Street-Level Rule of Law: Prosecutor Presence and the Fight against Corruption*

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Abstract

Prosecutors play a central role in enforcing the rule of law, including in combating corruption. Yet we lack systematic evidence on whether, and how, they succeed in limiting rent-seeking and improving governance. I argue that prosecutors' anti-corruption work is more effective when they are physically present in the communities they oversee. Being on the ground improves prosecutors' access to information, enhances their ability to exert both formal and informal pressures on public officials, and heightens politicians' perceptions of oversight. I test this theory using a causal event study of the deployment of state prosecutors in Brazil, drawing on newly assembled administrative data on their geographic location and enforcement activity. I find that the arrival of a prosecutor to a locality increases anti-corruption enforcement (including investigations and extra-judicial agreements), raises civil service hiring in the local bureaucracy, and reduces corruption in municipal finances—all without depressing budget execution. I complement these quasi-experimental results with insights from original surveys and in-depth interviews with both prosecutors and politicians. Together, the findings provide rare causal evidence that autonomous prosecutors can enhance local governance – and that physical presence is a key driver of their effectiveness.

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1 Introduction

Prosecutors are central figures in the fight against corruption and the rule of law more broadly. Recent research has documented "a strikingly broad trend around the globe in vesting greater discretion and greater responsibility in prosecutors" (Langer and Sklansky, 2017, 1). This trend coincides with a global, upward trend in the conviction of politicians for corruption (Da Ros and Gehrke, 2024).

Yet, while the power and discretion of prosecutors in criminal justice systems has been widely studied (Fionda, 1995; Davis, 2007; Wright and Miller, 2010), we have little systematic evidence of prosecutors' behavior and effectiveness in the fight against corruption, particularly in everyday settings. The existing literature on prosecutors and corruption offers two images. Studies on the United States often portray prosecutors' anti-corruption work and the resources they count on as politically biased, in line with their political selection (Gordon, 2009; Alt and Lassen, 2012; Pavlik, 2017; Nyhan and Rehavi, 2018; Davis and White, 2021). In contrast, studies of Latin America emphasize the figure of the heroic or crusading prosecutor, highlighting the successes and limitations of extraordinarily high-level anti-corruption crusades, constrained in time and led by a handful of very visible individuals (Lagunes and Svejnar, 2020; Da Ros and Taylor, 2022; González-Ocantos et al., 2023; Vilaça, 2024). These literatures, while rich and insightful, focus on exceptional settings with either politically selected prosecutors or extraordinarily high-level campaigns. We still know little about the behavior and impacts of rank-and-file prosecutors in the everyday fight against corruption and in the absence of political control.

Two main reasons explain the scarcity of evidence about the effectiveness of prosecutors in fighting corruption. First, prosecutors' strength is typically understood as a macro-level variable; consequently empirical designs rarely go beyond observational or qualitative comparisons across countries (Van Aaken et al., 2010; Voigt et al., 2015; Gutmann and Voigt, 2019) or states (Mueller, 2010). These designs limit our ability to test causal hypotheses about the design and impacts of prosecutor's offices, separating their features from other good-governance institutions that correlate with them. Second, we do not typically observe prosecutors' actions outside courts – this makes it hard to trace hypothesized causal chains and test observable implications of arguments about prosecutors' role in the fight against corruption.

This paper contributes to filling this gap. I start by theorizing what enables strong and autonomous prosecutors to fight corruption, highlighting their discretion in who to prosecute and how,

their reliance on a wide range of tools (including informal pressures and extra-judicial bargains and agreements), and the fact that they can act in real time to deter malfeasance. Their effectiveness at using these tools depends on their political insulation, a feature that cross-national research has emphasized (Van Aaken et al., 2010; Gutmann and Voigt, 2019). The core of my argument is that, in contexts where prosecutors are autonomous from politicians, their effectiveness benefits from physical presence in the communities they monitor, something previous research has overlooked. Physical presence aids effectiveness because it helps prosecutors obtain information, exert formal and informal pressures on government officials, and raise politicians' perceived probability of detection and of punishment.

My argument builds on previous studies that have examined the role of presence in the control of corruption and other bureaucratic tasks. Using an instrumental variable strategy, Litschig and Zamboni (2024) show that Brazilian municipalities which host the judiciary district headquarter have lower levels of corruption.Other studies have found positive effects of presence on bureaucratic effectiveness (Bozcaga, 2025) or tax collection (Balan et al., 2022), although scholars have also documented how social embeddedness can undermine bureaucratic capacity (Xu et al., 2023; Soifer, 2015). In contrast to these previous studies, this paper focuses on the physical presence of one type of agent and traces its effects on anti-corruption action, on management decisions by government officials, and on levels of corruption.

Empirically, I focus on Brazil, a large federal democracy where prosecutors have high levels of capacity and autonomy, especially when compared to other countries in the Global South (Gutmann and Voigt, 2019). I leverage variation across municipalities and years in the presence of state prosecutors, using a causal event study approach (Liu et al., 2024). The design essentially compares what happens after the deployment of a prosecutor to a municipality, relative to other municipalities that should also have a prosecutor but have not yet received one.[1] To measure prosecutors' presence and anti-corruption actions for each municipality-year observation, I use administrative data scraped from websites of prosecutor's offices in 17 states (covering about 90% of Brazil's municipalities and population), and time periods between 2006 and 2024. I complement that data with detailed administrative data on municipal employment and spending, and audit data on municipal corruption uncovered by a federal oversight agency.

There are three main advantages to this research design. First, using fine-grained admin-

[1]All municipalities are *de jure* covered by the state prosecutor's office, but untreated municipalities are typically overseen by a prosecutor based in a neighboring district who visits them occasionally.

istrative data allows me to trace both immediate outputs of prosecutorial pressure and relevant outcomes in local governance, thus illuminating the mechanisms by which prosecutorial presence works. Second, by examining the impacts of the universe of rank-and-file prosecutors, the design sheds light on how everyday anti-corruption efforts work within the standard bureaucratic environment of prosecutor's offices. Finally, by focusing on variation in prosecutor presence, this research contributes rare causal evidence of the effectiveness of prosecutor's offices, overcoming some of the limitations of macro-level comparisons across countries or states.

The event study results demonstrate that the deployment of a prosecutor to a municipality leads to meaningful changes in enforcement, management decisions by local officials, and corruption. First, prosecutorial presence causes a significant increase in anti-corruption actions targeted at the local government, including investigations, recommendations, and extra-judicial agreements. Prosecutor presence also causes an increase in the incidence of civil service hiring in the municipal bureaucracy. This shows that prosecutor presence leads to meaningful changes in management decisions by municipal officials, in a direction aligned with legal norms as well as with scholarly findings on the political abuses of temporary hiring. Civil servants' selection and careers are more protected from political influence, and the prevalence of the civil service is often associated with better government performance and reduced corruption (Charron et al., 2017; Aneja and Xu, 2024; Oliveira et al., 2024). In contrast, bureaucrats whose contracts are controlled by politicians are more easily amenable to rent seeking and corruption (Brierley, 2020). A third set of results shows, by comparing the findings of randomized federal audits in localities with and without a prosecutor present (or in localities that received a prosecutor right before or after an audit), that prosecutor presence reduces corruption in municipal finances. Finally, I show that these gains in local governance do not come at the cost of limiting implementation. Counter to theories of administrative paralysis, I find that prosecutor presence has no effects on the share of the municipal budget that is left unspent.

I then use observational evidence from original surveys of politicians and prosecutors to illustrate some of the mechanisms. Using data from an online survey of politicians in one state, I show that in localities where a prosecutor was present at the time, politicians were more likely to declare meeting with the prosecutor and believing that the prosecutor's office knew the local reality. In an online survey of prosecutors in another state, I show that they often see corruption as a major problem at the local level, their institution as the one best placed to fight it, and insufficient prosecutorial presence in the territory as an obstacle in that endeavor.

In sum, this article advances our understanding of how autonomous prosecutors can be effective at fighting corruption. It does so by highlighting how the exercise of prosecutors' unique advantages benefits from physical presence in the communities they monitor. This is an under-appreciated driver of prosecutorial effectiveness that previous research has overlooked. By highlighting the importance of territorial presence, this paper complements established views of effective rule of law institutions as depending on insulation and capacity, suggesting that geographic decentralization and physical presence may act as complements to those more fundamental factors. Moreover, by leveraging variation across districts rather than across prosecutor agencies or countries, this research design contributes causal evidence on the beneficial impact of prosecutor's offices on local governance and state capacity.

2 Theory

2.1 Why Presence Can Boost Prosecutorial Effectiveness

Autonomous prosecutors can be especially effective anti-corruption actors due to three core features: they wield substantial discretion, they have access to a diverse set of enforcement tools, and they can intervene preventively—before or during the commission of wrongdoing. While these advantages are well recognized in the literature on prosecutors' role in combating common crime (Gordon and Huber, 2009; Sklansky, 2018), they have received far less attention in studies of corruption and governance. I argue that each of these features becomes even more potent when prosecutors are physically present in the communities they oversee. I first elaborate on these three institutional features, then explain how presence enhances prosecutorial effectiveness in the anti-corruption domain.

Prosecutors typically enjoy broad power and discretion. For instance, they generally get to decide who to prosecute, how harshly, and whether and how to negotiate. In many countries, prosecutors also have the monopoly of prosecution over some forms of malfeasance. This gives them unparalleled power compared to other accountability actors. In the words of Tonry (2012, 1): "Prosecutors are potentially the most powerful figures in any country's criminal justice system. They decide what crimes to prosecute; whom to charge; what to charge; whether to plea-bargain, offer concessions, or divert a case; how aggressively to seek a conviction; and what sentence to propose. Police arrest people, but prosecutors decide whether those arrests lead to charges. Judges

preside over trials and sentence convicted offenders, but only those whom prosecutors bring before them." This discretion becomes even more critical in corruption cases, where misconduct is often difficult to detect, politically sensitive, and unlikely to be pursued without a proactive prosecutor. Unlike common crimes, acts of corruption rarely generate immediate victims who report wrongdoing, making prosecutorial initiative essential to triggering enforcement.

Second, prosecutors often have at their disposal a broad range of tools, including investigations, court actions, and extra-judicial mechanisms such as settlements and conduct adjustment agreements. While this flexibility has been critiqued as a source of abuse and uneven enforcement in the criminal justice system (Davis, 2007; Sklansky, 2018), it can be a distinct advantage in the anti-corruption domain. Corruption involves a wide range of malfeasance –often diffuse, concealed, and politically sensitive– committed by powerful actors. The ability to tailor enforcement strategies to specific contexts, and to interact with potentially corrupt actors through extrajudicial mechanisms gives prosecutors a unique capacity to address a type of misconduct that is otherwise difficult to detect or prosecute.

Third, prosecutors can deter malfeasance before it happens or while it is unfolding. Unlike auditors and judges, who typically assess misconduct *ex post*, prosecutors are positioned to act in real time, responding to early signals such as citizen complaints or whistle-blower reports – even without having full evidence that would stand in court. While courts can contribute to deterrence by raising the expected cost of punishment, their impact is mediated through formal proceedings and delayed sanctions. Prosecutors, by contrast, can intervene preemptively, issue warnings, offer extra-judicial settlements, and signal ongoing scrutiny – all of which can raise officials' perceptions of both the probability of detection and the likelihood of consequences, even without a formal indictment.

Prosecutors' ability to fight corruption depends on them being insulated from politics. In many countries, however, prosecutors remain subject to formal or informal control by the executive branch. A cross-national study by Van Aaken et al. (2010) found that *de facto* prosecutorial independence is negatively correlated with corruption perceptions. In the United States, where prosecutors are either elected or appointed through political processes, researchers have found significant bias in the targeting of anti-corruption efforts (Gordon, 2009; Pavlik, 2017; Davis and White, 2021), the timing (Nyhan and Rehavi, 2018), and resource allocation (Alt and Lassen, 2012). In settings such as the United States, where prosecutorial selection and career advancement are closely tied to political incentives, reforms that favor political insulation may be a necessary precondition for

improving prosecutorial effectiveness. In such environments, physical presence alone is unlikely to yield meaningful accountability gains if discretion remains politically driven, and may even facilitate capture by local politicians.

In settings where prosecutors are sufficiently insulated from politics, their use of the power, discretion, and tools of their office to fight corruption benefits from being physically present in the locality they monitor. This argument complements the standard political economy view that effective rule-of-law institutions depend on independence and capacity. It highlights, in addition, the importance of the organizational and relational foundations of effective accountability institutions.

I hypothesize three key channels connecting prosecutors' presence to anti-corruption effectiveness. First, presence improves access to information about malfeasance. Prosecutors based in a locality are better positioned to detect wrongdoing directly –through informal observation, proximity to administrative routines– and a deeper understanding of local context. At the same time, they become more accessible to potential informants –be that citizens, opposition politicians, activists, or whistle-blower bureaucrats– who can more easily report misconduct and supply supporting evidence when the prosecutor's office is physically present and thus more visible and accessible. This enhances the flow of both formal complaints and informal signals about malfeasance, inducing deterrence. This mechanism is especially important in the case of corruption, where wrongdoing is often concealed by powerful actors – wrongdoing may be particularly difficult to detect, and informants may fear reputational, professional, or even legal consequences for reporting misconduct, especially in small or politically uncompetitive municipalities. In such environments, the visibility and accessibility of a local prosecutor can lower the costs and perceived risks of reporting, helping break through informational barriers that typically shield corrupt behavior.

Second, physical presence makes it easier for prosecutors to exert formal and informal pressures on government officials. Face-to-face meetings, document requests, calls, expressions of concern, and recommendations all carry more weight when they come from a state authority regularly present in the community. Presence allows prosecutors to follow up personally directly, and thus makes it harder for government officials to ignore or delay their requests. Last but not least, being physically present also allows prosecutors to design these actions in ways that are more relevant to the political or bureaucratic actors targeted, since they can build on a richer understanding of the local community and what will be more effective to deter and/or correct malfeasance.

Third, prosecutor presence raises local government officials' perceived probability of oversight.

Even in the absence of active enforcement, the mere fact that a prosecutor is stationed in the municipality may alter officials' expectations about being monitored and being targeted by anti-corruption efforts, ultimately through legal actions in court and eventually potential convictions. This third mechanism builds on the previous two and is essentially one of deterrence – when oversight is more visible, tangible, continuous, and targeted, public officials may adjust their behavior in anticipation of legal trouble.

2.2 How Prosecutorial Presence Can Avoid Capture

Scholars have long studied the gains and losses of bureaucrats' social embeddedness in the communities they serve (Pepinsky et al., 2017; Grossman and Slough, 2022). Building on the concepts of embeddedness (Granovetter, 1985) and embedded autonomy (Evans, 1995), some researchers argue that bureaucrats' relationships to local communities and local elites can foster government effectiveness, using data from contexts as diverse as China (Tsai, 2007), India (Bhavnani and Lee, 2018), Turkey (Bozcaga, 2025), and Congo (Balan et al., 2022). Yet other studies have found that social presence leads to capture and can hurt bureaucratic performance, for instance in contemporary India (Xu et al., 2023) and 19th-century Latin America (Soifer, 2015).

While the debate on the ambivalent role of embeddedness for bureaucratic effectiveness is still open, two main reasons suggest that in the case of prosecutors presence may escape the dangers of embeddedness and capture. First, prosecutors and other anti-corruption actors are typically hired, deployed, and paid for from the center. This makes it harder for local elites to capture prosecutors and for connections with the locals to stymie their performance. A similar logic underlies the argument in Soifer (2015) of why centrally deployed bureaucrats led to state development in Latin America.

Second, prosecutors are often deployed for time constrained terms. For example, the European Union's prosecutors are deployed for a non-renewable term of 6 years. In Brazil, while prosecutors cannot be removed against their will, the undesirable nature of most early destinations means ? they tend to move after a few years seeking a more desirable deployment. Regardless of its formal or informal source, prosecutor rotation ensures that deep social connections do not build between them and the local community, thus reducing the risk of capture. This is consistent with lab experimental evidence showing that rotating pairs of potential bribers and public officials reduced corruption Abbink (2004).

3 Institutional Setting

I focus on state prosecutors in Brazil, a large federal democracy where prosecutors have high levels of capacity, autonomy, and discretion when compared to those of other countries (Kerche, 2008). Partly as a result of a decades-long building of bureaucratic autonomy (Arantes, 2002; Coslovsky and Nigam, 2016), the Constitution and multiple laws guarantee prosecutor's offices autonomy from the executive, legislative, and judicial powers, and grant high levels of discretion and autonomy to individual prosecutors. State prosecutor's offices deploy prosecutors throughout the territory, inducing variation across time and municipalities in the physical presence of prosecutors. A final but key advantage of the Brazilian case is that prosecutor's offices are extraordinarily transparent, and publish detailed administrative data about their members and their extra-judicial behavior on their transparency portals. This section describes the key details of how prosecutor's offices are designed, the municipal political environment, and the prosecution of local politicians.

