I study organizations, broadly exploring the role of management and managers on organizational performance. My work focuses on three main areas. The first area considers managers' decisions about their own labour supply, including the practices they adopt, their allocation of time across different tasks, and their execution of authority *at the intensive margin*. The second area considers organizational decisions and practices about selection, allocation and retention of managers and workers *at the extensive margin*. The third area considers how organizations can help mitigate macro-level shocks leading to uncertainty, as ecological, epidemiological and political crises become more prominent, as well as how these shocks shape organizations. I briefly describe each area of my research below.

My research spans contexts in different regions – Latin America, Southeast Asia, Europe, and Africa) and different industries – manufacturing, healthcare, and education. This work provides insights for understanding the role of organizations under different institutional settings — often less rigid — as we think about potential innovations in the organizational structures of generally more rigid public settings. As the questions I am interested in often do not have good measures, an important component of my research approach includes designing novel instruments and building new datasets, often linked to large administrative data that allows for a deeper analysis. I use a variety of tools in my work beyond new descriptive stylized facts, including randomized experiments in field projects as well as quasi-natural experiments to evaluate particular organizational policies.

There are tangible policy implications that can be drawn from my research. One of the key constraints on growth in developing countries is the availability of adequate financing. Demands to expand coverage and improve the quality of public services often stretch limited resources, and recent crises are expected to further exacerbate fiscal pressures. My research informing how to improve public sector management for better service delivery is particularly timely and relevant. For example, my recent work showing that central-level test-based managerial selection and allocation policies in Peru are good predictors of educational outcomes but its implementation has led to a short-term yet persistent learning loss (equivalent to half a year) in rural areas (but not urban areas). As a direct result of this work, the Ministry of Education introduced a proposal to amend its legislation and improve its manager selection process to target the needs of the local context.

i. Managerial practices, delegated authority & time allocation

The labour supply of managers – such as the practices they adopt, their time allocation, and delegated authority *at the intensive margin* – is an important driver of the performance of service delivery. The first step to understanding what explains variation across organizations in this area is to create credible measures that can capture how managers run their organizations.

My work with an international team of researchers, published in PNAS in 2024 as **The International Empirics of Management**, culminates several years of collaboration with statistical agencies in 13 countries to implement the Management and Organization Practices Survey. The study investigates the role of management practices in shaping organizational performance in the private sector. In addition, my early work with N. Bloom, R. Sadun, and J. Van Reenen included the first adaptation of the World Management Survey, originally used to collect data on management practices in the private sector, to schools and hospitals. In our papers published in the *Economic Journal* in 2015, **Does Management Matter for Schools?** and published in the *Review of Economic and Statistics* in 2020, **Healthy Business? Managerial Education and Management in Healthcare**, we document wide dispersion in the adoption of management practices across and within countries using the adapted instrument. We find that management seems to matter for organizational performance such as student test scores and patient mortality rates. In schools, management differences across organizational types can be largely explained by leadership and accountability mechanisms. In hospitals, we find that those closer to universities offering *both* medical and managerial training had better management. Two features from this early work spurred additional lines of inquiry that might affect managerial labour supply and are thus relevant for service delivery: (i) the importance of how accountability, governance and authority is used across the public sector, and (ii) the importance of building on both managerial as well as sector-relevant skills needed to improve day-to-day practices.

On the first point, one useful way to understand how differences in governance and accountability are related to managerial labour supply is to turn to family and non-family firms in the private sector. In our paper published in *The Review of Financial Studies* in 2018 work with O. Bandiera, A. Prat, and R. Sadun, **Managing the Family Firm: Evidence from CEOs at Work**, we build a dataset of time use of CEOs and find family CEOs allocate 9% less time for business activities. To understand the source of variation across governance types, we exploit firm and industry heterogeneity, and quasi-exogenous meteorological and sport events and suggest that family CEOs value (or can pursue) leisure activities relatively more than non-family CEOs. In work with D. Scur, **The ties that bind: implicit contracts and the adoption of management technology in the firm**, we collect new data on ownership successions to show that maintaining family control leads to lower adoption of managerial best practices. We explore firm reputation costs as a novel mechanism constraining investment in management, building a new proxy using data on eponymy (firms bearing the family name), and suggest that implicit contract between managers and workers matter management adoption.

Related to these concepts, delegated authority might also affect labour supply, but there is a dearth of data on this topic across different layers of bureaucracy. In my work with M. Adelman, R. Nayar, and M. J. Vargas, **Managing for learning: (in)coherence in education systems in Latin America**, we develop a new conceptual framework and build a new dataset measuring coherence of *de jure* and *de facto* authority in ten core functions of education bureaucracies in Latin America. We show that on average local education officials and schools fail to identify 33% and 39% of tasks that are theirs according to regulation, respectively. On average there is approximately 44% coherence in terms of *de facto* understanding of how tasks are allocated between schools and officials. Coherence matters: a 10 p.p. increase in coherence is associated with gains equivalent to 3 months of learning.

