# **DIME LAC PROGRAM**



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Authors: Lupe Bedoya, