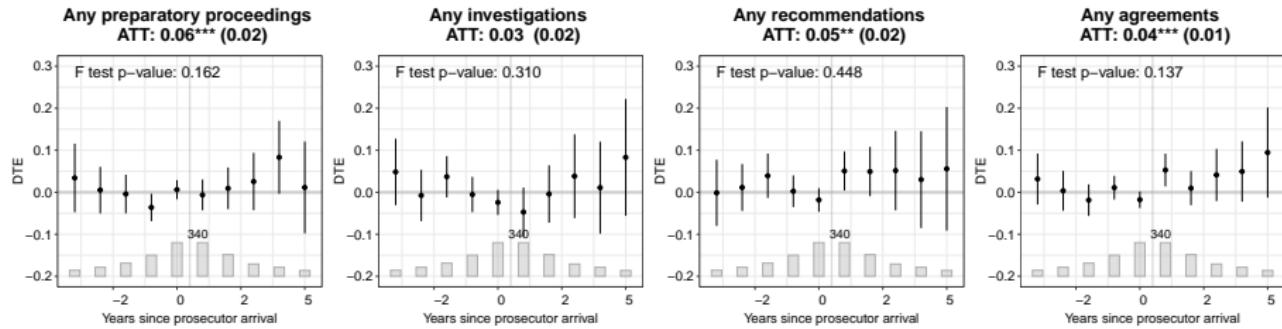
[◀ appendix](#)



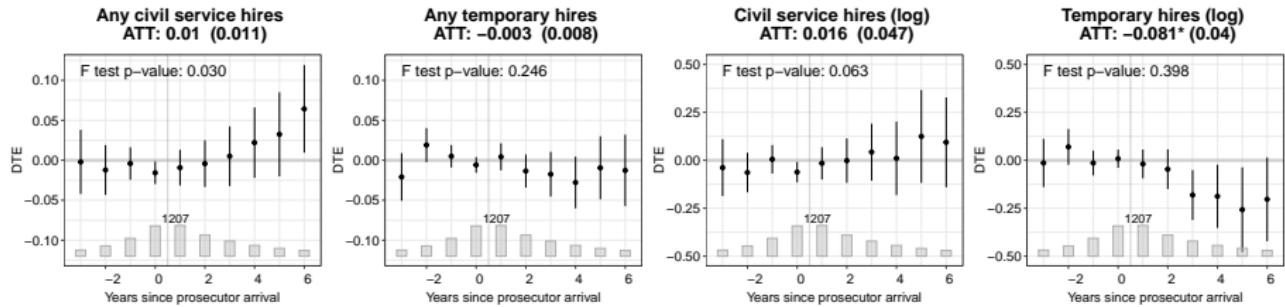
Alternative specifications: Logged measures of anti-corruption action targeted at the local government



Alternative specifications: Binary measures of anti-corruption action targeted at the local government

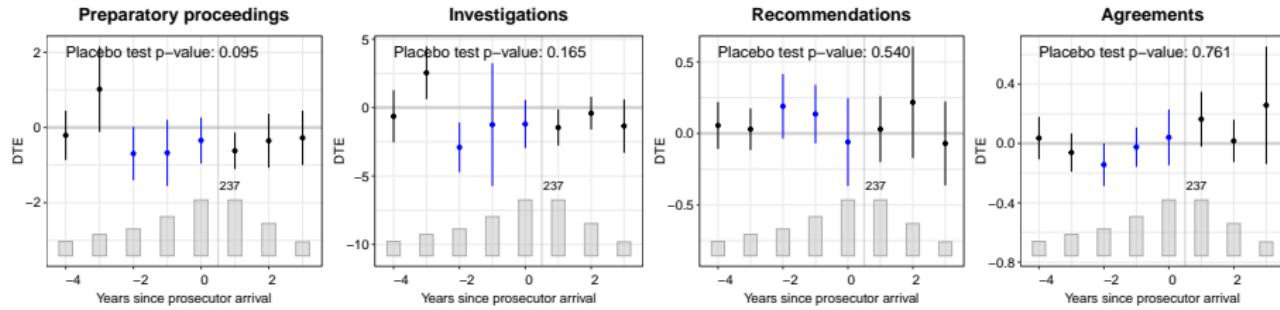


Alternative specifications: Logged and binary measures of civil service and temporary hires

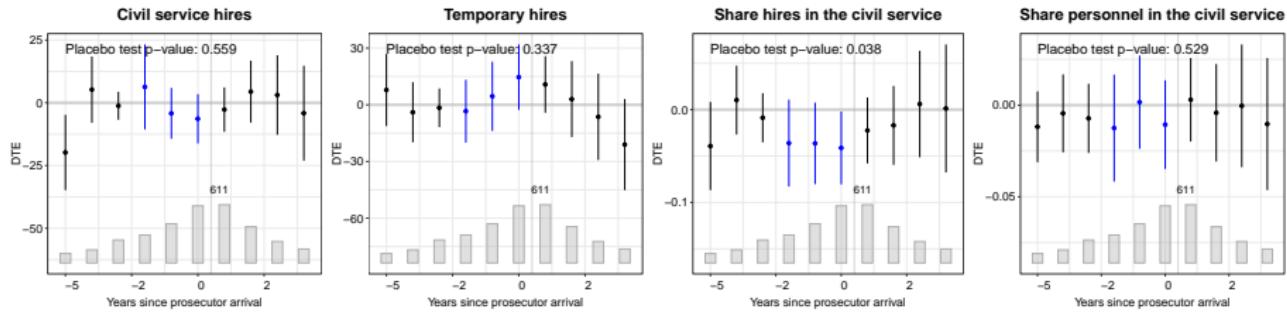


Placebo tests: Effects of prosecutor presence on anti-corruption action targeted at the local government

[◀ back](#) [◀ appendix](#)

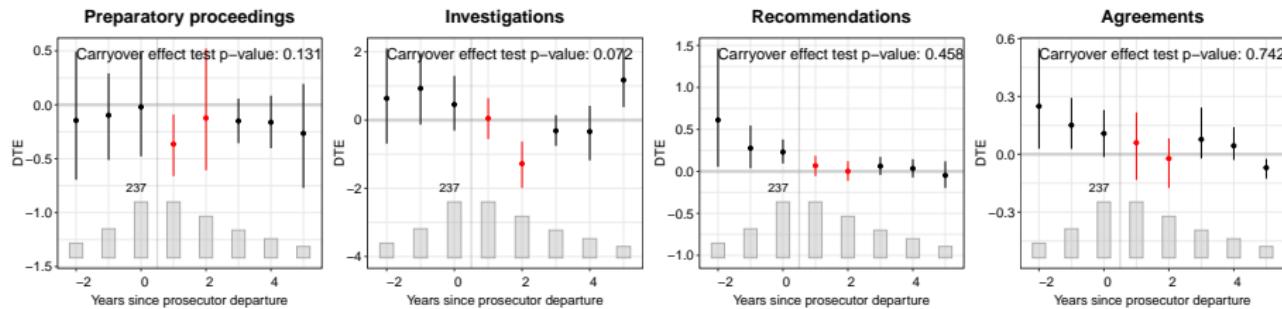


Placebo tests: Effects of prosecutor presence on hiring decisions by local government officials

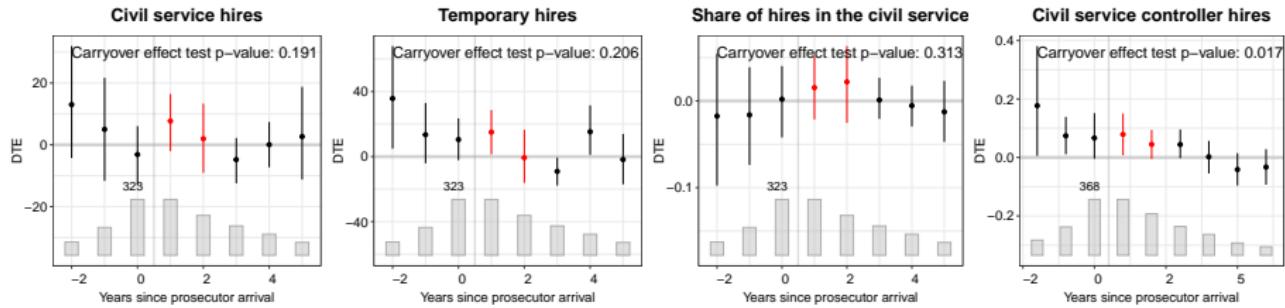
[◀ back](#)[◀ appendix](#)