On the second point, understanding how training, a policy lever often used by governments, affects managerial labour supply has important implications for team composition, the distribution of tasks, and service delivery. In work with R. Almeida, L. Costa, and I. Lautharte, **Managerial Time Allocation and Student Learning: Evidence from Brazil**, we focus on time allocation across different tasks as a measure of labour supply and developed an instrument to collect data with principals across two distinct levels — early childhood and secondary education. We find principals spend just over half of their time on tasks related to instructional program, which is strongly correlated with learning, and only about a quarter of this time with teachers. They also overestimate by 22 p.p. how much time they spend on the former. We ran two experiments where we randomly introduced principals to improvements in managerial and education-related skills and found no differences in time allocation nor in student learning across treatment and control groups post interventions. This result highlights the resistance to change in such settings (as in Gibbons & Roberts 2013), and underscores the importance of carefully thinking about training design and how it affects labour supply.

In ongoing work with A. Fenizia and I. Pantelaiou, **Management Consultancy in the Public Sector: Evidence from Greece**, we address this question by studying whether management consultancy is an effective tool for changing managerial practices in vocational education schools in Greece. The intervention, implemented in a randomly selected set of schools, aimed to reduce dropout rates and improve student outcomes. Our results show that the student dropout rate declined by 2.8 to 3.5 percentage points—approximately a 10% reduction. By the end of the first year, students in treated schools were 5.5 percentage points more likely to have been assigned an apprenticeship with a local firm and, on average, began their apprenticeship about a month earlier than students in control schools. Taken together, these results suggest that while designing interventions to improve management is not straightforward, they can yield promising outcomes.

II. Selection, allocation, and retention of managers & workers

Another important channel governments can use to improve the performance of public service delivery is by strengthening their system for selecting, allocating, and retaining managers and workers *at the extensive margin.* My work shows that personnel policies enacted from the top, but tailored to the local context, as well as flexible personnel policies adopted through better management could help attract and retain better managers and workers.

From a theoretical lens, my work with C. Leaver and D. Scur, **Measuring and Explaining Management in Schools: New Approaches using Public Data**, builds a framework to understand the channels through which management practices ultimate affect learning. We propose that operations and people management affects learning because school actors such as teachers, students and parents become more productive (incentive channel), and new actors join the school (selection channel). We build a new dataset using public data from PISA to build new management indices covering 15,000 schools across 65 countries. We find evidence of these mechanisms at different levels across public and high-cost private schools in Latin America. Our combination of theory and descriptive empirical analysis offers a novel insight into how management matters for attracting and motivating school actors and, consequently, improving performance.

This finding is reinforced in a vastly different context in my paper with K. Muralidharan and D. Scur, **Personnel Management and School Productivity: Evidence from India**, suggesting our framework has some external validity. In this paper, we also decompose management into operations and people practices and study their relationship with productivity across public schools and low-cost private schools. As in Latin America, we find that private schools are better managed relative to public schools mainly because of differences in people management, and that this matters for student value added and teacher practices. In particular, we find evidence that better people management practices at private schools (but not public) are associated both with paying higher wages to better teachers as well as keeping better teachers and letting go of worse teachers.

While there is substantial heterogeneity in the selection of public school managers and teachers in the region, there has been a strong push for selection via centralized public service examinations. My work with C. Piza and R. Santarrosa, **Manager Selection, Sorting, and Demotion in the Public Sector**, we evaluate a policy change where a new mandatory examination was put in place for school managers, shielding it away from the local political process. Relative to other types of more costly evaluations – trainer end-of-course evaluations, on-the-job observations, and teacher, parent and student interviews –, we show that sit-in examinations are good predictors of manager effectiveness. Yet, assigning managers to schools based on the results of sit-in examinations led to worse outcomes — equivalent to a 6-month learning loss — driven largely by sorting. Demoting managers to teaching positions – an unintended consequence of the reform – also led to worse outcomes of similar magnitudes. Reassuringly, the Ministry of Education based a new policy proposal on these results to amend current legislation.

Another issue faced by the public sector is the managerial gender gap. Across Latin America, there is a 20-percentage point gap between the share of school leaders who are female and the share of teachers who are female. Qualified female candidates often fail to apply for these management positions. In work with C. Avitabile, J. David, and A. M. Munoz – **Reducing Gender Gaps in Access to Management Positions in the Public Sector** –, we have partnered with the Ministry of Education to test whether a communication strategy designed to encourage approximately 100,000 candidates who are eligible to apply for management positions can reduce the gender gap in school management in Peru. In addition to the standard information, eligible female teachers randomly assigned to treatment receive information designed to encourage them to apply (e.g. emphasizing that they meet the requirements, providing examples of women who were hired in previous contests as role- models, etc). The intervention encouraging women to apply for school leadership roles increased applications by 1 pp overall and by 3.3 pp among rural women, narrowing the gender gap by over 20%. The intervention also improved rural women's exam performance and likelihood of receiving job offers. A follow-up survey suggests that rural women place greater value on information about successful peers and safer schools, while urban women are more deterred by competition. Together, these findings indicate that targeted behavioral nudges can help level the playing field for women in underserved areas, making opportunities more equitable.