3.1 State Prosecutor's Offices

State prosecutor's offices (*Ministério Público dos Estados*, MP) are in charge of prosecuting most crime and corruption charges in Brazil.[2] This stems from their constitutional mandate to protect "diffuse rights" , i.e., public goods such as the environment, consumer rights, and good governance. While prosecutors are in charge of prosecuting crime, many are especially concerned with fighting corruption (Arantes, 2002), particularly in recent times (Vilaça, 2024; Kerche and Viegas, 2024). In a recent nationwide survey of prosecutors, 40% of respondents placed the fight against corruption among the top 3 priorities after crime (Ribeiro et al., 2024, 23).[3]

Each of Brazil's 26 states has its own prosecutor's office, all autonomous from state executive, legislative, and judicial powers. While state prosecutor's offices follow their own rules and organization, there is significant isomorphism among them, partly because they all operate under a common legal framework and follow the guidelines of a national coordinating body – the National Council of Prosecutor's Offices (*Conselho Nacional do Ministério Público*, CNMP).

[2]The exception is cases of crime and corruption in the use of federal transfers, which are dealt with by the federal prosecutor's office (*Ministério Público Federal*).

[3]Relatedly, 60% of surveyed prosecutors expressed they agreed a lot with the statement "corruption is one of the main features of politics in Brazil" (Ribeiro et al., 2024, 38).

Each state prosecutor's office is territorially organized in districts (*comarcas*). Each of these districts typically corresponds to a medium or large municipality (or part of it), or to a group of smaller municipalities. In the latter case, the district is headquartered in the most prominent municipality, where the institution typically has an office and deploys its bureaucrats. Large districts have many prosecutors, often working in offices dedicated to specialized topics (e.g., healthcare, environment, or labor issues). The smaller districts typically have one prosecutor who, with a support team, takes care of all issues in the district. In any case, prosecutors are legally expected to live in the district to which they are deployed, and they typically do. Yet not all prosecutorial district headquarters have a prosecutor deployed to them, given limited human resources. The design I exploit in this paper leverages variation across municipalities and years in the presence of prosecutors in the headquarters of small districts.[4]

Seven institutional design features protect the autonomy of prosecutors from political influence and enhance their commitment to a bureaucratic ethos. First, prosecutors are selected through highly competitive, merit-based civil service examinations. Second, once selected, and after a two-year probationary period, prosecutors are appointed for life. Third, prosecutors cannot be removed from their post – once they take an office anywhere in the state, they cannot be forced to leave it. Fourth, prosecutors advance in their careers (and move towards more desirable posts if they so desire) based mostly on seniority and the availability of posts. Fifth, prosecutors enjoy very high salaries.[5] High salaries and other privileges that prosecutors enjoy make it harder for them to be captured by political elites or by special interest, and ensure a long-term commitment to the career. Finally, prosecutors are forbidden from engaging in any partisan or political activity, charging any legal fees, or having any participation in firms (except as a stockholder). More details about the institutional design of Brazilian prosecutor's offices are included in Appendix B.

In sum, the institutional design of Brazilian prosecutor's offices protects the autonomy of prosecutors from political influence. This contrasts with the design of prosecutor's offices in many high-income countries, where prosecutors are often dependent on the executive power (or, in the case of district attorneys in the US, on voters), do not have a career separate from that of judges, or are not empowered to act in the defense of collective interests such as good governance (Aaken et al., 2004; Tonry, 2012).

[4]Appendix D has maps illustrating this variation.

[5]For example, in 2020, prosecutors in the southeastern state of Minas Gerais were paid an average net monthly salary of over 41,000 Brazilian reais (about 8,000 US dollars with the exchange rate at the time).

3.2 Municipal Governments

Brazil has 5,570 municipalities, distributed across 26 states and a federal district. Municipal governments are responsible for providing primary services in areas like education, healthcare, and social assistance. Partly due to their responsibilities in service delivery, the municipal workforce is typically large. On average, in 2016, municipal governments hired 4.9% of the local population and 38.2% of those employed in the formal labor market.Municipal employees enjoy a wage premium relative to the private sector (Colonnelli et al., 2020, 3090), similarly to other developing contexts (Finan et al., 2017). Employment opportunities in the typical municipality, which is small and relatively poor, are scarce. Therefore, public employment is highly valued and can be mobilized for a variety of political purposes.

Mayors (who are elected by majority rule every four years and can only be re-elected once) and the secretaries they appoint have some discretion over the hiring and firing of bureaucrats. Such discretion differs significantly between the civil service and other hiring modes with fewer employment protections. The Constitution mandates all permanent staffing needs to be filled with civil service contracts, which have tenure for life after a short probationary period. Approximately a third of municipal employees are hired on temporary contracts, which can legally be used to hire political appointees for management or leadership positions, or to fill short-term or urgent staffing needs. In practice, temporary hiring is often used where the civil service should prevail.

The abuse of hiring outside the civil service has been shown to help politicians reward political supporters after getting to office (Colonnelli et al., 2020), build legislative coalitions (Mignozzetti et al., 2025), and mobilize supporters ahead of a re-election campaign (Toral, 2025). It has also been shown to be detrimental for citizen welfare; bureaucrats selected under temporary contracts often have worse qualifications and experience (Colonnelli et al., 2020; Toral, 2024a), and their turnover, induced by political turnover, depresses the quality of public services (Akhtari et al., 2022; Toral, 2024b).

3.3 Prosecution of Local Politicians

Given the centrality of public employment in local politics and the strong legal basis for mandating hiring in the civil service, prosecutors often seek to constrain local officials' use of temporary contracts. For example, a prosecutor I interviewed in the southeastern state of São Paulo reported

a task-force was established to monitor the political appointment of bureaucrats.[6]

Prosecutors have at their disposal a variety of tools to fight local-level corruption, both judicial and extrajudicial. They can open formal investigations, issue recommendations, negotiate and sign extra-judicial agreements, and file public civil actions in court. They can also use more informal tools, like meetings, phone calls, and e-mails. A prosecutor I interviewed in the northeastern state of Rio Grande do Norte acknowledged that sometimes such informal pressures can have an effect on local government officials.[7]

For politicians, the consequences of being charged for violating public employment rules are potentially very severe. If found guilty, they are subject to penalties, including the loss of their post, having their political rights suspended, substantive fines, and even imprisonment. In practice, it is not uncommon for politicians to be charged for corruption. Lambais and Sigstad (2023) estimate that about 7.7% of mayoral election winners or runner-ups are involved in a court case accused of corruption charges. Bento et al. (2021) document 1,716 judicial cases involving mayors and former mayors between 1992 and 2016 in the southern state of Rio Grande do Sul, which has 497 municipalities. In the state of São Paulo, 40% of municipalities had their mayors or former mayors convicted of corruption charges in just one year; 83% of them had to pay fines, and 68% had their political rights suspended (Anuário da Justiça de São Paulo, 2016). Because convictions are not rare, prosecutors can often induce compliance through extra-judicial measures.

4 Research Design

To measure the impact of prosecutors on local governance, I leverage variation in the physical presence of a prosecutor across years and municipalities. Using an imputation-based causal event study approach (Liu et al., 2024) that overcomes the well-known issues with two-way fixed-effects specifications (Baker et al., 2022; Roth et al., 2023),[8] I identify the causal effect of a prosecutor

[6] State prosecutor interviewed in the state of São Paulo in September of 2018.

[7] Prosecutor interviewed in Rio Grande do Norte in June 2018.

[8] Other recently developed approaches to causal inference in panel settings are inappropriate in this setting, either because they assume staggered adoption of treatment without reversals (Callaway and Sant'Anna, 2021; Sun and Abraham, 2021) or a balanced panel (Imai et al., 2023; De Chaisemartin and d'Haultfoeuille, 2020). The Liu et al. (2024) method is very similar to the imputation event study method developed in parallel by Borusyak et al. (2024). Appendix O shows the robustness of the results using these alternative estimators in a subset of states that experience no treatment reversals.

being deployed to a municipality on anti-corruption action and on public employment.

4.1 Identification

Several factors drive variation in prosecutorial presence. First, municipalities that do not hold the headquarter of a prosecutorial district do not have prosecutors deployed to them. I therefore focus on examining variation across prosecutorial district headquarters, where the prosecutor's offices typically have physical and human infrastructure (a building and support staff) but not always a prosecutor.[9] Second, state prosecutor offices lack enough prosecutors to staff all district headquarters. Over time, with the hiring of junior prosecutors growing faster than the retirement of senior ones, more district headquarters have been staffed.[10] Third, the prosecutorial districts that go from untreated to treated or vice versa are typically the relatively small and remote entry-level districts, typically staffed by junior prosecutors. As they advance in their careers, prosecutors seek to move to the capital city or close to it, where their living conditions can be better and there are more specialized prosecutor offices. Municipalities under control (i.e., without a prosecutor deployed to them) are subject to exactly the same rules and are monitored by a prosecutor in a nearby district, who is paid extra for the additional work. This prosecutor will typically travel to the district from time to time (e.g., once a week).

The Liu et al. (2024) imputation-based estimator of treatment effects is unbiased and consistent under a strict exogeneity assumption. This assumption, which implies the parallel trends assumption, involves the absence of time-varying confounders, anticipation effects, and carryover effects. Assuming spherical errors, the imputation method is also the most efficient among all linear and unbiased estimators (Borusyak et al., 2024).

Five substantive reasons make the strict exogeneity assumption reasonable in this setting. First, variation in prosecutor presence is mostly driven by entry-level districts, and thus by the hiring of new prosecutors and the career advancement of more experienced ones. Second, moves by junior prosecutors are mostly driven by the availability of posts and by seniority. Third, prosecutor deployments are not announced *ex ante*. Fourth, the boundaries of prosecutorial districts are largely

[9] There very few instances of changes in district headquarters in states where I have historical district data. I take the indicator of whether a municipality was a district headquarter in 2020 (a year for which I have complete data on prosecutorial districts) to determine municipalities that could have a prosecutor present. Results are similar when using the whole sample without this restriction.

[10] Appendix C has a plot of the number of prosecutors by state and year.

constant across time, and set according to administrative criteria. Finally, state prosecutor's offices are autonomous and do not report to or depend on municipal governments.

Two sets of empirical results lend additional support to the identifying assumptions. First, one may worry that corruption acts as a time-varying confounder. If prosecutor's offices strategically deploy prosecutors in places where they detect an increase in corruption or corruption risk, that would hinder our ability to identify the effect of prosecutor presence on local governance outcomes using an event study estimator. However, as shown in Appendix G, randomly assigned federal anti-corruption audits, which produce a public and high-quality measure of local corruption (Avis et al., 2018), do not have an effect on the deployment of prosecutors. This is true even in cases where federal auditors find high levels of corruption in municipal finances. Another concern may be that variations in crime may be confounding the relationship between prosecutor arrival and corruption. Prosecutor's offices may target prosecutors to (or away from) localities with spikes of violent crime, and to the extent that crime may be systematically related to corruption,[11] that could act as another time-varying confounder. Yet, as shown in Appendix H, there is no systematic pretrend in absolute or relative numbers of violent deaths.[12]

4.2 Estimation and Inference

The Liu et al. (2024) estimator follows an imputation procedure. Using only untreated observations (i.e., municipality-year observations corresponding to a prosecutorial district headquarter but without a prosecutor deployed to them), municipality and year fixed effects are fitted and then used to impute the counterfactual potential outcomes for treated units under control. The individual treatment effect for each treated observation (ITE) is estimated by taking the difference between its observed outcome and its imputed counterfactual outcome: $\hat{\tau}_{it} = Y_{it} - \hat{\alpha}_i - \hat{\beta}_t$. ITEs are then aggregated to obtain dynamic treatment effects for each period (DTEs) and overall average treatment effects on the treated (ATT). For inference, the Liu et al. (2024) procedure uses non-parametric block bootstrap clustered at the unit level. In this case, that implies clustering at the municipality level, which is appropriate since that is the level at which treatment is assigned (Abadie et al., 2023).

[11] Corruption and crime may be systematically related for instance through organized crime, as Trejo and Ley (2020) show for the case of Mexico and Magaloni et al. (2020) for the case of Rio de Janeiro.

[12] I measure the number of violent deaths in each municipality and year using administrative micro-level data from the Ministry of Health (SIM, *Sistema de Informação sobre Mortalidade*).

4.3 Data

To analyze the impacts of prosecutor presence, I built panel of municipality-year observations, leveraging administrative data from state prosecutor's offices and from the federal government. The panel is unbalanced because the data published by each state prosecutor's office has different time coverage (between 2006 and 2024).

To obtain data on prosecutors' presence and activity, I scraped the transparency portals of state prosecutor's offices. I use data for 17 states across all of Brazil's five regions which, together, cover 91% of Brazil's municipalities and 89% of its population (details in Appendix C). I measure the deployment of prosecutors by leveraging monthly staffing and payroll files. I identify a municipality-year observation as treated if there are at least 12 unique prosecutor-month records assigned to it.[13] In total, I have prosecutor presence data for about 50,000 municipality-year observations, of which about 23,000 correspond to municipalities that were prosecutorial district headquarters in 2020. Of those 23,000 observations included in the effective sample, 65% have a prosecutor present and 38% correspond to municipalities that are always treated. Treatment histories are visualized in Appendix F.

Treatment effect estimates are driven by municipalities that switch from not having a prosecutor to having a prosecutor present.[14] These municipalities (*switchers*) are systematically different from both those that always have a prosecutor present (*always treated*) and those that never do (*never treated*), as shown in Appendix E. While there is significant overlap, always-treated municipalities tend to be larger, wealthier, more developed, and less rural than switchers; the opposite applies for never-treated municipalities. Practically all switcher municipalities correspond to prosecutorial district headquarters.

To measure the effect of prosecutor presence on anti-corruption actions, I use scraped data for five states in the sample in which such activity can be identified at the municipality-year level. In particular, I examine four types of anti-corruption action that prosecutors can take. For each of them, I count the number of actions established by municipality and year, excluding all those not

[13] I use the 12-month threshold because it marks that the municipality has the equivalent of a full-time prosecutor dedicated to it. The distribution of the number of prosecutor-month records in a municipality is bunched at 0 and then at values multiple of 12. Still, results are substantively similar when using as thresholds 6 or 9 prosecutor-month records.

[14] Untreated observations are used to estimate the counterfactual for treated observations. Always-treated municipalities are disregarded by the imputation method.

related to mismanagement or corruption.[15]

The four types of anti-corruption action I examine are preparatory proceedings, civil investigations, recommendations, and extra-judicial agreements. Preparatory proceedings (*procedimentos preparatórios*) are preliminary investigations to gather evidence and examine the facts and potential for prosecutorial action. Civil investigations (*inquéritos civis*), are more formal, the affected parties are generally notified (except when the law allows for confidentiality), and can be extended for longer periods of time. Both preparatory proceedings and formal investigations can be established at the discretion of the prosecutor, unprovoked or after a request from an affected party. Recommendations (*recomendações*), which can be issued in the context of preparatory proceedings or civil investigations, request that a party (e.g., a mayor) do or cease to do something to ensure compliance with the law. Finally, extra-judicial agreements (*termos de ajustamento de conducta*, TACs) are negotiated and, once signed, are binding. Agreements are intended to enhance public officials' compliance with the law and compensation for damages (including financial damage to government budgets), while avoiding the slow and costly procedures of a public civil action in court.

To measure how prosecutorial presence impacts management decisions by local government officials, I look at municipal employment. I use the federal government's Annual Social Information Report (RAIS, *Relação Anual de Informações Sociais*). All formal employers –including municipal governments– are legally obliged to report all their contracts every year. RAIS therefore contains data on the universe of municipal employees, including contract type, start and end dates, salary, reason for termination, and professional category, among other variables. I count the number of new hires[16] in each municipality-year observation, by whether they have a civil service contract or a temporary one. With this data, I examine the effects of prosecutor presence on the number of new hires in the civil service, the number of new hires on temporary contracts, and the share of new hires in the civil service.[17]

To measure effects of prosecutor presence on corruption, I follow Avis et al. (2018) and use the count of "serious irregularities" uncovered by the audits performed by Brazil's federal comptroller's

[15]To select anti-corruption actions, I use prosecutor office's topical classification of actions and keep only those including key words such as public assets (*patrimônio público*), administrative misconduct (*improbidade administrativa*), or administrative law (*direito administrativo*).

[16]I exclude contracts for less than 35 hours a week (the mean of the distribution of weekly hours in municipal jobs, and roughly equivalent to a full-time job) so as to not double count employees that have several part-time jobs.

[17]In order to keep all observations, I assign that share to zero when there are no new hires, but results are similar when dropping those observations.

office (CGU, *Controladoria-Geral da União*) between 2006 and 2018. These audits are done by high-capacity and well-insulated auditors deployed to the municipality by the CGU to a few dozen municipalities every year. Up until 2015, the targeting of municipalities was randomized. Since then, audited municipalities are chosen by a mix of lotteries and scores of a corruption risk that is not publicly known.[18] The CGU classifies as serious irregularities substantive rather than merely formal forms of mismanagement, including those that hurt government funds, break the law, or hinder accountability.[19]

Finally, to examine whether prosecutorial presence and increses in anti-corruption action lead officials to limit government action or curb spending as a way to avoid legal trouble (Viegas et al., 2024; Wang, 2022), I use administrative data on underspending. In particular, I use public spending data published by the National Treasury's Brazilian Public Sectyor Accounting and Fiscal Information System (SICONFI, *Sistema de Informações Contábeis e Fiscais do Setor Público Brasileiro*) to measure the relative gap between budgeted and executed expenses for each municipality-year observation.

5 Results

This section presents six sets of results. First, I show event study estimates demonstrating that the presence of a prosecutor in a municipality leads to an increase in anti-corruption action targeted at the local government, including investigations and settlement agreements. Second, I show using the same event study design that the deployment of a prosecutor causes an increase in the prevalence of civil service hiring in the municipality. Third, I exploit the timing of a prosecutor's arrival to a municipality relative to the year of municipal accounts examined by federal auditors to demonstrate that prosecutorial presence reduces corruption in municipal finances. Fourth, I show that counter to theories of administrative paralysis, the arrival of a prosecutor does not increase the share of

[18] I use data for all audits between 2006 and 2018, but results are similar when restricting the sample to the period when audits were assigned only by lottery.

[19] As per the CGU, serious irregularities include: "failure to fulfill accountability duties (including the withholding of information necessary for the operation of internal control)", "damages to government funds resulting from illegitimate or uneconomical management decisions", "embezzlement or misappropriation of public funds, assets, or values", and "engagement in illegal, illegitimate, or uneconomical management actions, or violation of legal or regulatory norms that: a) have the potential to cause losses to government funds; or b) constitute a serious deviation from the principles to which public administration is subjected" (Ministério da Transparência e Controladoria-Geral da União, 2018).

municipal budgets left unspent. Fifth, I use observational data from an original survey of politicians to show that in municipalities where a prosecutor was present local politicians were more likely to report having met with a prosecutor and to agree that the prosecutor's office knew the municipality. Finally, I use descriptives from an original survey of prosecutors to show that they overwhelmingly see corruption as a major problem (especially the abuse of public employment by incumbents), and that many see vacant prosecutorial districts as an obstacle in the fight against corruption.

5.1 Effects of Prosecutor Presence on Anti-Corruption Action

Causal event study estimates show the deployment of a prosecutor to a municipality causes an increase in anti-corruption enforcement actions targeted at the local government. The first two columns in Table 1 show that, on average, prosecutorial presence leads to an increase of 0.61 preparatory proceedings and 1.03 formal investigations on corruption and mismanagement by the local government ($p < 0.01$). These effects correspond to about 0.10 and 0.07 standard deviations of the number of preparatory proceedings and investigations in municipalities without a prosecutor.

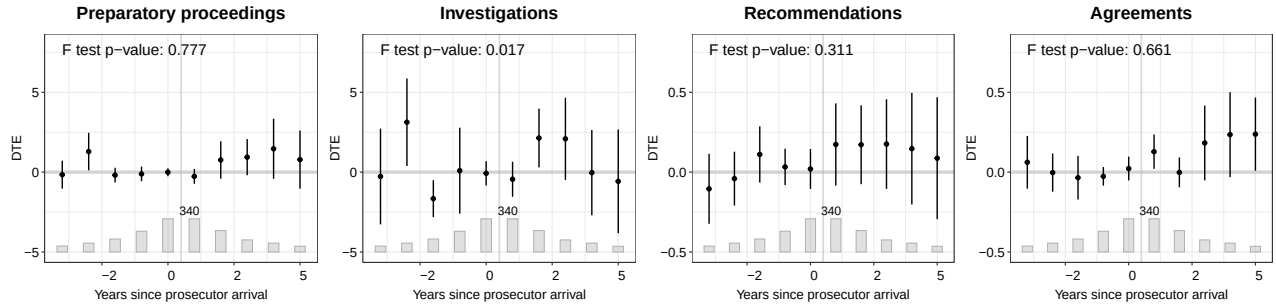
Table 1: Average Treatment Effect Estimates of Prosecutor Presence on Anti-Corruption Actions

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

*p<0.05; **p<0.01; ***p<0.001. Each column presents the ATT estimates of prosecutor presence on the number of preparatory proceedings, civil investigations, recommendations, and extra-judicial agreements, respectively, on issues related to corruption. The municipality-clustered standard errors are in brackets. The mean outcome under control is the average of the dependent variable in municipality-year observations with a prosecutorial district headquarter but no prosecutor deployed to it.

The increase in anti-corruption enforcement is not limited to investigations; as shown in the last two columns in Table 1, the presence of a prosecutor also causes an increase in the number of formal recommendations issued to local government officials and extra-judicial agreements signed with them. In particular, recommendations increase by 0.18 and agreements increase by 0.10 on average ($p < 0.01$), which is equivalent to increases of about 0.17 and 0.14 standard deviations, respectively. These effects suggest that presence leads to increases in anti-corruption enforcement through extra-judicial actions that seek to correct misconduct.

Figure 1: Dynamic Treatment Effect Estimates of Prosecutor Presence on Anti-Corruption Actions



Each subplot presents the estimated dynamic treatment effects (DTE) for switcher municipalities in each period (indexed relative to the year of prosecutor arrival) as a dot, and its block-bootstrapped 95% confidence interval as a vertical line. The bar plot at the bottom represents the number of treated units in each period. Periods where the number of treated observations is less than 15% of the number of observations at the period of prosecutor arrival are omitted from the subplots. The F test p-value reported in the upper left corner of each plot corresponds to the test of no pre-trend.

The dynamic treatment effect estimates in Figure 1 show that increases in anti-corruption action follow shortly after the arrival of a prosecutor and, with the exception of investigations, are generally sustained across time. This is relevant because it suggests that increases are not driven merely by an initial impulse or overcompensation for the previous absence of a prosecutor in the municipality, and that anti-corruption pressure fundamentally changes with prosecutor presence.

Multiple pieces of evidence lend support to the validity of the design. First, the pre-treatment DTEs are generally insignificant. Second, the F test for no pre-trend returns high p-values for all outcomes except investigations, as seen in the upper left corner of the plots. Third, ATT estimates are similar (in both substantive and statistical significance) using binary or logged measures of the outcomes (Appendix I) – with the exception of the result for the binary measure of investigations which is statistically insignificant. Fourth, placebo tests that re-estimate DTEs and the ATT assuming prosecutors arrive 1, 2 or 3 years before they actually do return statistically insignificant results (Appendix J). Fifth, tests for the no carryover assumption that re-estimate DTEs and the ATT assuming prosecutors stay 1 or 2 years after they actually depart also return insignificant results (Appendix K.) Finally, treatment effect estimates go towards zero and become statistically insignificant after the departure of the prosecutor, as shown in Figure 2. This suggests that it is indeed prosecutorial presence, and not a time-varying confounder, that explains the surges in enforcement documented in Figure 1.

Taken together, these results show that the presence of a prosecutor in a municipality leads to

an increase of anti-corruption enforcement targeted at the local government. These actions include not just investigations, but also recommendations and agreements. These extra-judicial agreements generate binding obligations for public officials to change management or policy decisions. These treatment effects suggest that presence makes it easier for prosecutors to detect malfeasance and highlight the role of physical presence for accountability and rule of law institutions.

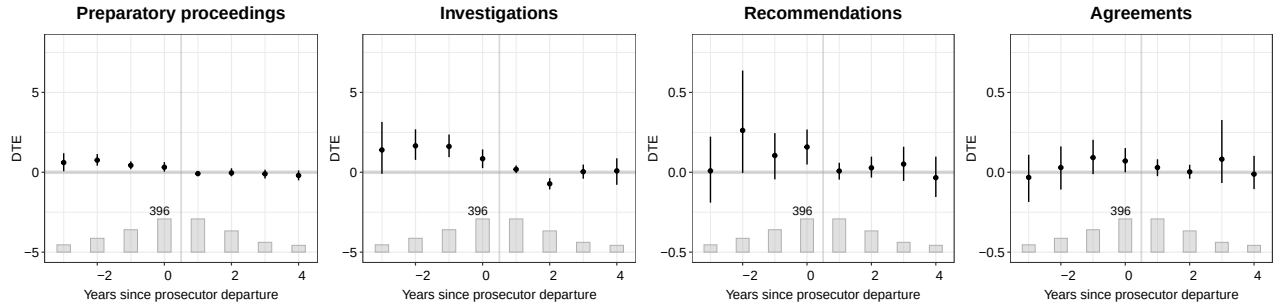
This is consistent with what some prosecutors reported in interviews. A prosecutor I interviewed in the state of Rio Grande do Norte said: "it makes a big difference if the prosecutor is in the district."[20] Unprompted about the issue, a prosecutor I interviewed in the state of Minas Gerais said: "if the prosecutor does not spend a lot of time in the district it can lead to trouble; the population needs to feel that their reports [of malfeasance of corruption] will be taken care of; [...] the prosecutor needs to understand the local reality and its political conflicts."[21] When I asked how physical presence helped throughout investigations, this prosecutor mentioned the collection and assessment of evidence and the negotiation of extra-judicial agreements. While municipalities without a prosecutor are covered by a prosecutor in a nearby district and have lower-level staff working locally, prosecutorial pressure and capacity is diminished. Several prosecutors I interviewed in Minas Gerais and São Paulo said that when a prosecutor is not present, the anti-corruption and public management area suffers most.

As an additional placebo test, I examine whether presence has any effect on prosecutorial enforcement in environmental issues. While Brazilian prosecutors are very active in the protection of the environment (McAllister, 2008), presence is arguably less importance in this area, for at least three reasons. but where presence is arguably less important, for at least two reasons. First, environmental malfeasance is more clearly visible. Second, violations of environmental laws often generate more directly affected parties that can activate prosecutor's and other protection agencies, when compared to corruption. Last, environmental malfeasance often occurs in rural areas (e.g., deforestation, pollution, or degradation of preservation areas), which would not be directly observable by prosecutors deployed to the municipality since they are stationed at the urban center. Consistent with presence being a key complement for anti-corruption work but not other areas of prosecutorial enforcement, I find null effects of presence on environmental preparatory proceedings, investigations, recommendations, and agreements (Appendix L).

These effects are also consistent with efforts by state prosecutor's offices to further extend

[20]Prosecutor interviewed in Rio Grande do Norte in June 2018.
[21]Prosecutor interviewed in Minas Gerais in November 2023.

Figure 2: Dynamic Treatment Effect Estimates of Prosecutor Presence, Relative to their Departure, on Anti-Corruption Actions



Observations are indexed relative to the time of prosecutor departure. See notes under Figure 1.

their presence throughout the territory, and ensure that prosecutors generally reside where they work. The state prosecutor's office of Minas Gerais, for example, has run a program since 2010 called "traveling prosecutor's office," which brings prosecutors, workshops, and events to small municipalities that are not a district headquarters. When the CNMP regulated the constitutional mandate for prosecutors to live in the district where they work, one of its members stated: "only the constant presence of the prosecutor, with their effective integration into the local social fabric, leads to the perception of issues affecting the community, enabling the appropriate representation of diffuse and collective interests" (CNMP, 2007).

5.2 Effects of Prosecutor Presence on Public Employment

Causal event study estimates of the effect of prosecutor presence on public employment decisions by local government official suggest that prosecutorial presures lead to meaningful changes in policy. In particular, results reported in this section show that the deployment of a prosecutor to a municipality increases the incidence in civil service hiring, to the detriment of temporary hiring.

The first two columns in Table 2 show that municipalities with a prosecutor present hire, on average, more bureaucrats in the civil service and less bureaucrats on temporary contracts, although these effects are not statistically significant. When examining effects on the share of hires in the civil service, a variable bounded between 0 and 1 and where functional form is likely less important for measuring the ATT, the design uncovers a positive and marginally insignificant effect. In particular, municipalities with a prosecutor present have on average a 1.6 percentage points higher prevalence of the civil service in new hires ($p = 0.08$), equivalent to an increase of

Table 2: Average Treatment Effect Estimates of Prosecutor Presence on Municipal Employment

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

$^{\cdot}$p<0.10; *p<0.05; **p<0.01; ***p<0.001. Each column presents the ATT estimates of prosecutor presence on the number of new civil service hires, the number of new temporary hires, the share of new hires in the civil service, and the share of employees in the civil service in the municipal bureaucracy, respectively. The block-bootstrap, municipality-clustered standard errors are in brackets. The mean outcome under control is the average of the dependent variable in municipality-year observations with a prosecutorial district headquarter but no prosecutor deployed to it.

about 0.04 standard deviations. The presence of the prosecutor also increases the overall share of municipal personnel with civil service contracts, likely as a result of not just hires but also dismissals and contract non-renewals of temporary employees. In particular, municipalities with a prosecutor present have on average a proportion of civil servants that is 2.1 percentage points higher ($p < 0.01$), equivalent to an increase of 0.07 standard deviations.

The dynamic treatment effects shown in Figure 3 suggests that the presence of the prosecutor leads to an increased preference for civil service hiring shortly after the arrival of the prosecutor. While the effects on new hires appear to plateau about 5 years after the arrival of the prosecutor, the effects on the stock of municipal employees increase with time. This, combined with the fact that civil service hires get tenure, suggests that the effects of presence on local bureaucracies are persistent.

These analyses with municipal employment outcomes also pass the validity tests. First, pre-treatment DTEs in Figure 3 are insignificant, and the F test for no pre-trend returns high p-values. Second, the results for binary and logged counts of civil service and temporary hires are statistically insignificant (except the one for the log of temporary hires), but all move in the same direction (Appendix I). Finally, the placebo and carryover effect tests are passed (Appendices J and K, respectively) – with the exception of the placebo test for the share of civil service hires and the carryover effect test for the share of personnel in the civil service.

A potential concern is that the estimates for the effect on the share of personnel in the civil service are biased by carryover effects, since this variable refers to the stock of employees rather

than the flows. However, effects on both the flow and the stock proportion of civil servants are large and significant when examining three states –in three different regions– that deploy prosecutors in a staggered fashion without reversals. This subsample of states is also relevant because it allows us to ignore the potential time-varying confounders of prosecutors' exits.

As shown in Appendix M, effects are stronger in the subsample of states where treatment adoption happens without reversals. In these cases, the arrival of a prosecutor leads to an increase of 8.1 points in the share of new hires in the civil service ($p < 0.01$) and of 8.2 points in the share of all employees who have civil service contracts ($p < 0.001$). These increases are equivalent to about 0.21 and 0.32 standard deviations of the distribution in municipalities that hold the district headquarter but lack a prosecutor. These larger treatment effect estimates in the subset of states with staggered adoption suggest that the positive estimates in Table 2 are not driven by treatment reversals and carryovereffects, which if anything appear to bring estimates closer to zero.

As an additional robustness check, I examine what happens in localities that gain a second prosecutor. When this happens, typically the two-prosecutor team distributes work by area (for instance civil versus criminal). The arrival of a second prosecutor can therefore be thought of as an increase in prosecutorial resources while keeping prosecutorial presence constant. As shown in Appendix N defining treatment as the arrival of a second prosecutor, using still the sample of states with staggered adoption, produces ATT and DTE estimates that are much closer to zero and statistically insignificant. This suggests that the effects reported in Table 2 and Figure 3 are driven by presence and not simply by a gain in prosecutorial resources.

These results suggest local government officials do respond to prosecutor presence and adjust their decisions in one of the most important dimensions of public management in this context – public employment. This is consistent with qualitative evidence from interviews with municipal bureaucrats and politicians who explained changes in hiring practices were driven by pressures from the state prosecutor's office. For example, two municipal school directors I interviewed in the southeastern state of Rio de Janeiro said that, while their school's teaching force had largely been on temporary contracts, the share of civil servants had increased significantly as a response to pressures from the state prosecutor in the locality.[22]

Public employment is often central to prosecutors' work on anti-corruption and public management. In interviews, prosecutors often highlight the importance of the civil service, and refer

[22]Municipal school directors interviewed in the state of Rio de Janeiro in February of 2017.

Figure 3: Dynamic Treatment Effect Estimates of Prosecutor Presence on Municipal Employment

Each subplot presents the estimated dynamic treatment effects (DTE) for switcher municipalities in each period (indexed relative to the year of prosecutor arrival) as a dot, and its block-bootstrapped 95% confidence interval as a vertical line. The bar plot at the bottom represents the number of treated units in each period. Periods where the number of treated observations is less than 15% of the number of observations at the period of prosecutor arrival are omitted from the subplots. The F test p-value reported in the upper left corner of each plot corresponds to the test of no pre-trend.

to processes to impose a civil service process and/or reduce the incidence of hiring through other modalities. This is also evident on administrative data. Of all the extra-judicial agreements on public management in the state of São Paulo, 43.5% include employment-related terms in their thematic classification.[23]

Three reasons make the effects of prosecutorial presence on civil service hiring meaningful. First, they imply a reduction in the prevalence of temporary hiring, which sometimes allows politicians to use public employment for private gain, be it by rewarding supporters (Colonnelli et al., 2020), building and sustaining legislative coalitions (Mignozzetti et al., 2025), or mobilizing supporters ahead of elections (Toral, 2025). Second, the growth in civil service hiring can further constrain local governments' ability to engage in corruption, both in the short- and long-term. For instance, when politicians have direct control over bureaucratic careers, it is easier for them to manipulate procurement processes (Charron et al., 2017; Brierley, 2020). Finally, having a larger share of the bureaucracy on civil service contracts has the potential to improve public service delivery (Aneja and Xu, 2024). A key mechanism connecting civil service contracts to government performance is that they lessen the connection between political and bureaucratic turnover, which has been shown to depress service delivery in Brazil (Akhtari et al., 2022; Toral, 2024b).

All in all, the fact that prosecutorial presence increases the incidence of civil service contracts

[23]These include terms for employee (*servidor, empregado*), temporary hiring (*temporário, cargo comissionado*), and civil service hires (*concursado*).

not just in new hires but also in the stock of municipal bureaucracies suggests that presence can transform local bureaucracies, reducing the space for patronage hires, insulating the municipal workforce from the impacts of political turnover, and potentially building capacity.

5.3 Effects of Prosecutor Presence on Corruption

If prosecutorial presence constraints malfeasance, we should observe that municipalities where a prosecutor is deployed have lower levels of corruption. This is hard to assess empirically because we lack reliable municipality-year measures of corruption. To overcome this challenge, I exploit variation in the timing of prosecutor arrival relative to that of federal audits conducted by the CGU. As measures of corruption I use the number of serious irregularities uncovered by CGU auditors, following Avis et al. (2018). In particular I use its log and indicators for whether the count is at least 1 or at least 3, which are the median and the third quartile of the count distribution.

In this design, I compare the level of corruption found by federal auditors in municipalities that had a prosecutor deployed to them in the year of the audit to the level of corruption found in localities that, while holding the headquarters of a prosecutorial district, did not have a prosecutor deployed to them in the year of the audit. I do so through a regression of the form $Y_{ma} = \beta D_{ma} + \varepsilon_{ma}$, where D_m is an indicator for whether municipality m had a prosecutor deployed to it in the year of audit a. With few exceptions, municipalities are only audited once in the states for which I have prosecutorial presence data.

I apply this comparison in three different samples. First, all audits that happen in municipalities that hold the headquarter of a prosecutorial district for which I have presence data. Second, given the prevalence of treatment reversals and the plausibility of carryover effects, I examine results in the subset of audits that occur in the three states with staggered adoption of treatment (see Appendix M). Finally, for a stricter comparison, I also restrict the comparison to audits that happen within a 2-year window before or after the arrival of a prosecutor, in municipalities with staggered adoption.[24]

The results, shown in Table 3, suggest that prosecutor presence does reduce the level of corruption uncovered by federal auditors. Regardless of what measure of corruption we look at,

[24]Results are similar when restricting the sample even further to municipalities audited the year of the prosecutor's arrival or the year immediately before.

Table 3: Effect of Prosecutor Presence on the Number of Corruption Instances Uncovered by Federal Auditors

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

·p<0.10; *p<0.05; **p<0.01. HC2 standard errors in brackets. The unit of analysis is the municipal-level audit, considering the results of the most recent yearly accounts examined by auditors (typically, those of the year of the audit). The independent variable is an indicator for whether a prosecutor was deployed to the municipality during the year of the audited accounts. The dependent variables are the logged number of serious irregularities (*falhas graves*) or acts of corruption uncovered by the federal auditors (after adding 1), and indicators for whether that number is at or above the median (1) or the third quartile (3) of its distribution.

there is a negative and large association between the corruption detected by federal auditors and the presence of a state prosecutor in the municipality. Focusing on the indicator for high levels of corruption, the presence of a prosecutor reduces in 0.23 the probability that the audits find a high number of serious irregularities ($p < 0.001$). This is a large reduction, equivalent to 0.45 standard deviations. Results are also negative and similar in size when restricting the sample to states with staggered adoption of treatment, although only the one for high levels of corruption is statistically significant, as shown in columns 2, 4 and 6 of Table 3. When restricting the sample even further to municipalities that were audited immediately before or after the arrival of a prosecutor, the association between presence and irregularities found is even larger.

While these results draw on a small sample in order to make the exogeneity of prosecutorial presence plausible, they suggest that presence has a large and negative effect on the number of irregularities uncovered by federal auditors. These audits, which are done by professional auditors deployed by the CGU, have been shown to reduce corruption (Avis et al., 2018; Ash et al., 2025), decrease temporary hiring (Lauletta et al., 2022), improve service delivery (Funk and Owen, 2020), and reduce child mortality (Ramos et al., 2024). The results reported here suggest that the presence of prosecutors in municipalities can meaningfully constrain corruption and thus, indirectly, could contribute to improve citizen welfare.

As a robustness check, I replicate the event study design from sections 5.1 and 5.2 using as outcome a machine-learning measure of predicted corruption produced by Ash et al. (2025). These researchers use about 800 features from municipal budget data for every year between 2001 to

2012 to construct municipality-year measures of predicted corruption in that period, using data from the findings of federal audits to train their model, and in particular using as label whether the auditors found at least one serious irregularity. The authors then go to validate their measure of corruption empirically and replicate famous studies of corruption in Brazilian municipalities with it. Because I observe prosecutorial presence prior to 2012 in only two states, this test is underpowered. Nonetheless, the event study design yields an ATT estimate of approximately -0.06 standard deviations ($p < 0.12$) – a smaller and marginally insignificant estimate, but substantively aligned with the findings in Table .3 using actual audit data.

5.4 Null Effects of Prosecutor Presence on Underspending of Municipal Budgets

An emerging literature in political science and public administration suggests that horizontal accountability pressures can lead to limited implementation and budget execution because they instill fear in political and bureaucratic decision makers. This has been documented for instance in the context of China's anti-corruption audits (Wang, 2022). In Brazil, scholars refer to the deleterious effects that pressures from accountability institutions by the label "pens' blackout" and point in particular to the prosecutor's offices as responsible for "administrative paralysis" ensuing from excessive, misguided, or counterproductive pressures (Viegas et al., 2024; Lotta and Monteiro, 2024).

Counter to those theories, causal event study estimates suggest that the gains in civil service hiring and reductions of corruption in municipal finances induced by prosecutorial presence do not come at the cost of depressed budget execution. Table 4 shows that prosecutor presence causes very small (of 0.03 standard deviations or less) and statistically insignificant increases in underspending of municipal budgets, be it in the continuous measures or on binary indicators for whether underspending is above the median or above the third quartile. The dynamic treatment effects are illustrated in Figure 4. Using as outcomes these three different measures of underspending, the design once again passes validity tests: pre-trends are generally null, placebo and carryover effect tests are passed (Appendices J and K), and results are similarly null in the subsample of states with staggered deployment (Appendix M).

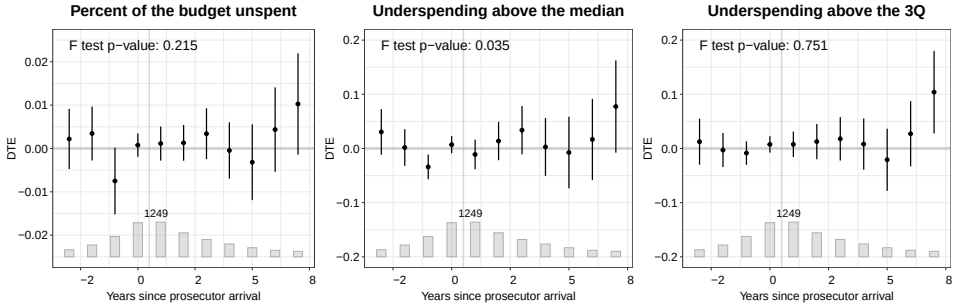
The null results presented here suggest that, in this context, the pressures stemming from prosecutorial presence do not seem to cause administrative paralysis, at least when it comes to the

Table 4: Average Treatment Effect Estimates of Prosecutor Presence on Underspending of Municipal Budgets

	Underspending (%)	Underspending > 2Q	Underspending > 3Q
$\widehat{\text{ATT}}$	0.002	0.008	0.007
	(0.002)	(0.014)	(0.012)
Mean outcome under control	0.069	0.497	0.249

*p<0.05; **p<0.01; ***p<0.001. Each column presents the ATT estimates of prosecutor presence on the share of the municipal budget left unspent and indicators for whether that figure is above the median and above the third quartile, respectively. The municipality-clustered standard errors are in brackets. The mean outcome under control is the average of the dependent variable in municipality-year observations with a prosecutorial district headquarter but no prosecutor deployed to it.

Figure 4: Dynamic Treatment Effect Estimates of Prosecutor Presence on Underspending of Municipal Budgets



Each subplot presents the estimated dynamic treatment effects (DTE) for switcher municipalities in each period (indexed relative to the year of prosecutor arrival) as a dot, and its block-bootstrapped 95% confidence interval as a vertical line. The bar plot at the bottom represents the number of treated units in each period. Periods where the number of treated observations is less than 15% of the number of observations at the period of prosecutor arrival are omitted from the subplots. The F test p-value reported in the upper left corner of each plot corresponds to the test of no pre-trend.

execution of the budget. One potential reason that would explain this finding is that prosecutor presence leads to more pressures but also, and critically, more locally targeted and relevant pressures. Through a combination of pressure and relevance, prosecutorial presence may avoid the paralysis effect hypothesized and shown in other contexts and treatments, and instead contribute to build capacity at the local level.

5.5 Additional Evidence on Mechanisms from a Survey of Politicians

Observational results from an online survey of local politicians provide additional evidence about the impacts of prosecutorial presence, consistent with the mechanisms outlined in Section 2.1. In particular, politicians in municipalities with prosecutorial presence report more meetings with prosecutors and are more likely to believe the prosecutor's office knows the local reality.

I did the survey in early 2019 in partnership with the audit court of the state of Rio Grande do Norte. The survey's primary purpose was to measure intermediate outcomes of a field experiment that randomized an information treatment sent by the state audit court (Toral, 2019), but I also included some questions about the state prosecutor's office. The survey was sent by the court to the mayor and secretaries of education, healthcare, social assistance, finance, and administration of all 167 municipalities in the state. 455 politicians from 142 municipalities completed the survey (including 50 mayors and 405 secretaries), for a response rate of 45% – a high value for a survey of elites.[25]

Correlational analyses reported in Table 5 suggest that politicians in municipalities where a prosecutor was present[26] were 25.7 percentage points more likely to report having held a meeting with a prosecutor in the previous three months ($p < 0.001$). This difference is equivalent to about half of a standard deviation. Politicians in municipalities where a prosecutor was present were 9.1 percentage points more likely to agree with the statement "the prosecutor's office knows the reality of this municipality" ($p < 0.05$), a difference of roughly a quarter of a standard deviation. On the other hand, there is no statistically significant difference in respondents' agreement about the statements "the prosecutor's office detects the management irregularities that take place in this municipality" or "I trust the prosecutor's office."[27]

These results suggest that presence increases contact between prosecutors and politicians. This may help prosecutors collect richer information about potential malfeasance and mismanagement, and induce accountability pressures on local government officials. The fact that politicians in

[25] Appendix Q has a link to the survey instrument, details on respondent recruitment and non-response, and descriptive statistics.

[26] I measure prosecutorial presence using payroll files from December 2018, gathered from the transparency portal of the prosecutor's office of Rio Grande do Norte.

[27] Results are similar when using the continuous rather than binary measures of the outcome, when controlling for municipality population, or when excluding municipalities with more than one prosecutor, although only the coefficient for meetings retains statistical significance (Appendix Q.3).

Table 5: 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***	0.091*	-0.044	-0.056
	(0.056)	(0.042)	(0.053)	(0.049)
Constant	0.337***	0.765***	0.613***	0.801***
	(0.034)	(0.027)	(0.031)	(0.026)
Observations	450	455	455	455
R^2	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 indicators for whether respondents report having met at least once with a prosecutor over the previous 3 months, and whether their 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."

municipalities with a prosecutor are not more likely to report that the prosecutor's office detects local irregularities, or that they trust the prosecutor's office, is consistent with the uneasy feelings about the prosecutor's office that local politicians often report in interviews. A former municipal secretary of administration in the state of Rio Grande do Norte said: "the prosecutor's office thinks it's almighty and wants to meddle in everything; they should run for election."[28]

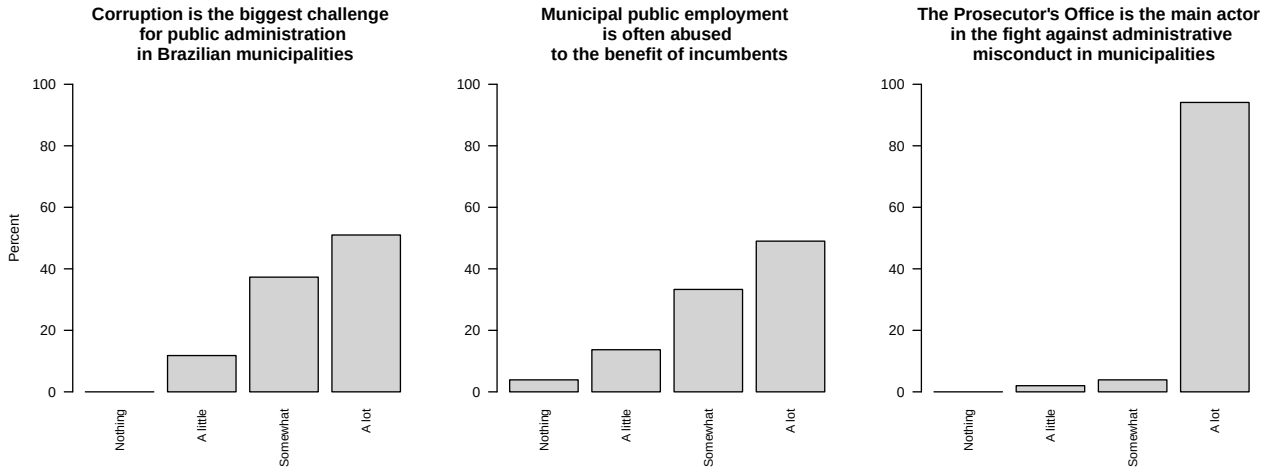
5.6 Additional Evidence on Mechanisms from a Survey of Prosecutors

A final set of empirical evidence suggestive of mechanisms comes from an online survey of prosecutors in the southeastern state of São Paulo (by far the one with a largest numbers of prosecutors). I collected the data between April and October of 2025, in partnership with the state's Prosecutor's Office. Prosecutors working on the area of anti-corruption and public assets were asked to participate in a voluntary and anonymous survey, first through internal channels of the Operational Support Center for Civil and Collective Interests, and later by email. A total of 51 prosecutors who work on the area of corruption and mismanagement, out of roughly 300, participated in the survey – yielding a response rate of roughly 17%.

As shown in Figure 5, prosecutors overwhelmingly see corruption and administrative misconduct

[28]Former municipal secretary of administration interviewed in Rio Grande do Norte in June of 2018.

Figure 5: Descriptive Results of the Survey of Prosecutors - Respondents' Agreement with Statements about Corruption in Brazilian Municipalities



Data come from survey responses by prosecutors in the state of São Paulo to the question "Thinking about the reality of the municipality or municipalities where you work, how much do you agree with the following statements?"

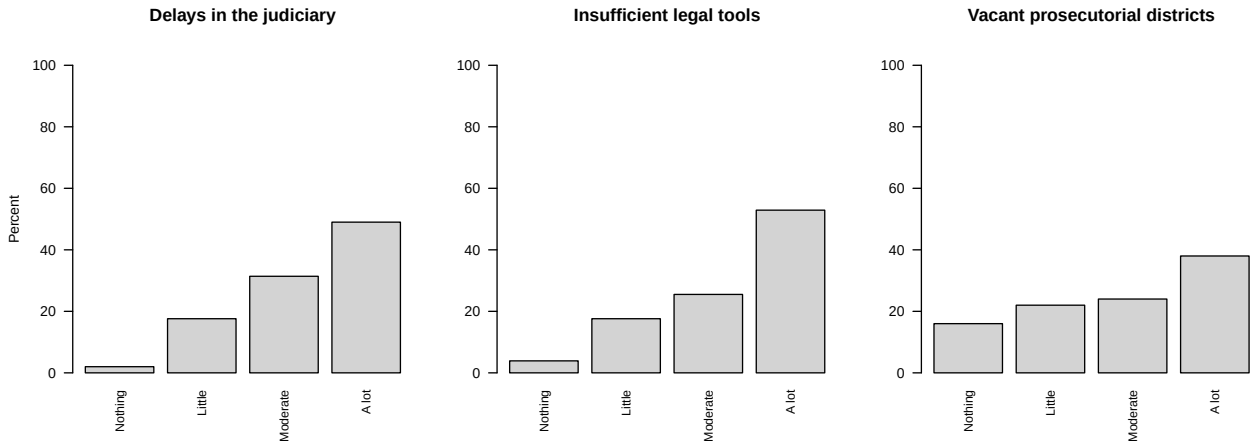
as a major problem, including in particular the abuse of public employment by incumbents, and see the prosecutor's office as having a leading role in the fight against it. These findings echo those from a recent nationwide survey of prosecutors (state and federal) working on all areas – in it, corruption was the most-often cited priority in their work after crime.

Second, as shown in Figure 6, many respondents see vacant prosecutorial districts as an important obstacle to the effectiveness of prosecutorial work against administrative misconduct. The share of surveyed prosecutors who see this as a major problem (38%) is lower than that corresponding to more classical constraints such as the insufficient speed of the judiciary (49%) or insufficient legal tools at prosecutors' disposal (53%). However, that share goes up to 55% among junior prosecutors, i.e. prosecutors in the first ranks of the career who are more likely to serve in the smaller districts of the interior of the state that drive the causal event study estimates in this paper.[29] Last but not least, 45% of respondents say they agree a lot with the statement "the prosecutor's office should expand its presence in municipalities in the interior."

Taken together, these descriptive results from a survey of prosecutors working on public assets

[29]The difference between junior and senior prosecutors is large and statistically significant for the statement on vacancies (0.28, $p < 0.05$), but negative and statistically insignificant for the other two items in Figure 6.

