Research Statement

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March 2025

My research lies at the intersection of Development Economics and its overlapping areas with Public, Political, and Organizational Economics. I focus on the functioning of governments in developing countries and the implementation of their programs—engaging directly with questions in Public Economics. However, my work typically moves beyond the assumption of a benevolent social planner. Instead, I explore how political frictions shape government operations (drawing from Political Economics), as well as how the internal complexity and non-unitary nature of governments create organizational frictions (drawing from Organizational Economics). My projects typically study programs and interventions conducted at scale, driven by a motivation to understand the challenges and nuances of large-scale implementation and their potential to deliver meaningful impact at the population level. Methodologically, I rely on administrative, survey, and newly digitized data, employing quasi-experimental designs and randomized controlled trials.

1. Understanding dysfunctional governance structures.

The first strand of my research studies how governance structures —such as discretionary hiring, political turnover, anti-corruption efforts, and regulatory oversight—shape the effectiveness of governments. While much of the literature studying these structures focus on the political beneficiaries, I'm interested in the ultimate consequence for service provision. When such structures are found to be detrimental, I seek to provide a political rationale for their use or highlight the trade-offs they entail.

1a. Discretionary hiring & political incentives

In "Political Turnover, Bureaucratic Turnover and the Quality of Public services, 2022, American Economic Review, coauthored with Mitra Akhtari (Airbnb) and Laura Trucco (Amazon), we investigate how political discretion in hiring affects local governments in Brazil. Using a regression discontinuity design around close municipal elections, we show that when a new political party takes office, it often initiates widespread (across the hierarchy and across several service sectors) politically motivated personnel replacements. These shake-ups disrupt the municipal bureaucracy and negatively affect an important public service: public education. Students in affected schools score 0.05 to 0.08 standard deviations lower on standardized tests, and we show school inputs are also negatively affected in those settings.

While previous literature had explored the relationship between patronage and bureaucrat characteristics, there was limited evidence on whether such political discretion tangibly influenced welfare-relevant measure of public service quality. Our regression discontinuity design, paired with a simple theoretical model, also allows for a cleaner identification of politically motivated bureaucratic replacements—those attributable to changes in the ruling political party—as distinct from routine or contractual turnover common in such contexts. Our work addresses these challenges while also introducing a novel mechanism: discretionary appointment disrupts service due to the more frequent personnel replacements — indeed we detect that some measures of general and organization-specific human capital are lower in municipalities that experience political turnover.

A subsequent replication by Gallegos (2023) published at the Journal of Economic Behavior and Organization independently verified our results and provided additional sensitivity checks, which largely confirm our original findings. In my published reply "A Reply to "Political Turnover Negatively Affects the Quality of Public Services: A Replication (Gallegos, 2023)", 2023, Institute for Replication I summarize Gallegos' key contributions and discuss his extension of our framework to the Chilean context, situating this work within the growing literature on political turnover and bureaucratic disruption. I have also helped write a newspaper article summarizing the implications of AMT (2022) at O Globo.

1b. Corruption and regulation over public funds

A second published paper investigates a widespread problem in dysfunctional governments: corruption. "Corrupting Learning: Evidence from Missing Federal Education Funds in Brazil", 2012, Journal of Public Economics is joint work with Frederico Finan (UC Berkeley) and Claudio Ferraz (UBC). We study how corruption in the educational funds of Brazil's local governments affect the quality of public education. We find that students residing in municipalities where corruption in education was detected, scored 0.35 standard deviations less on standardized tests.

This paper contributes by moving beyond perception-based, cross-country corruption indices. We construct an objective, fine-grained measure of corruption using audit data and link it to detailed survey and administrative records. Our analysis can also identify specific inputs compromised by corruption—including shortages of qualified teachers, teaching materials, computer labs, and training opportunities. A striking finding is that while corruption was rampant, a significant share of flagged irregularities involved non-corrupt but technically non-compliant acts, suggesting that stringent oversight frameworks may penalize inefficiencies that fall short of actual malfeasance.

Building on these insights, a follow-up project investigates the unintended consequences of regulatory oversight. In ''State Paralysis: The impact of Compliance uncertainty on Government Performance'' joint with Joana Naritomi (LSE), Socorro Martinez (UC Davis), Gustavo Fernandes (FGV -Brazil), and Leite (CONASEMS – Brazil), we investigate how compliance uncertainty—defined as ambiguity over adherence to complex spending regulations—affects bureaucratic decision-making.