Carryover tests: Effects of prosecutor presence on anti-corruption action targeted at the local government

[◀ back](#) [◀ appendix](#)



Carryover tests: Effects of prosecutor presence on hiring decisions by local government officials

[◀ back](#)[◀ appendix](#)

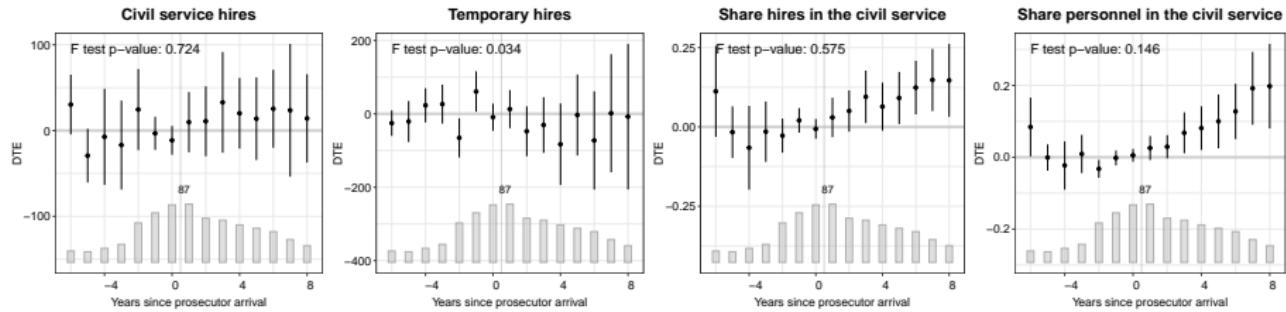
Results: Effects of prosecutor presence on hiring decisions by local government officials in states with staggered adoption

Table: Average Treatment Effect Estimates of Prosecutor Presence on the Hiring of Municipal Bureaucrats

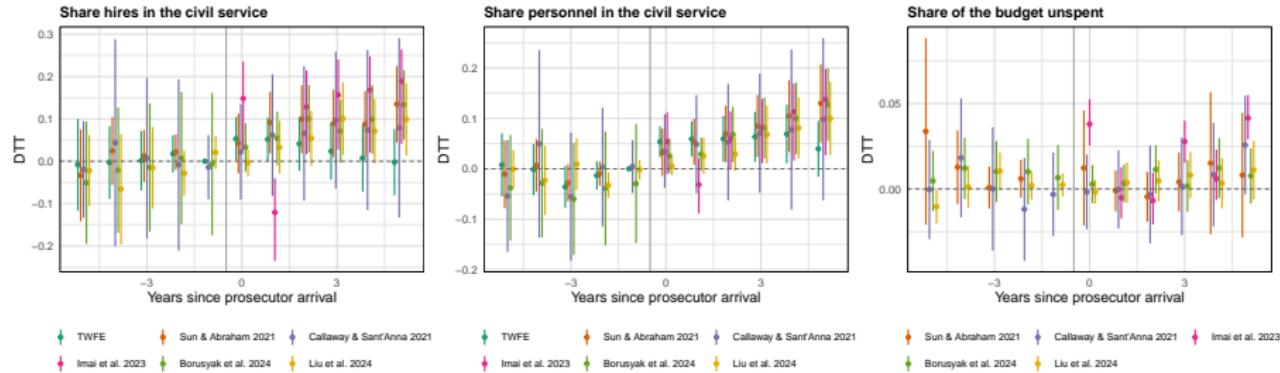
	Civil service hires	Temporary hires	Share hires in the civil service	Share personnel in the civil service
\widehat{ATT}	18.090 (17.932)	-28.277 (38.584)	0.081** (0.031)	0.082*** (0.0238)
Mean outcome under control	77.559	178.498	0.339	0.647

* p<0.10; * p<0.05; ** p<0.01; *** p<0.001. Municipality-clustered standard errors in brackets.