Figure 6: Descriptive Results of the Survey of Prosecutors - Respondents' Agreement with Statements about Obstacles in the Fight against Corruption



Data come from survey responses by prosecutors in the state of São Paulo to the question "In your view, to what extent do the following factors hinder the work of prosecutor offices in controlling administrative misconduct?"

suggest that they see corruption as a major challenge for local governance; that their institution has a central role to play in the fight against it; and that insufficient prosecutorial presence in the territory is an important obstacle in that endeavor. While these findings come from a small, non-probability sample of prosecutors, they provide quantitative data on prosecutors' attitudes which is in line with insights from in-depth interviews and which helps explain the results reported in Sections 5.1, 5.2 and 5.3.

6 Conclusion

Can autonomous, rank-and-file prosecutors effectively fight corruption? In an era when corruption dominates political debates and political leaders are increasingly accused or even convicted of corrupt acts (Da Ros and Gehrke, 2024), it is crucial to understand whether prosecutors are effective anti-corruption actors – and, if so, what enables their effectiveness. Yet rigorous evidence on prosecutorial effectiveness and its mechanisms remains scarce, especially outside the United States (where prosecutors are directly appointed by politicians or selected by voters) or beyond the high-profile anti-corruption crusades seen in Latin America. This paper addresses that gap by developing a theory of how independent prosecutors, endowed with exceptional discretion and autonomy,

can combat corruption – and why their physical presence within the communities they oversee strengthens this capacity.

I argue that, when meritocratically recruited and sufficiently insulated from political pressure, physical presence makes prosecutors more effective at fighting corruption because it allows them to better use their discretion, wide range of tools, and timeliness. First, presence facilitates access to information about potential malfeasance, be it through direct observations or investigations, or through reports by affected parties who face lower reporting costs. Second, presence enhances prosecutors' ability to exert both formal and informal pressure on local officials, be it through meetings, information requests, settlement agreements, recommendations, which can be better informed and targeted to the local environment as a result of presence. Third, prosecutorial presence can raise the sense of oversight among local government officials, who may perceive a higher probability of detection and of punishment. In sum, my argument is that physical presence enhances prosecutors' ability to fight corruption through both easier and better targeted actions and through deterrence.

I test this theory through a quasi-experimental study leveraging newly assembled administrative data about state prosecutors in Brazil which I scraped from the websites of the prosecutor's offices of 17 states covering about 90% of municipalities and residents int he country. I complement the data on the presence and behavior of prosecutors with detailed administrative data on municipal employment, spending, and corruption found by federal auditors. To identify the causal effect of presence, I leverage variation across municipalities and years in whether there is a prosecutor deployed to them and an imputation-based causal event study estimator that is unbiased and consistent under a strict exogeneity assumption (Liu et al., 2024).

Causal event study estimates demonstrate that prosecutor presence leads to a series of significant changes on anti-corruption enforcement and local governance. First, the deployment of a prosecutor leads to an increase in anti-corruption actions targeted at the local government, including investigations, recommendations, and extra-judicial agreements. Second, the deployment of a prosecutor raises the incidence of civil service hiring in the municipal bureaucracy, in line with legal mandates and strong norms among prosecutors that give precedence to civil service hiring to the detriment of temporary hiring (which previous research has shown is often abused for political purposes). Third, prosecutor presence is associated to a lower incidence of corruption found by federal auditors in municipal accounts. Fourth, these gains do not appear to come at the cost of administrative paralysis or slowed down implementation: prosecutor presence has small and statistically

insignificant effects on the underspending of municipal budgets.

Observational findings from original surveys of politicians and prosecutors provide additional evidence about mechanisms. In an online survey of local politicians in the northeastern state of Rio Grande do Norte, mayors and secretaries from municipalities where a prosecutor was present at the time were significantly more likely to report having recently met with a prosecutor and believing that the prosecutor's office knew the local reality. Participants in an online survey of prosecutors in the southeastern state of São Paulo see corruption as a major challenge, including the abuse of public employment, and see insufficient geographic presence as an important obstacle in the fight against it. I complement these findings with insights from in-depth interviews with politicians and prosecutors.

The paper makes three key contributions. First, it articulates a theory of why prosecutors can be effective anti-corruption actors, and why physical presence can be a powerful complement to their institutional strength. Second, the paper provides causal evidence of the effect of prosecutorial presence on a series of relevant outcomes – anti-corruption actions, public employment in the local government, and corruption as measured by federal audits. More generally, this paper presents plausibly causal evidence of the effects of prosecutor's offices on anti-corruption efforts and on corruption, thus highlighting how autonomous prosecutors can make a difference on local governance. As far as I know, this is the first quasi-experimental study to present evidence on prosecutor effectiveness outside the United States, a context marked by the political selection of prosecutors.

The theoretical argument and empirical results of this paper have three key implications for policy reformers seeking to improve government accountability. First, the paper suggests empowering autonomous prosecutor's offices may be an effective way to deter corruption at the local level. Second, it suggests that efforts at decentralizing autonomous prosecutor's offices may lead to important gains in effectiveness. More generally, the results presented here suggest the internal organization and relational capacity of rule of law institutions may be an important complement to their independence and capacity. In cases where accountability actors are sufficiently insulated from political pressures, decentralizing rule of law institutions may help improve governance and build local state capacity.

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Appendices

A Additional Details on In-Depth Interviews

In-depth interviews with local actors gave rise to the hypotheses tested in this article, but many of them were part of a larger empirical study of patronage in Brazil. Over 19 months of fieldwork in the period 2016-2023, I conduced 133 in-depth, semi-structured interviews with municipal bureaucrats and politicians, prosecutors, with other accountability actors. I recruited interviewees at their offices, and collected their oral consent after providing information about the research project and their rights as participants. I conducted interviews in Portuguese, face-to-face, and at the interviewee's office. I chose not to record interviews because some of the topics discussed were highly sensitive, including corrupt and illegal uses of public employment. While recording interviews would have allowed for more complete transcripts, it would have seriously hindered the reliability of the data and subjects' willingness to participate. Some subjects agreed to participate on the condition of anonymity or confidentiality. When quoting interviewees, I specify only their position, the state, and the month of the interview in order to safeguard their identity. In total, I interviewed 51 municipal politicians, 59 municipal bureaucrats, and 23 horizontal accountability actors.[30] Interviews were done in 45 municipalities in 7 states across 3 different regions of Brazil.[31] Locations were chosen to ensure diversity in political and socioeconomic variables.

Within each municipality, fieldwork focused on the center, where government offices are. I approached potential interviewees at their offices and requested an interview after introducing myself and the research project. No compensation of any sort was offered or given to participants. Most subjects I spoke to directly agreed to participate.[32] Interviews were semi-structured, and usually started as an open conversation about the interviewee's background, the challenges they faced in their position, and their perception of public services in the municipality. As the conversation advanced, I followed up with questions about the local dynamics of public employment, including, in some cases, specific questions about the connection between political turnover, bureaucratic turnover, and public service delivery. I took handwritten notes during and after the interviews. The median duration of interviews was one hour.

[30] 41 of of the 59 politicians were secretaries. 46 of the 54 bureaucrats were school directors, clinic managers, and social assistance center coordinators. Of the 23 horizontal accountability actors, 15 were state prosecutors.

[31] Interviews were done in the states of Ceará (43 interviews), Rio Grande do Norte (21), Paraíba (15), Pernambuco (1), Rio de Janeiro (19), Minas Geráis (10), São Paulo (3), and Goiás (12).

[32] Some refused, mostly arguing they did not have time. Two refused due to the research topic.

B Additional Details on the Design of Brazil's State Prosecutor's Offices

This appendix reports additional details on the design of Brazilian state prosecutor's offices, highlighting their relevance for the autonomy and capacity of prosecutors and for the validity of the design.

B.1 Selection

Prosecutors are selected through highly competitive, merit-based civil service examinations. To enter the selection process, candidates must be Brazilian citizens, have an undergraduate law degree, and have at least three years of professional legal experience (Article 129 of the Constitution). The selection process includes written and oral tests on law, and are generally seen as objective and free from manipulation. A recent study of Brazilian judges, who are selected through a very similar civil service examination process, has shown that performance in these tests is associated with on-the-job performance (Dahis et al., 2025).

B.2 Deployment

Prosecutors are expected to live in the district to which they are deployed. This is established in article 129 of the Constitution and Article 43 of Law 8,625. This obligation was further developed in Resolution 26 of the CNMP (available at https://www.cnmp.mp.br/portal/images/Resolucoes/Resoluo-0261.pdf), which allows for extraordinary exceptions when authorized by the state's chief prosecutor. As a result, most prosecutors do reside in the district where they work.

In the northeastern state of Ceará, for which I have data for authorizations to live outside of the district, only 56 out of 453 prosecutors (12.4%) are authorized to live in a different district, as of May 2023.

B.3 Tenure

Once selected, and after a two-year probationary period, prosecutors are appointed for life. Tenured prosecutors can only lose the job after a court ruling, in cases of crimes deemed incompatible with their role (Article 38 of Law 8,625).

Prosecutors cannot be removed from their post – once they take an office anywhere in the state, they cannot be forced to leave it. The only exception would be if a majority of the state prosecutor's office board, the *Conselho Superior do Ministério Público*, voted in favor of moving a colleague based on reasons of public interest (Article 128 of the Constitution).

B.4 Promotions and Careers

Prosecutors advance in their careers (and move towards more desirable posts if they so desire) based mostly on seniority and the availability of posts. When there are vacant posts to be filled, state prosecutor's offices issue a public call for promotion or transfer. These calls are decided alternately on the criteria of seniority or merits. In practice, most calls based on merit are decided based on seniority, given the difficulty of assessing merits. In any case, merits are assessed on objective criteria and assessments are public (Resolution 244 of the CNMP, available at https://www.cnmp.mp.br/portal/images/Resolucoes/2021/Resoluo-n-244-2022.pdf). The criteria for each call, the candidates, their ranking, and ranking criteria are all public on the internal prosecutor's office website, allowing prosecutors to monitor the process.

Prosecutors' careers are typically organized in three main ranks. After being selected, entrants are typically appointed as "substitute prosecutors" (*promotores substitutos*), essentially being deployed for short periods of time to work somewhere with a particularly high demand, either on their own or supporting more experienced prosecutors. After two years, they are given tenure and promoted to prosecutors (*promotores titulares*). Their first deployment is to an a entry-level district (*comarca de entrância inicial*). These are typically small districts grouping several municipalities, with low or no level of specialization, and where there is often only one prosecutor. Then, based on the availability of posts, seniority, and merits, prosecutors can move to other entry-level districts or be promoted to medium-level districts (*comarcas de entrância intermediária*) in larger municipalities with more complexity and specialization. Later they can also be promoted to final-level districts (*comarcas de entrância final*), typically in the state capital and sometimes in other large cities.

Senior prosecutors can opt to be promoted (based on seniority, merits, and sometimes an internal examination) to the senior-level rank of *procurador*. The main difference is that *procuradores* can act before high-level courts, while *promotores* cannot.

B.5 Pay

Fifth, prosecutors enjoy very high salaries. For example, in 2020, prosecutors in the southeastern state of Minas Gerais were paid an average net monthly salary of over 41,000 Brazilian reais (about 8,000 US dollars with the exchange rate at the time). Salaries vary with seniority. For instance, entry-level prosecutors (*promotores substitutos*) were paid, on average, about BRL 33,000, whereas prosecutors at the top of the career (*procuradores*) received on average BRL 47,000. These figures are from complete individual payroll reports obtained from the transparency portal of the state prosecutor's office. The averages reported here include base salary as well as extras and benefits, and are net of income tax withholdings.

High salaries and other privileges that prosecutors enjoy make it harder for them to be captured by political elites or by special interest, and ensure a long-term commitment to the career. Consistent with this, Boylan and Long (2005) show with data from the United States that, in districts where the private sector pays higher salaries, assistant US attorneys are more likely to take cases to court as a way to gain trial experience in order to get a job in the private sector. They also show that, in those districts, assistant US attorneys have higher turnover rates.

Prosecutors are forbidden from engaging in any partisan or political activity, charging any legal fees, or having any participation in firms (except as a stockholder), as per article 128 of the Constitution.

B.6 Leadership

Chiefs of state prosecutor's offices (so-called *Procuradores-Gerais de Justiça*) are selected by the governor (the head of the state's executive power) from a list of three prosecutors resulting from an internal election where only prosecutors vote.

B.7 Anti-Corruption Actions

I examine four types of anti-corruption action taken by state prosecutors: civil investigations, recommendations, and extra-judicial agreements.

Preparatory proceedings (*procedimentos preparatórios*) are preliminary investigations to gather evidence and examine the facts and potential for prosecutorial action. Preparatory proceedings may last up to 180 days, as per the 2017 Resolution 23 of the CNMP (available at https://www.cnmp.mp.br/portal/images/Normas/Resolucoes/Resoluo-0232.pdf).

Civil investigations (*inquéritos civis*), are more formal, the affected parties are generally notified (except when the law allows for confidentiality), and can be extended for longer periods of time. Civil investigations may last up to 2 years (Resolution 23 of the CNMP). At any point during preparatory proceedings or civil investigations, the prosecutor may archive the case or file a public civil action (*ação civil pública*) in court.

Both preparatory proceedings and formal investigations can be established at the discretion of the prosecutor, unprovoked or after a request from an affected party. Requests to establish an investigation may be declined by the prosecutor in writing with a justification.

Recommendations (*recomendações*), which can be issued in the context of preparatory proceedings or civil investigations, request that a party (e.g., a mayor) do or cease to do something to ensure compliance with the law. In urgent cases, recommendations can also be issued before the establishment of preparatory proceedings or a civil investigation (Resolution 28 of the CNMP, available at https://www.cnmp.mp.br/portal/images/Resolucoes/Resolu%C3%A7%C3%A3o-164.pdf. Recommendations must include a rationale, a specific action requested, an a deadline. Recommendations sometimes also include the consequences that not following it may have.

Extra-judicial agreements (*termos de ajustamento de conducta*, TACs) are negotiated and, once signed, are binding.Once signed, TACs have the same executive force as a court order. They are similar to the consent decrees used by prosecutors in the United States.Agreements must contain specific obligations and a daily fine the affected party will be subject to for breaches after the deadline. Agreements are intended to enhance public officials' compliance with the law and compensation for damages (including financial damage to government budgets), while avoiding the slow and costly procedures of a public civil action in court.

C Location and Descriptive Statistics of States in the Sample

Figure 7: States Included in the Dataset

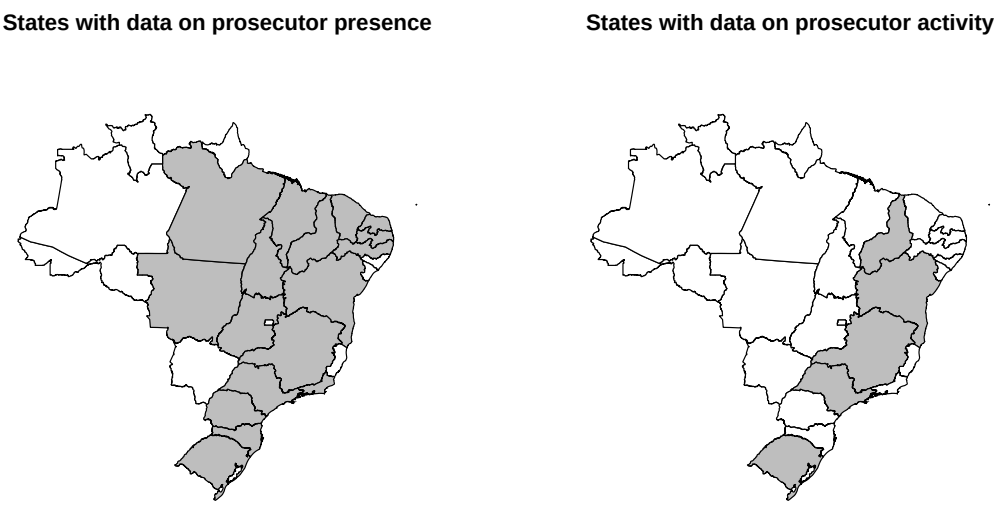


Table 6: Descriptive Statistics of the States Included in the Dataset

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	

Population figures correspond to the 2022 census. Figures on municipalities, prosecutorial districts, and prosecutors refer to 2020.