Focusing on municipal health expenditures in Brazil, where local officials face personal liability for administrative errors, we explore whether fear of sanction distorts spending behavior. Using a lab-in-the-field experiment with health secretaries, we find that higher perceived compliance risk leads officials to prefer lower-risk, but potentially less effective, spending choices. Moreover, by analyzing administrative data on local public finances and newly digitalized judicial decisions, we show the patterns are consistent with compliance uncertainty being relevant in the aggregate: a substantial share of the budget remains unspent and that the courts classify only 6% of convictions as corruption. Finally, using an event-study design we show that the conviction of a former mayor reduces the execution of public funds in their municipality. These results highlight an unintended consequence of stringent accountability frameworks: reducing budget execution and distorting policy design.

Together, these projects reveal how institutional design and oversight shape public sector outcomes—sometimes in counterproductive ways—and emphasize the importance of balancing accountability with the capacity to act.

2. Introducing "good governance" and the consequences for the functioning of governments

A second strand of my research examines how government organizations respond to policy interventions aimed at correcting governance failures—such as efforts to improve the diffusion of effective public policies, or the introduction of civil service exams to curb patronage. This work centers on well-documented institutional shortcomings and evaluates the effectiveness of commonly proposed policy solutions.

2a. Evidence-based Policymaking & Policy Diffusion

One reason local governments may fail to deliver quality public services is that officials lack access to information about which cost-effective policies work—akin to how some managers fail to adopt high-performing management practices. In joint work with Jonas Hjort (UCL), Gautam Rao (UC Berkeley) and Juan Santini (World Bank), "How Research Affects Policy: Experimental Evidence from 2,150 Brazilian Municipalities", 2021, American Economic Review we collaborate with the National Confederation of Municipalities in Brazil to investigate how policymakers value and use policy research. In our main experiment, that includes 2,150 municipalities and their mayors, we find that informing mayors about research on a simple and effective policy (reminder letters for taxpayers) increases the probability that their municipality implements the policy by 10 percentage points. We use a complementary lab-in-the field experiment with a smaller sample of mayors to show that mayors are somewhat sophisticated in processing evidence from policy research. Prior to our paper there was a growing literature documenting how experts, including policy-practitioners, process policy-research information. Our main contributions relative to those papers are to study heads of government with actual decision-making authority over the informed policy. Crucially, our study demonstrates that evidence dissemination can result in tangible policy changes.

I have worked on two additional academic papers that combines the data from (HMRS, 2021, American Economic Review) with a new survey implemented in the same context but that wasn't utilized in the original paper.

In joint work with Maria Inés Badin (UC Davis), Juan Santini (World bank) Monica Singhal (UC Davis) "Politicians and Tax Policy: The Role of Preferences and Beliefs", 2025, National Tax Journal We analyze a new survey of local government leaders in Brazil to explore how leaders' preferences and beliefs contribute to the limited reliance on local tax revenues—a well-documented pattern in many low- and middle-income countries. We find that the vast majority of mayors in our survey report that they prioritize raising tax revenues among their policy objectives, and this is more likely in areas with greater income inequality. We also document that mayors hold overoptimistic beliefs about the revenue potential over various policies instruments relative to the empirical evidence. These beliefs, in turn, predict whether mayors seek further information on tax-enhancing strategies.

While much of economic research evaluates whether policies achieve desired outcomes, less is known about why effective policies fail to spread. The idea that states serve as "laboratories of democracy" assumes that successful innovations diffuse, yet there is little causal evidence supporting this notion. In "Mayoral

Connections and the Spread of Policy Innovation in Brazil" coauthored with Maria Inés Badin (UC Davis), Jonas Hjort (UCL), Gautam Rao (UC Berkeley) and Juan Santini (World bank) we explore the diffusion of a proven tax policy among local governments. We leverage the fact that HMRS (2021) created random variation in the number of local governments that received an evidence-based training within a geographic region to study spillovers to neighboring municipalities. We find significant diffusion effects: the indirect impact on policy adoption through geographic spillovers was comparable in magnitude to the direct effect. Using unique survey data on mayoral networks, we show that physical proximity and, to a lesser extent, political party affiliation, are strong predictors of inter-mayoral interactions.

Beyond academic work, I have contributed to policy-oriented efforts promoting evidence-based governance. I co-authored a chapter with Juan Santini (World Bank) Connecting Research to Municipal Administrations, 2022, IPEA translating HMRS (2021) findings for a broader, Portuguese-speaking policy audience. This chapter also includes new analyses omitted from the published paper, such as a cost-benefit calculation of the training intervention and qualitative insights into how policymakers search for policy ideas. IPEA, which published the volume, is a research institute affiliated with Brazil's Ministry of Finance.

In 2022, I also began co-chairing J-PAL's Government Partnerships Committee for Brazil, alongside Thomas Fujiwara (Princeton) and two senior J-PAL staff (Paula Pedro and Claudia Macias). Together, we oversaw the allocation of a \$556,000 budget to support evidence-based policymaking initiatives across all levels of government in Brazil. [Link: https://www.povertyactionlab.org/page/j-pal-lac-government-partnerships-expansion-brazil-and-mexico, accessed June 28, 2025.]

2b. Exam-based Recruitment in the Public Sector

In this line of research, conducted jointly with Santiago Pérez, we study the transformation of the U.S. federal bureaucracy following the introduction of meritocratic hiring. We assembled a novel historical dataset of federal personnel records to analyze the shift from patronage-based to exam-based recruitment after the Pendleton Act of 1883. Prior to the reform, government jobs were largely distributed based on political or personal connections. The Pendleton Act mandated that certain positions be filled through competitive exams, laying the foundation for a more professionalized civil service.

In our first project "Civil Service Reform and Organizational Practices: Evidence from the 1883 Pendleton Act", 2024, American Economic Journal: Applied Economics, examines the impact of this reform on the functioning of the U.S. Customs Service—a key agency that, at the time, was responsible for collecting over half of federal revenues. A key empirical advantage is that only collection districts with at least 50 employees were subject to the merit system, enabling a clean comparison between reformed and unreformed districts before and after the reform. We find that exam-based recruitment improved the

¹ I have also discussed the findings of HMRS (2021) in the <u>Vox Dev podcast</u>, participated in a roundtable with practitioners and academics at <u>gLOCAL Evaluation Week</u> and talked to journalists to facilitate the translation of our findings to general newspaper audience <u>Folha de Sao Paulo</u> and <u>Nexo Jornal</u>.

professional background of new hires and reduced turnover, but these gains did not translate into measurable improvements in the agency's cost-effectiveness. While prior work has often focused on the political consequences of civil service reform, our study shifts the focus to bureaucratic performance—specifically, how such reforms affect personnel quality and organizational outcomes. Moreover, unlike the more complex or heterogeneous reforms implemented at state and local levels, our setting allows us to isolate the impact of competitive exams—a central element in modern bureaucratic design.

In a second project "Who Benefits from Meritocracy?" (MP, 2025) we explore the equity implications of these reforms. While competitive exams are often viewed as leveling the playing field, a common critique to exam-based selection is that it might have a disproportionately negative impact on the chances of applicants from disadvantaged backgrounds. Indeed, there has been a recent push to limit the influence of exams in different selection processes, often fueled by concerns that their use could conflict with the goal of achieving a diverse pool of recruits. At the same time, however, exams might replace other selection criteria (for instance, personal connections) in which applicants from poorer backgrounds are potentially at an even worse disadvantage. We find that the reform reduced the representation of applicants from disadvantaged family backgrounds in government jobs—an effect that persisted for at least a decade. This decline was driven by an increased representation of middle-class applicants, particularly those we term "educated outsiders": individuals with high educational attainment but limited social or political ties. In contrast, we find that the upper class were resilient to the reform: continue to be similarly overrepresented in those positions after the reform. Our findings suggest that while meritocratic exams can improve candidate quality, they may also reinforce elitism unless complemented by broader inclusion strategies

Based on this line of research, Santiago and I were awarded the Hellman Fellows grant (\$30,000) in the 2021/22 academic year and participated in few activities targeted to a non-academic audience—We published an <u>policy note</u> at the CATO institute, and participated in two podcasts (<u>The Visible Hand, 2022</u>; Not Another Politics Podcast).

I have also extended this research agenda to contemporary settings. In "Strengthening State Capabilities and Missing Entrepreneurs: Evidence from Brazil" is joint with Thiago de Lucena (ML, 2025) we investigate how modern meritocratic systems and high public-sector wage premiums in developing countries shape talent allocation. In many such settings, the public sector absorbs a disproportionate share of highly skilled individuals—partly due to attractive job security and compensation. These individuals often spend years preparing for public sector entry exams, and once hired, may be underutilized. While this dynamic can strengthen bureaucratic capacity, it may also crowd out entrepreneurship and other forms of economic dynamism.