iii. Managing during uncertain times

The third area looks at how organizations can mitigate the effects of macro shocks, as they become more regular and more intense, and in turn how these shocks can affect the adoption of better management. This is particularly relevant for developing countries, as fragile and cash strapped governments have much lower capacity to handle such adverse events relative to rich nations. For example, organizations with better management can help identify areas of need and enable the rapid reallocation of budget or human resources in response to changing conditions while at the same time changing conditions can hinder the adoption of better management.

My work with M. Adelman, J. Baron, and D. Scur **Managing Shocks in Education: Evidence from Hurricane Matthew in Haiti**, shows the first evidence of the role of management practices in mitigating the impact of a natural disaster. We collected new management and learning data before and after the hurricane, and developed a new instrument to collect data emergency response and recovery measures immediately after the hurricane. We find that, even with low average day-to-day management quality and limited variation, routinely better managed schools were significantly more resilient and better able to mitigate the impacts of the hurricane on short-term recovery, from reconstruction to having teachers and students back at school, and learning in the long run.

In another work with C. Avitabile and L. Dinarte, **School Management and Government Support during an Emergency**, we explore whether a simple and short training program can help managers manage more effectively the reopening of schools during the COVID-19 pandemic. In the context of Peru, in partnership with the Ministry of Education and in cooperation with Global School Leaders and Varkey Foundation, we pilot and evaluate a training program that focuses on two key aspects: (i) school organization, such as using resources efficiently and complying with health guidelines for school organization, and (ii) communication, such as informing school operations effectively to all school actors and thus bring reassurance that school environment is safe for teachers and students. Unexpectedly, our results show that the training had a null effect on school reopening and student attendance. We run a discrete-choice experiment to elicit the attributes of the reopening setting that might be more relevant for principals.

I also have ongoing work in this area in other sectors. I also have ongoing work on management across different sectors. In manufacturing, my work with A. Choudhary and J. Van Reenen, **Management in Pakistan: Performance and Conflict**, examines how terrorist activity affects firm management and performance. Using data collected with the Pakistan Bureau of Statistics on roughly 4,500 firms in 2010 and 2015, we document large within- and between-province variations in management quality. Although average management scores remain well below the global frontier, better-managed firms are more productive, profitable, and grow faster. Areas with greater increases in terrorist activity experienced the sharpest deterioration in management practices, suggesting conflict undermines management and firm performance. In healthcare, my work with K. Andrews, F. Dal-Ri, R. Gatti, M. Macis, and L. Nakhone, **Management of Healthcare Facilities and Patient Attendance During Major Disruptions: Evidence from Kenya**, combines a nationally representative survey of 429 primary health care facilities and 73 hospitals with administrative data. Management quality is low and compressed across facilities. During COVID-19 and a health workers' strike, private facilities with stronger management experienced smaller declines in outpatient attendance, driven by better operations management, highlighting how effective management can strengthen resilience and potentially balance the public-private healthcare system. More generally, in the public sector, my work with M. Best, D. Scur, and V. Gupta, **Day-to-Day Disasters and Local Government Capacity,** we aim to understand how "day-to-day" climate disasters affect local economies and how government capacity and management shapes disaster resilience. Specifically, we examine the impacts of routine seasonal floods on labor markets and local governments in Brazil. We build two novel datasets: a very high-resolution flood data (900m×900m grids) for one state (Santa Catarina) and a dataset of municipal government actions extracted from near-daily legal publications that describe all government actions (Daily Gazettes). Using a local projections difference-in-differences approach, our preliminary findings suggest that floods reduce hiring approximately six months post-event, immediately decrease employment separations, and increase government actions—especially HR and procurement—with larger floods prompting stronger responses.

Finally, my work with L. Dinarte-Diaz, J. Gresham, H. Patrinos, and R. Rodriguez-Ramirez, **Investing in Human Capital During Wartime: Experimental Evidence from Ukraine**, takes a different direction, highlighting how non-public organizations can provide essential services when the public sector cannot. Across three experiments between early 2023 and mid-2024 with nearly 10,000 students, an online tutoring program for math and Ukrainian language substantially improved learning outcomes and reduced stress, with high take-up and engagement. The program's impact was driven by structured peer interactions, improved learning attitudes, enhanced socio-emotional skills, and increased student investments, while complementary parental nudges revealed the challenges of fostering household engagement in conflict settings. These results underscore that, in contexts where the public sector is incapacitated, well-managed private or non-governmental initiatives can play a critical role in maintaining service delivery and human capital investments.