Figure 8: Number of Prosecutors by State and Year

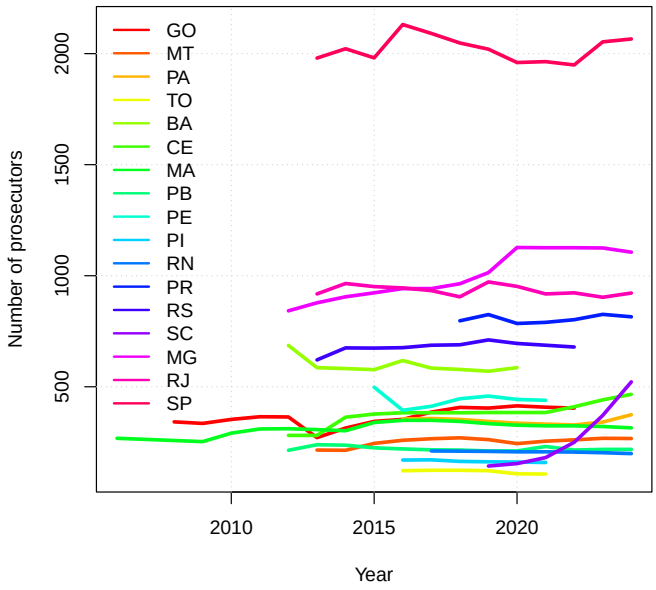
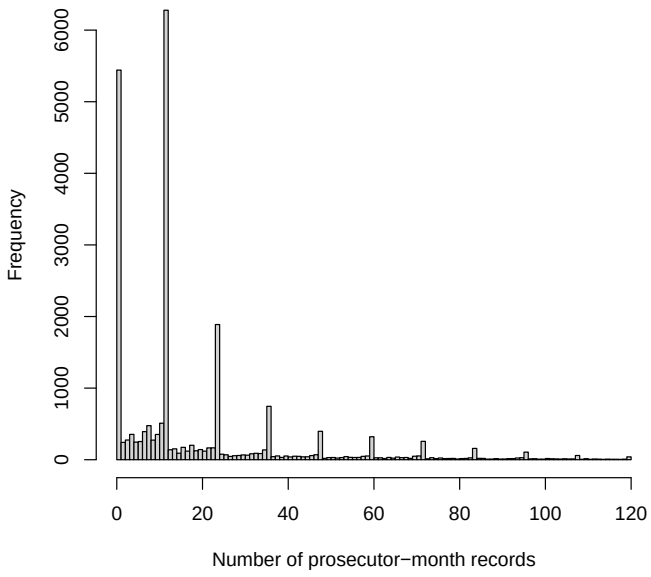


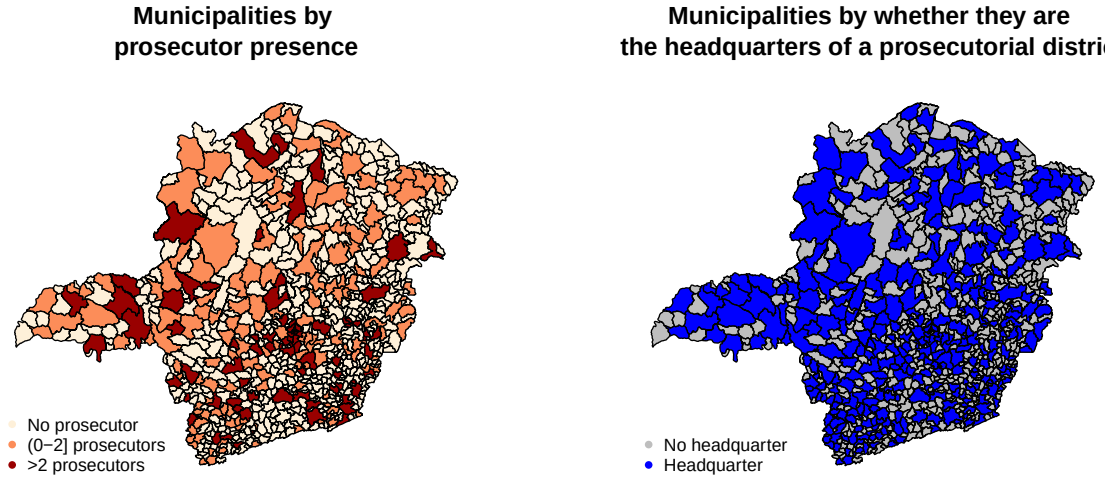
Figure 9: Number of Prosecutor-Month Records in Municipality-Year Observations with Presence Data



The range of the histogram is capped at the equivalent of 10 full-time prosecutors (120 prosecutor-month records).

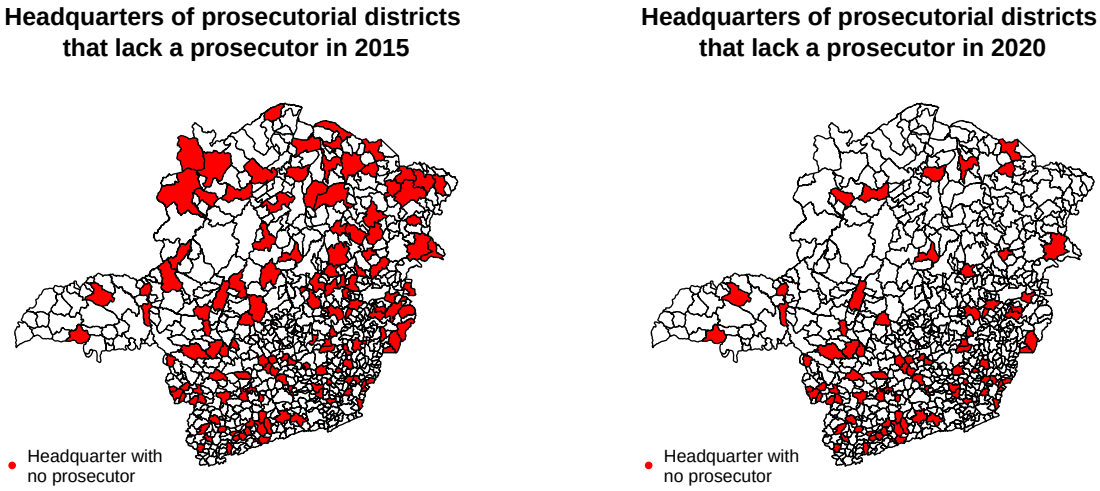
D Illustration of Treatment Variation in One State

Figure 10: Prosecutorial Presence and District Headquarters in the State of Minas Gerais in 2020



Prosecutor presence is measured with monthly payroll files. For every municipality, I count 1 prosecutor present for every 12 monthly payroll records of a prosecutor deployed to it.

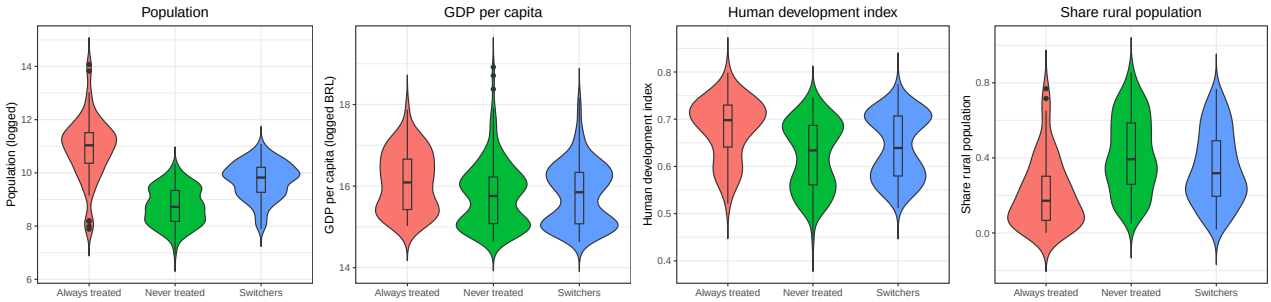
Figure 11: Absence of Prosecutors in District Headquarters in Minas Gerais in 2015 and 2020



Prosecutor presence is measured with monthly payroll files. I consider a municipality lacking a prosecutor when there are fewer than 12 monthly payroll records of a prosecutor deployed to it.

E Municipality Covariates by Treatment Group

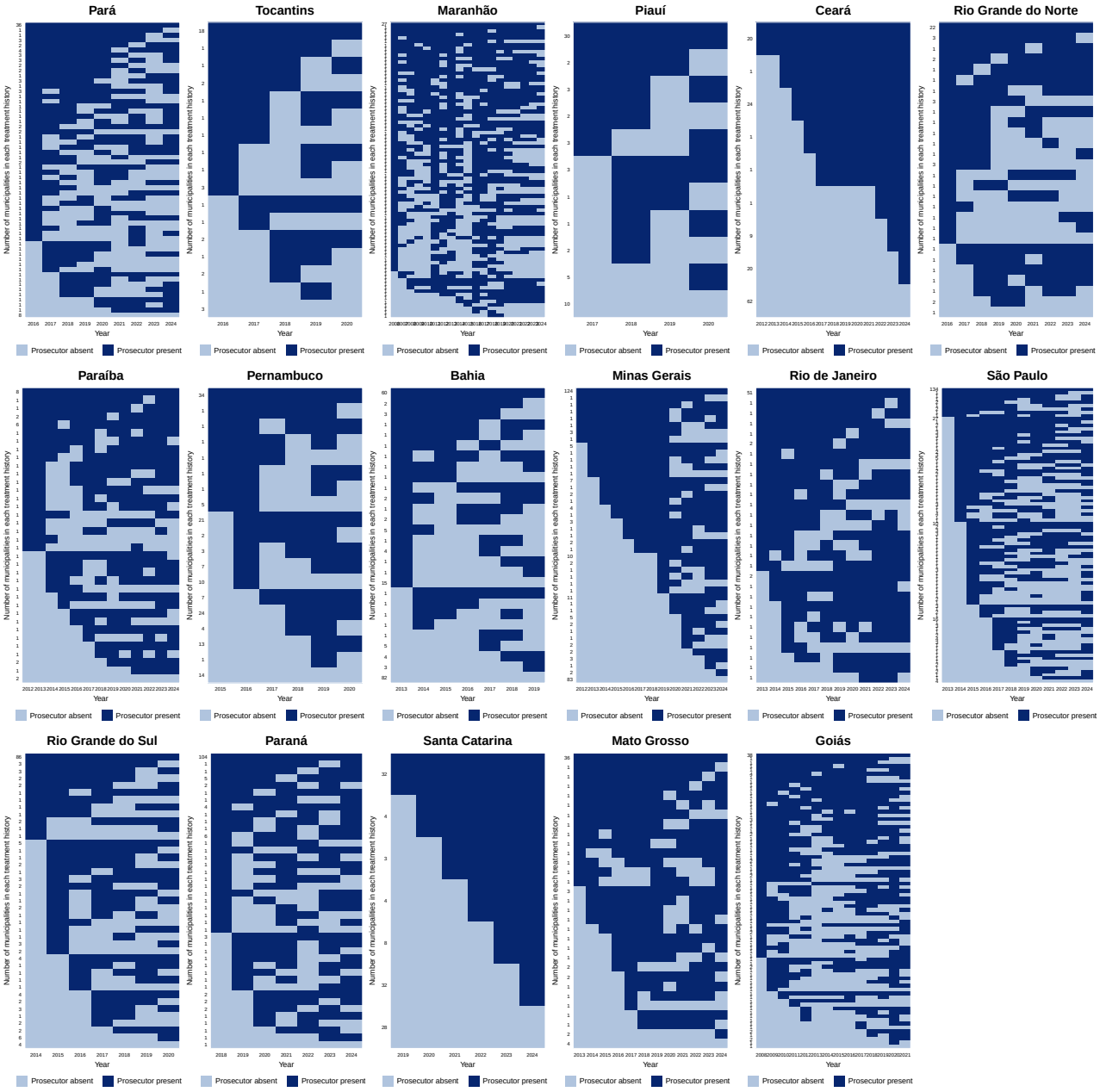
Figure 12: Distribution of Municipal Characteristics by Treatment Group



Distributions in red, green and blue correspond to always-treated, never-treated, and switcher municipalities, respectively. Covariates are from the Human Development Atlas published by UNDP, and correspond to 2010.

F Treatment Histories in the Sample

Figure 13: Treatment Status Changes across the States in the Sample



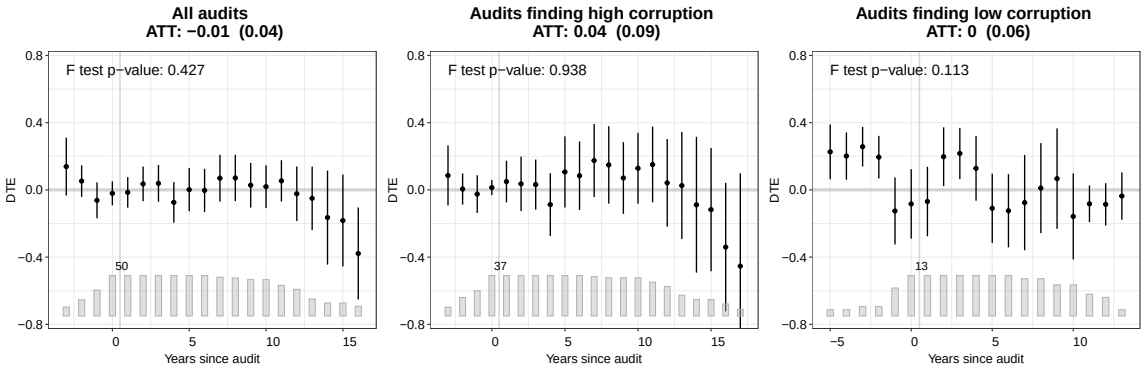
Each row in each subplot corresponds to a unique treatment history in that state, which, in turn, often corresponds to multiple municipalities. Darker (lighter) cells correspond to treated (untreated) observations, i.e., municipalities where a prosecutor is (not) present. Excludes municipalities that do not hold the district headquarters.

G Effect of Federal Anti-Corruption Audits on Prosecutor Presence

Brazil's federal comptroller's office (CGU, *Controladoria-Geral da União*) performed randomized anti-corruption audits of municipal governments between 2008 and 2015.[33] The CGU releases the results of the audits to the media and to other accountability actors like the federal prosecutor's office, the audit court, and the police, as well as to the municipal legislative chamber. These randomized audits, which are performed by highly professionalized federal bureaucrats, have been found to to decrease corruption and increase the chances that mayors will be prosecuted for corruption charges (Avis et al., 2018).

Figure 15 shows that federal anti-corruption audits, which can be understood as an exogenous revelation of the municipality's level of corruption, have no effect over the deployment of state prosecutors. This is true even for audits that end up finding high levels of corruption.[34] While few observations in my sample are exposed to an audit and therefore these tests may be underpowered, the estimated ATTs are all close to zero.

Figure 14: Dynamic and Average Treatment Effects of Federal Anti-Corruption Audits on Prosecutor Presence



Each subplot presents the estimated dynamic treatment effects (DTE) for audited municipalities in each period (indexed relative to the year of the audit) as a dot, and its block-bootstrapped 95% confidence interval as a vertical line. The bar plot at the bottom represents the number of treated units in each period. Periods where the number of treated observations is less than 15% of the number of observations at the audit period are omitted from the subplots. The F test p-value reported in the upper left corner of each plot corresponds to the test of no pre-trend.

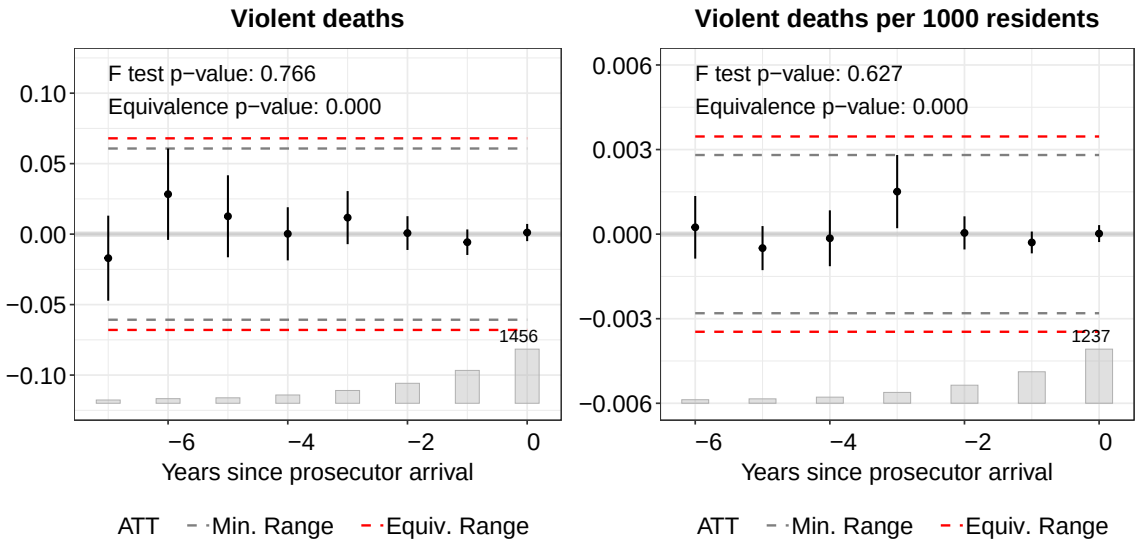
[33]Since 2015, some audits are targeted to municipalities with higher corruption risks – audits since that date are therefore excluded from these analyses.

[34]I follow the standard approach in the literature and measure corruption findings by counting "serious faults" (Avis et al., 2018), and classify municipalities as low (high) corruption if that number is below (at or above) the median.

H Tests for Pretrends in Violent Deaths

The plots below show there are no significant pretrends in either the absolute number of violent deaths or the rate per 1,000 residents in the lead-up to the arrival of the prosecutor. They do so using the two tests proposed by Liu et al. (2024): a standard F-test for all pre-trends being jointly equal to zero, and a more demanding equivalence test for whether any estimated ATTs are outside the range of 0.36 standard deviations of the residualized outcome (after partialling out the two-way fixed effects).