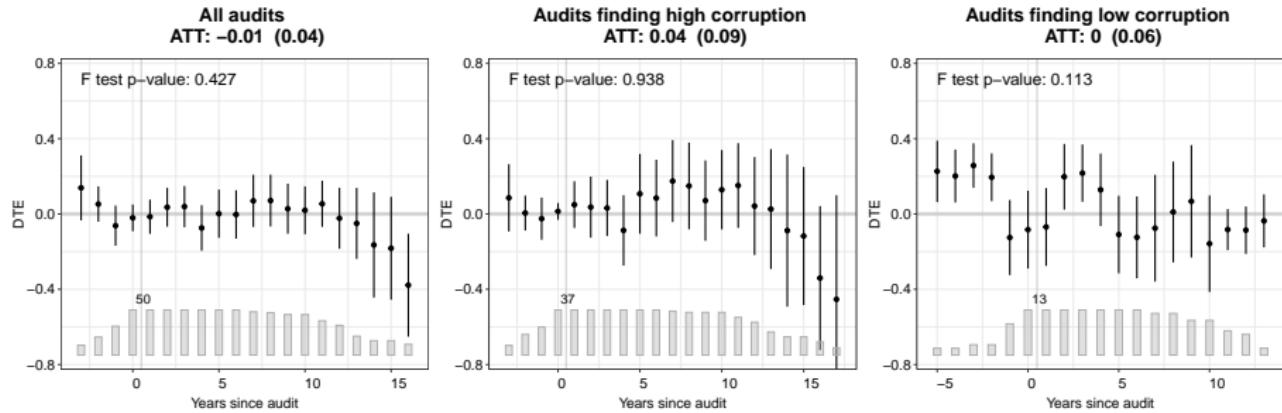
Results: Effects of prosecutor presence on hiring decisions by local government officials in states with staggered adoption



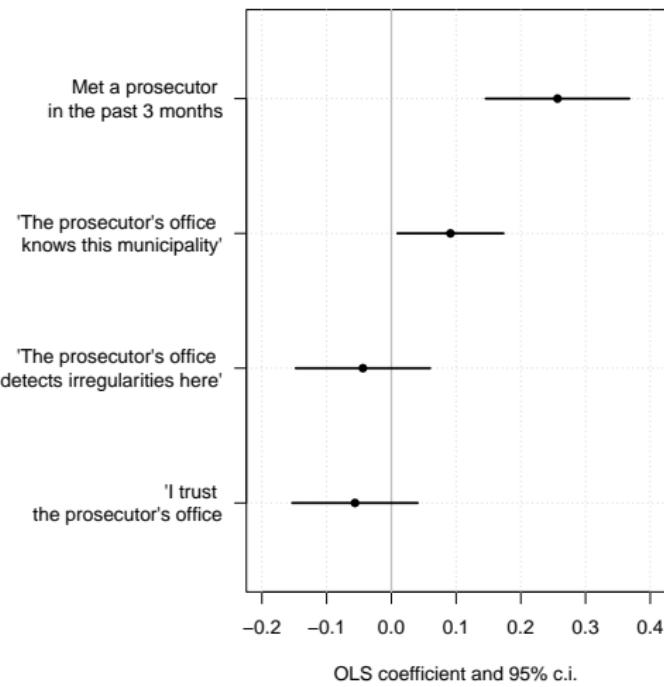
Results: Using alternative diff-in-diff estimators



Null effects of federal audits on prosecutor presence



Results: Correlations from a survey of local politicians are consistent with contact as a mechanism



- Online survey of local politicians in 2019 in the state of Rio Grande do Norte
- 455 respondents (response rate 45%)
- I examine correlation of responses to prosecutorial presence at the time
- Similar results controlling for population or omitting large districts

Results: Correlations from a survey of local politicians are consistent with contact as a mechanism

Table: Correlation between Prosecutorial Presence and Politician Survey Responses

	Met with a prosecutor in the past 3 months	Agreement with statement:		
		"The MP knows this municipality"	"The MP detects irregularities here"	"I trust the MP"
Prosecutor present	0.257*** (0.056)	0.091* (0.042)	-0.044 (0.053)	-0.056 (0.049)
Constant	0.337*** (0.034)	0.765*** (0.027)	0.613*** (0.031)	0.801*** (0.026)
Observations	450	455	455	455
R-squared	0.060	0.011	0.002	0.004

* p<0.05; ** p<0.01; *** p<0.001. Municipality-clustered standard errors in brackets. The dependent variables are dummies for whether the respondent reports having met at least once with a prosecutor over the previous 3 months, and whether the respondent's level of agreement is at or above the median for the following statements: "The prosecutor's office knows the reality of this municipality", "The prosecutor's office detects the management irregularities that take place in this municipality", and "I trust the prosecutor's office."