In this paper we investigate the extent of this crowd out focusing on business creation. Exploring a regression discontinuity design on a novel data set of a large public service entry exam with more than 1.5 million applicants, we find that candidates who narrowly passed the exam were 33% less likely to start a

business in subsequent years. For those public employees who also own a business, we employ an event-study design to track their public sector attendance around the opening of their business. we find limited evidence that business ownership affects job attendance. We aim to explore additional implications for talent allocation, including whether public sector recruitment crowds out *successful* business creation (as opposed to less viable ventures), how long narrowly unsuccessful candidates remain out of the labor force, and whether public sector employment serves as a stepping stone or a detour in the broader career trajectories of certain groups.

Multiple policy levers for effective public organization

I was co-editor of a summary article together with Guo Xu (UC Berkeley), senior editor, and other two co-editors, Erika Deserranno (Northwestern) and Eduardo Teso (Northwestern) "Bureaucracy", VoxDevLit, 2023. We review the emerging literature on bureaucracy and public sector organizations. We structure the review along key drivers of bureaucrat effectiveness: (i) improving performance through incentives; (ii) through better selection; and (iii) through a better matching of bureaucrats to tasks. We end by highlighting potential areas for future work. The senior editor had a larger role in the preparation of this article. He prepared a first version of this document, and we (co-editors) proposed changes to the original document.

3. Inclusive Governance and Talent Misallocation in Society

This is a newer line of research in which I explore the misallocation of talent—its origins, consequences, and potential remedies. Building inclusive institutions, where progress is shared broadly, is important for sustainable development, yet difficult to achieve. Enhancing the allocation of talent from disadvantaged backgrounds offers the rare opportunity to foster economic growth, equity and political stability—an outcome that can unite diverse perspectives in support of government action. My work aims to understand how to best identify and nurture the most talented among disadvantaged groups. I am interested in subjective elements such as aspirations, norms, and self-perception, as well as institutional barriers that restrict their access to opportunities. I have already discussed two of my papers --MP, 2025 and ML, 2025—that examine talent allocation in the context of public sector recruiting, and I have since expanded this agenda to study talent misallocation more broadly across society.

I am currently working on a set of projects that leverage the unique context of a large-scale educational program in Brazil that reaches over 18 million students annually, with an especial emphasis on highly talented students many of whom come from disadvantaged backgrounds. These projects are supported by a \$1.5 million grant from USAID's Development Innovation Ventures.

One project from this portfolio is titled "Success Spills Over: How Awards Affect Winners and Peers Performance in Brazil," co-authored with Fernanda Estevan (FGV- Brazil). In it, we study how the recognition of the academic success affects the award recipient and her peers (classmates who witness her success). The context is a Brazil's national math olympiad, which recognizes the top 4% of students nationwide. To study peer effects, we tracked the classmates of the math olympiad participants at the time the award was announced. we use a regression discontinuity design comparing classrooms with narrow winners and losers of the award. We find that recognition increases the likelihood that high-achieving peers participate in future competitions, though with limited effects on their actual performance. Importantly, we observe no negative effects on lower-performing peers, who in fact show a (statistically weak) decline in

school dropout rates. Proximity—both physical and in terms of academic ability—appears to be a key mechanism driving these peer spillover effects.

A second, early-stage project supported by the same grant investigates the longer-term career trajectories of math competition winners and the constraints that prevent many from realizing their full potential. Using 20 years of administrative data, we examine long-run career trajectories of winners and descriptively document socio-economic gaps in long-run trajectories, with the goal to also influence new generation of highly talented students. For instance, we will examine which fields and professions provide more accessible pathways for minority students, as opposed to those where outcomes are more strongly shaped by family background. We will also explore the common career choices made by high-achieving students that often result in limited financial or professional success.

Building on these insights, we are developing an evidence-based video intervention to encourage STEM aspirations among underrepresented students. This professionally produced short film will combine empirical findings with compelling narrative elements to portray the challenges and strategies involved in succeeding in math-related fields. Crucially, the intervention will be implemented at scale through the Brazilian Math Olympiad, with the potential to reach nearly all high-achieving students from disadvantaged backgrounds across the country.

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Estevan, Fernanda, and Diana Moreira "Success Spills Over: How Awards Affect Winners' and Peers' Performance in Brazil"

Fernandes, Gustavo, Socorro Martinez, Diana Moreira, Joana Naritomi, and Blenda Leite "State Paralysis: The Impacts of Compliance Uncertainty on Government Effectiveness"

Moreira, Diana, and Santiago Pérez "Who Benefits from Meritocracy?"