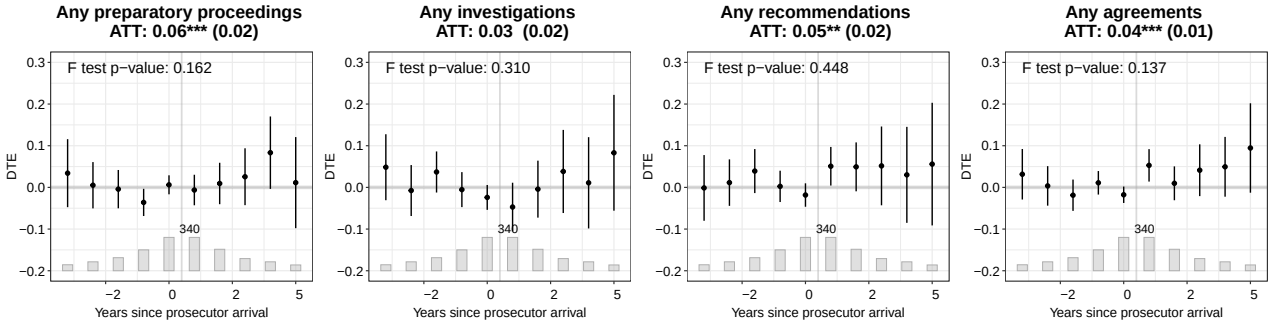
Figure 15: Pretrend Tests in Violent Deaths in the Lead-Up to Prosecutor Arrival



Each subplot presents the estimated Average Treatment Effect on the Treated (ATT) and 90% confidence intervals, by year, relative to prosecutor arrival. The *F*-test and equivalence *p*-values shown in the upper-left corner correspond to two complementary tests for the presence of pre-trends. The *F*-test assesses whether all pre-treatment ATT estimates are jointly equal to zero, while the equivalence test evaluates whether any of them fall outside a predefined range of negligible effects.

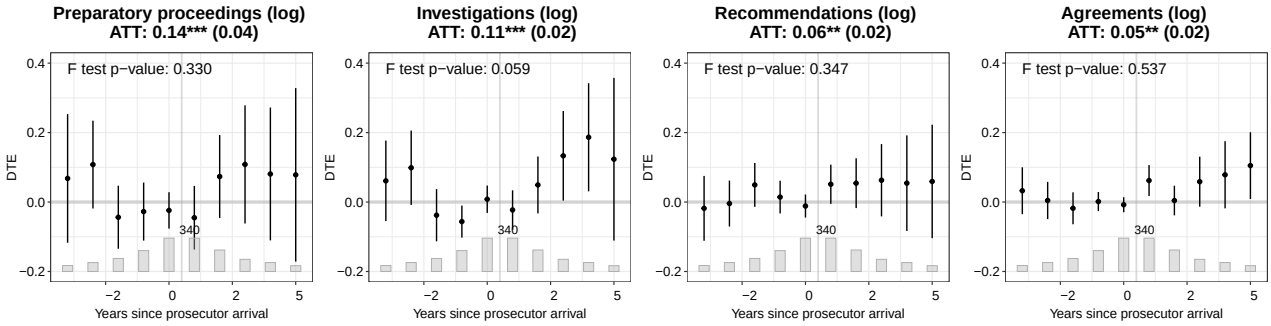
I Alternative Specifications of Outcomes

Figure 16: Dynamic and Average Treatment Effects of Prosecutor Presence on Anti-Corruption Action: Binary Outcomes



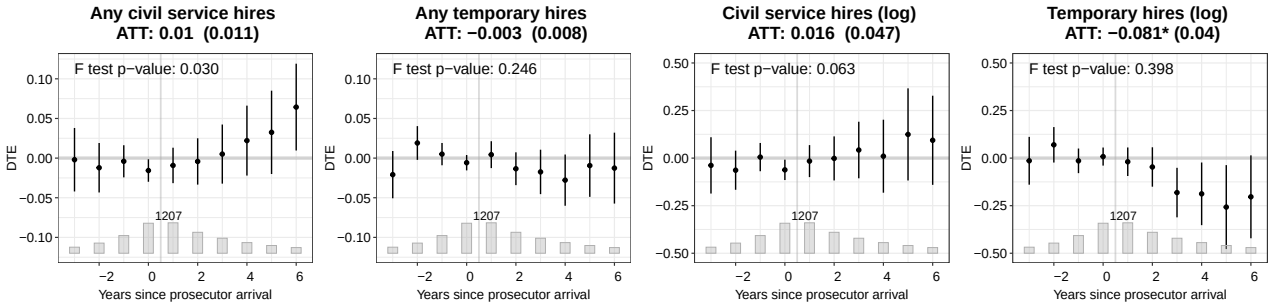
See notes under Figure 1.

Figure 17: Dynamic and Average Treatment Effects of Prosecutor Presence on Anti-Corruption Action: Logged Outcomes



See notes under Figure 1.

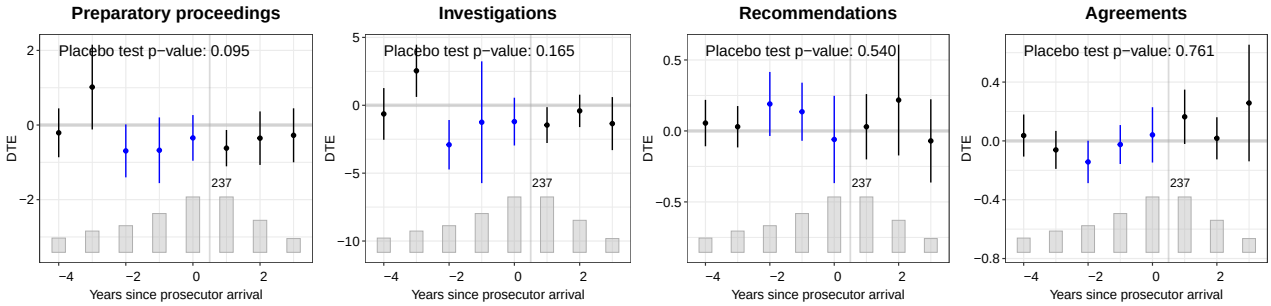
Figure 18: Dynamic and Average Treatment Effects of Prosecutor Presence on New Hires: Binary and Logged Outcomes



See notes under Figure 3.

J Placebo Tests

Figure 19: Placebo Tests for the Effect of Prosecutor Presence on Anti-Corruption Actions

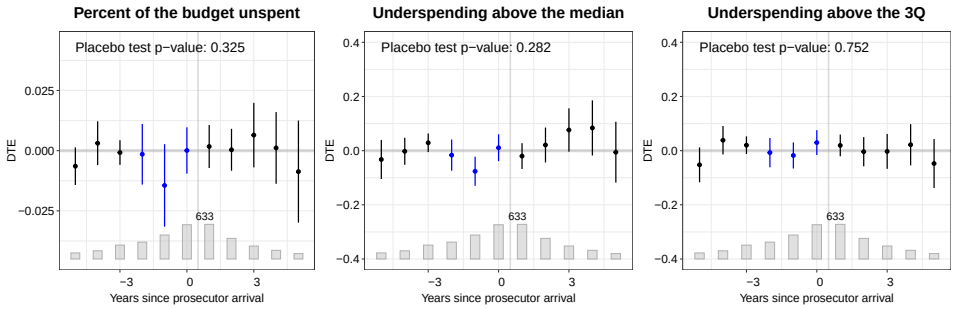


Bars and confidence intervals in blue (2, 3 and 1 years before actual prosecutor arrival) correspond to placebo tests. Each subplot presents the estimated dynamic treatment effects (DTE) for switcher municipalities in each period (indexed relative to the year of prosecutor arrival) as a dot, and its block-bootstrapped 95% confidence interval as a vertical line. The bar plot at the bottom represents the number of treated units in each period. Periods where the number of treated observations is less than 15% of the number of observations at the period of prosecutor arrival are omitted from the subplots.

Figure 20: Placebo Tests for the Effect of Prosecutor Presence on Municipal Employment

See notes under Figure 19.

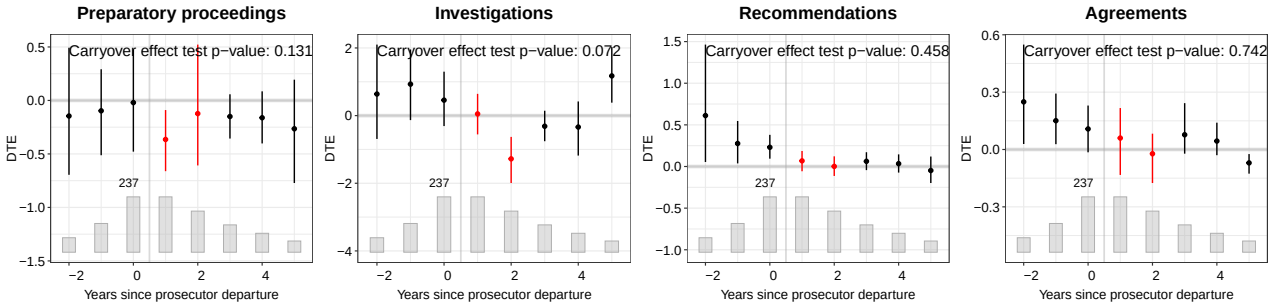
Figure 21: Placebo Tests for the Effect of Prosecutor Presence on Underspending of Municipal Budgets



See notes under Figure 19.

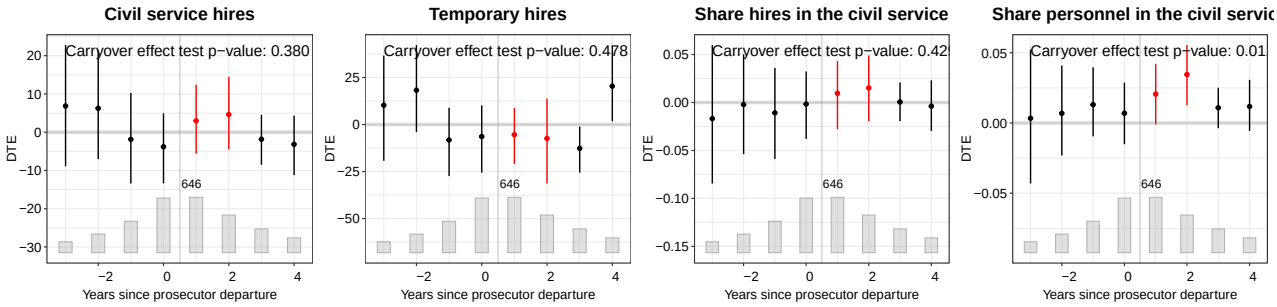
K Carryover Tests

Figure 22: Carryover Tests for the Effect of Prosecutor Presence on Anti-Corruption Actions



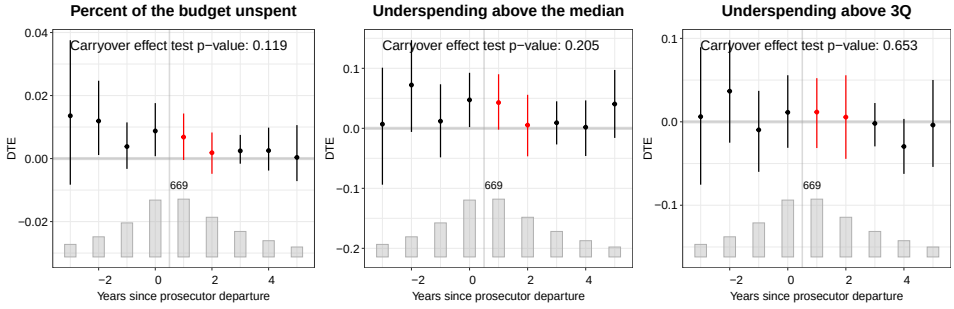
Bars and confidence intervals in red (1 and 2 years after actual prosecutor departure from a treated municipality) correspond to carryover tests. Observations are indexed relative to the time of actual prosecutor departure. Each subplot presents the estimated dynamic treatment effects (DTE) for switcher municipalities in each period (indexed relative to the year of prosecutor departure) as a dot, and its block-bootstrapped 95% confidence interval as a vertical line. The bar plot at the bottom represents the number of treated units in each period. Periods where the number of treated observations is less than 15% of the number of observations at the period of prosecutor arrival are omitted from the subplots.

Figure 23: Carryover Tests for the Effect of Prosecutor Presence on Municipal Employment



See notes under Figure 22.

Figure 24: Carryover Tests for the Effect of Prosecutor Presence on Underspending of Municipal Budgets



See notes under Figure 22.

L Null Effects of Prosecutor Presence on Enforcement in Environmental Issues

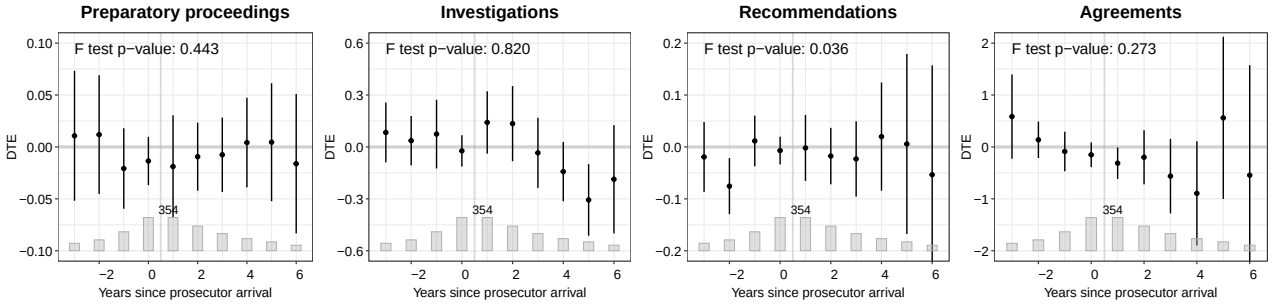
The table and plot below replicate the analyses examining the effects of prosecutorial presence on enforcement, but focusing on environmental issues rather than anti-corruption.

Table 7: Average Treatment Effect Estimates of Prosecutor Presence on Environmental Actions

	Proceedings	Investigations	Recommendations	Agreements
$\widehat{\text{ATT}}$	-0.021	0.058	0.026	-0.281
	(0.018)	(0.066)	(0.031)	(0.252)
Mean outcome under control	0.069	0.302	0.073	0.885

*p<0.05; **p<0.01; ***p<0.001. Each column presents the ATT estimates of prosecutor presence on the number of preparatory proceedings, civil investigations, recommendations, and extra-judicial agreements, respectively, on issues related to the environment. The municipality-clustered standard errors are in brackets. The mean outcome under control is the average of the dependent variable in municipality-year observations with a prosecutorial district headquarter but no prosecutor deployed to it.

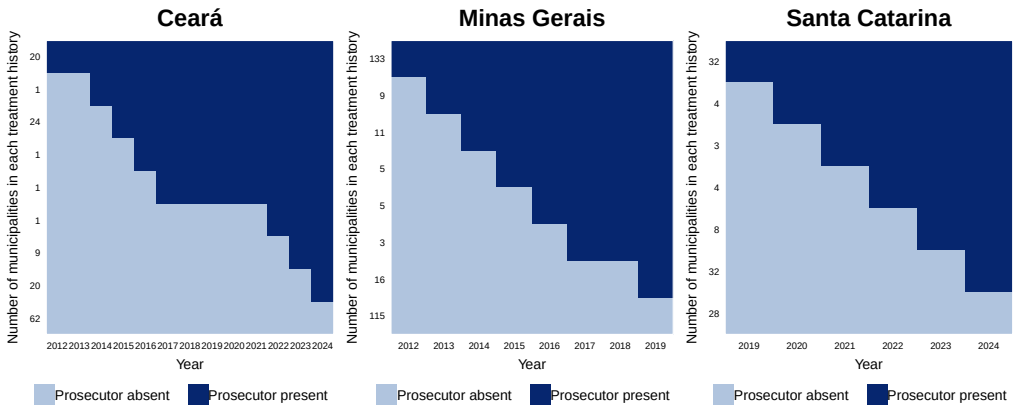
Figure 25: Dynamic Treatment Effect Estimates of Prosecutor Presence on Environmental Actions



Each subplot presents the estimated dynamic treatment effects (DTE) for switcher municipalities in each period (indexed relative to the year of prosecutor arrival) as a dot, and its block-bootstrapped 95% confidence interval as a vertical line. The bar plot at the bottom represents the number of treated units in each period. Periods where the number of treated observations is less than 15% of the number of observations at the period of prosecutor arrival are omitted from the subplots. The F test p-value reported in the upper left corner of each plot corresponds to the test of no pre-trend.

M Effects of Prosecutor Presence on Public Employment and Underspending in States with Staggered Deployment of Prosecutors

Figure 26: Treatment Status Changes across the States in the Sample with Staggered Adoption



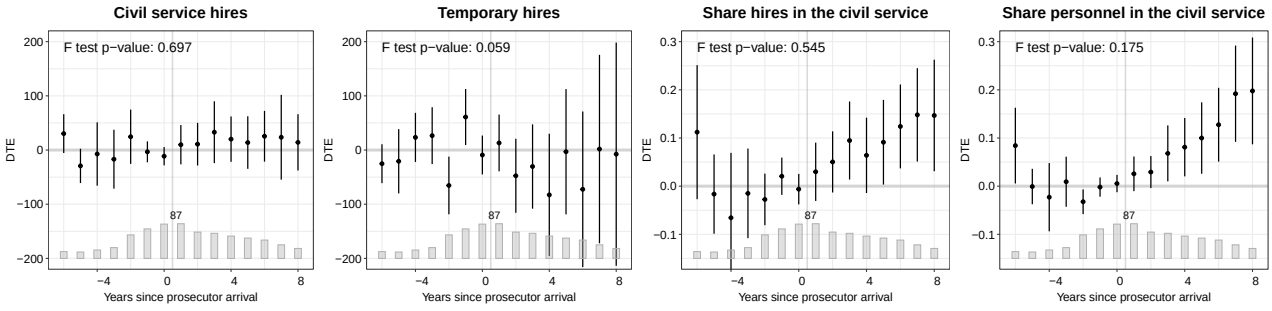
See notes under Figure 13.

Table 8: Average Treatment Effect Estimates of Prosecutor Presence on the Hiring of Municipal Bureaucrats - States with Staggered Adoption

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

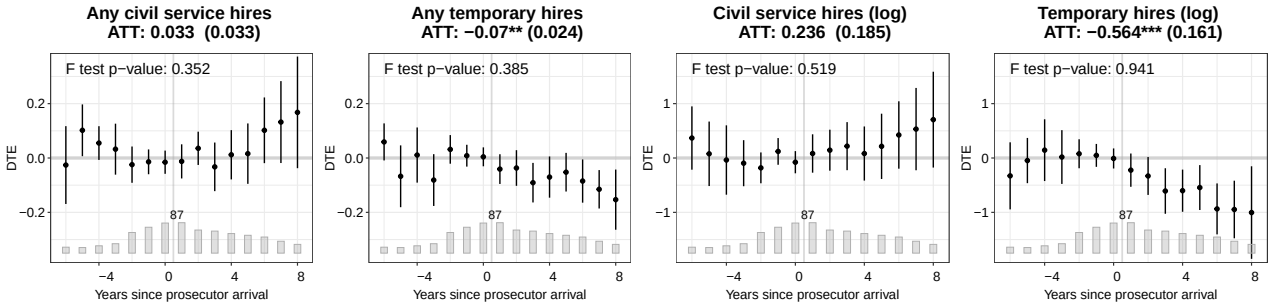
˙p<0.10; *p<0.05; **p<0.01; ***p<0.001. See notes under Table 2.

Figure 27: Dynamic Treatment Effect Estimates of Prosecutor Presence on Municipal Employment - States with Staggered Adoption



See notes under Figure 3.

Figure 28: Dynamic and Average Treatment Effects of Prosecutor Presence on New Hires: Binary and Logged Outcomes - States with Staggered Adoption



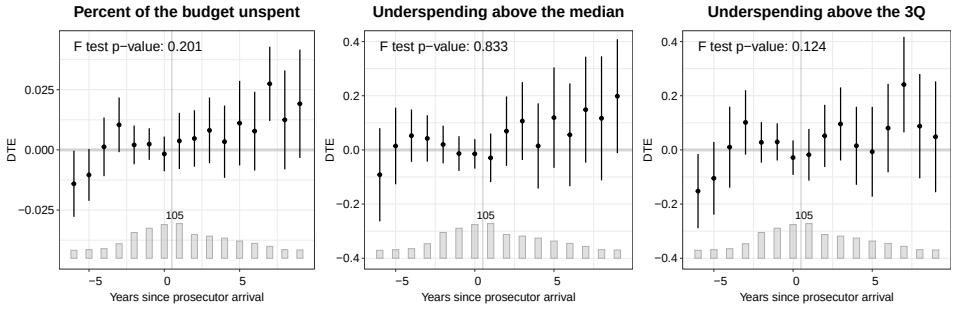
See notes under Figure 3.

Table 9: Average Treatment Effect Estimates of Prosecutor Presence on Underspending of Municipal Budgets – States with Staggered Adoption

	Underspending (%)	Underspending > 2Q	Underspending > 3Q
$\widehat{\text{ATT}}$	0.009	0.063	0.049
	(0.005)	(0.056)	(0.048)
Mean outcome under control	0.082	0.636	0.334

*p<0.05; **p<0.01; ***p<0.001. Each column presents the ATT estimates of prosecutor presence on the share of the municipal budget left unspent and indicators for whether that figure is above the median and above the third quartile, respectively. The block-bootstrap, municipality-clustered standard errors are in brackets.

Figure 29: Dynamic and Average Treatment Effects of Prosecutor Presence on Underspending of Municipal Budgets - States with Staggered Adoption

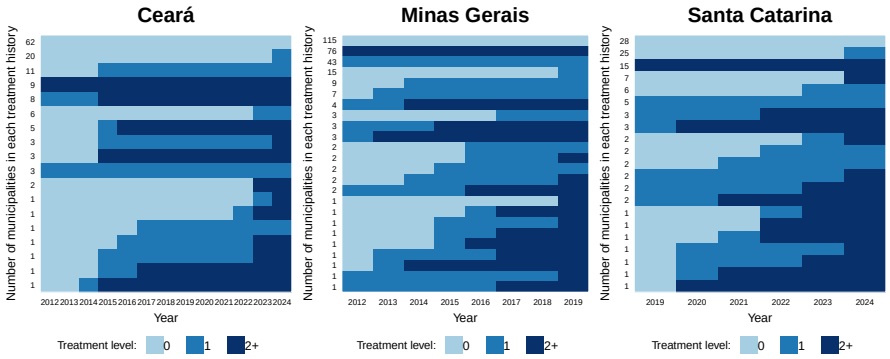


See notes under Figure 3.

N Effects of Deploying Two Prosecutors on Public Employment in States with Staggered Deployment of Prosecutors

To get at whether effects are driven by presence or prosecutorial resources, I examine the effect of having at least two prosecutors, relative to less. The overwhelming majority of cases correspond to district headquarters that go from having 1 prosecutor to having 2 or more.

Figure 30: Treatment Status Changes across the States in the Sample with Staggered Adoption



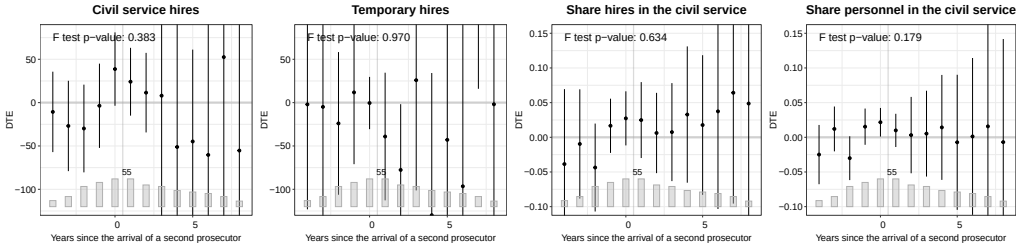
See notes under Figure 13.

Table 10: Average Treatment Effect Estimates of Deploying Two Prosecutors on the Hiring of Municipal Bureaucrats - States with Staggered Adoption

	Civil service hires	Temporary hires	Share hires in the civil service	Share personnel in the civil service
$\widehat{ATT}$	-7.514	-30.682	0.024	0.006
	(50.940)	(37.701)	(0.034)	(0.031)
Mean outcome under control	81.085	191.484	0.324	0.631

$^{\cdot}$p<0.10; *p<0.05; **p<0.01; ***p<0.001. See notes under Table 2.

Figure 31: Dynamic Treatment Effect Estimates of Deploying Two Prosecutors on Municipal Employment - States with Staggered Adoption



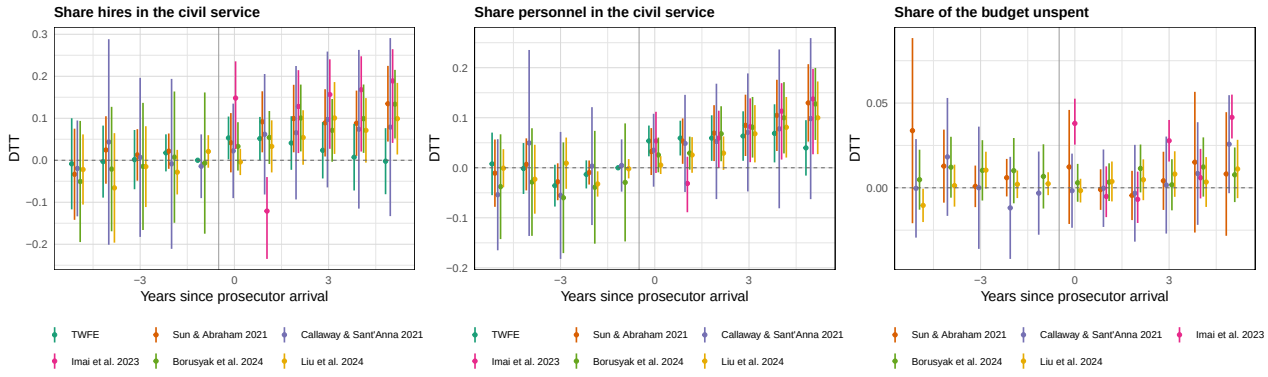
See notes under Figure 3.

O Effects on Public Employment and Underspending Using Alternative Difference-in-Differences Estimators

This appendix reports estimates using a whole range of alternative difference-in-differences estimators. To do so, I focus on the sample of states and periods for which treatment adoption is staggered (Ceará, Santa Catarina, and Minas Gerais until 2020, as shown in Appendix M), because many of these alternative estimators assume there are no treatment reversals. From left to right, plots report for each period estimates using the following estimators:

- Traditional two-way fixed effects
- The estimator proposed by Sun and Abraham (2021)
- The estimator proposed by Callaway and Sant'Anna (2021)
- The estimator proposed by Imai et al. (2023)
- The estimator proposed by Borusyak et al. (2024)
- The estimator proposed by Liu et al. (2024), which is the one used throughout the paper

Figure 32: Dynamic Treatment Effects of Prosecutor Presence on Public Employment and Municipal Spending outcomes - States with Staggered Adoption



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The results shown in Figure 32 show that results are strikingly similar across estimators – in general, pre-trends are not statistically significant and treatment effects kick in immediately after the arrival of a prosecutor for changes in public employment, whereas the effects on budget execution remain null overall.

P Effect of Prosecutor Presence on Machine-Learning Predictions of Corruption

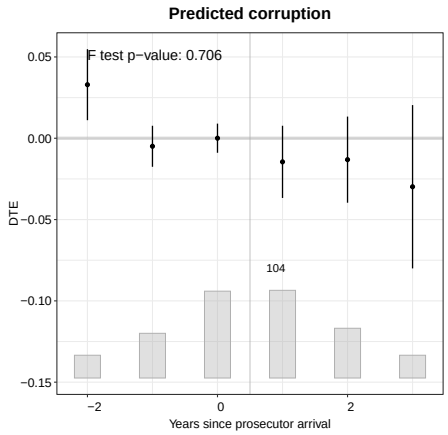
Ash et al. (2025) use hundreds of features from municipal budget data from 2001 to 2012 to construct municipality-year measures of predicted corruption in that period, which they validate empirically and theoretically. I use their measures of corruption as outcomes in the causal event study used throughout the paper as an additional test for whether prosecutor presence leads to declines in corruption. A challenge of this design is that I have data on prosecutor presence before 2012 for only two states (Maranhão and Goiás, see Appendix C), which makes this test likely underpowered. Still, results are negative, of about 0.06 standard deviations in size, and close to statistical significance ($p < 0.12$).

Table 11: Average Treatment Effect Estimates of Prosecutor Presence on Machine-Learning Predicted Level of Corruption

	Predicted Corruption
$\widehat{\text{ATT}}$	-0.014
	(0.009)
Mean outcome under control	0.702

*p<0.05; **p<0.01; ***p<0.001. This table presents the ATT estimate of prosecutor presence on the predicted level of corruption estimated by Ash et al. (2025). The municipality-clustered standard errors are in brackets.

Figure 33: Dynamic Treatment Effect Estimates of Prosecutor Presence on Machine-Learning Predicted Level of Corruption



See notes under Figure 1.

Q Additional Details on the Politician Survey

The survey instrument (in English and Portuguese) is available here.

Q.1 Respondent Recruitment and Non-Response

Table 12: Correlates of the number of responses per municipality

	Respondents (log)	No respondents (dummy)	Respondents (log) w/o zeroes
Population (logged)	0.042 (0.056)	−0.008 (0.032)	0.040 (0.042)
GDP per capita (logged)	−0.209 (0.127)	0.118 (0.085)	−0.071 (0.117)
Deaths per thousand	0.036 (0.037)	−0.027 (0.019)	−0.003 (0.033)
Mayor was reelected in 2016	0.260 (0.114)*	−0.137 (0.046)**	0.072 (0.100)
Constant	2.466 (1.207)*	−0.652 (0.762)	1.710 (1.035)
R-squared	0.049	0.063	0.009
Observations	167	167	142

***$p < 0.001$; **$p < 0.01$; *$p < 0.05$. HC1 standard errors in brackets.

The state audit court of Rio Grande do Norte sent the survey to all mayors and to secretaries of five key areas (education, healthcare, social assistance, finance, and human resources) in the state's 167 municipalities through its online platform.[35] Participation was voluntary. A total of 455 politicians participated and finished the survey, of which 50 were mayors and 405 secretaries. These respondents came from 142 municipalities. Municipalities where mayors were in their second term were more likely to participate but, conditional on some politicians responding, there are no statistically significant associations between a municipality's number of respondents and its basic political and socioeconomic characteristics, as shown in Table 12. Participants were recruited through the court's online platform, where they received information about the research project and their rights as participants. Participants were not compensated in any form.

[35]The survey was also sent to city councilors, but their responses are excluded here because the theory in this paper focuses on executive politicians. Including city councilors' responses, however, does not alter the results.

Q.2 Descriptive Statistics

Table 13: Descriptive Statistics for the Survey of Politicians, by Position

	All (N=455)		Mayors (N=50)		Secretaries (N=405)	
	Mean	SD	Mean	SD	Mean	SD
Age	42.620	10.611	48.680	11.092	41.872	10.320
Female	0.569	0.496	0.220	0.418	0.612	0.488
High school degree or less	0.099	0.299	0.320	0.471	0.072	0.258
College degree or more	0.789	0.408	0.580	0.499	0.815	0.389
Party member	0.516	0.500	0.980	0.141	0.459	0.499
Experience as bureaucrat (years)	0.721	0.449	0.380	0.490	0.763	0.426
Experience as politician (years)	4.607	4.881	7.260	6.901	4.279	4.474

Q.3 Alternative Specifications

As shown in Table 14, results are similar when using the continuous measures of the outcome, although the correlation for the question on the MP knowing the municipality is not statistically significant ($p = 0.102$). Results are similar when excluding municipalities where more than one prosecutor was present in January of 2019 (Table 15). These correspond to large prosecutorial districts, which are unlikely to be vacant. When comparing only municipalities with one or zero prosecutors present, we still see a significant correlation between prosecutorial presence and meetings ($p < 0.05$) and a positive yet insignificant correlation with the statement about the prosecutor's office knowing the reality of the municipality ($p = 0.233$). Finally, as shown in Table 16, results are similar when controlling for municipal population, a key correlate of prosecutorial presence, although the results for the question on knowledge is marginally insignificant ($p = 0.056$).

Table 14: Correlation between Prosecutorial Presence and Politician Survey Responses – Continuous Outcomes

	Meetings 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	0.348***	0.142	-0.039	-0.046
	(0.074)	(0.087)	(0.077)	(0.064)
Constant	0.314***	3.119***	3.497***	3.745***
	(0.034)	(0.050)	(0.045)	(0.039)
Observations	450	455	455	455
R-squared	0.084	0.006	0.001	0.001

*p<0.05; **p<0.01; ***p<0.001. Municipality-clustered standard errors in brackets. The dependent variables are the logged count of self-reported meetings with a prosecutor over the previous 3 months, and the respondent's level of agreement (on a 4-point scale) with 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."

Table 15: Correlation between Prosecutorial Presence and Politician Survey Responses – Excluding Municipalities with more than one Prosecutor

	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	0.163*	0.061	-0.047	-0.084
	(0.063)	(0.051)	(0.070)	(0.065)
Constant	0.337***	0.765***	0.613***	0.801***
	(0.034)	(0.027)	(0.031)	(0.026)
Observations	390	394	394	394
R-squared	0.020	0.004	0.002	0.007

Table 16: Correlation between Prosecutorial Presence and Politician Survey Responses – Controlling for Population

	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	0.229***	0.082	-0.042	-0.070
	(0.056)	(0.043)	(0.055)	(0.051)
Constant	0.332***	0.763***	0.613***	0.799***
	(0.034)	(0.027)	(0.031)	(0.026)
Observations	450	455	455	455
R-squared	0.071	0.013	0.002	0.008

R Additional Details on the Prosecutor Survey

The survey instrument (in English and Portuguese) is available here.

The survey was designed and distributed in collaboration with the Operational Support Center for Civil and Collective Interests (*Centro de Apoio Operacional Cível e Tutela Coletiva*) at the Prosecutor's Office of the State of São Paulo. This center is the internal unit in charge of coordinating prosecutorial efforts in the fight against corruption, amongst other areas.

R.1 Respondent Recruitment and Non-Response

The survey was distributed internally by the Operational Support Center through internal channels for prosecutors working on corruption (email lists, Whatsapp groups) as well as in the bulletin of the state chief prosecutor. Independently of those efforts, I emailed all prosecutors in the state inviting them to participate if they were currently doing work in the area of public assets. Data was collected between April and October 2025.

Some respondents reported not working in the area of public assets, and were therefore excluded from the sample.

All in all, I obtained 51 responses from prosecutors actively working on the area of public assets. The Operational Support Center estimates that about 300 prosecutors currently work in the area. The sample therefore corresponds to a response rate of 17%, which is high for a survey of elites, and slightly higher than the response rate obtained in a recent nationwide survey of prosecutors across all areas (Ribeiro et al., 2024, 5).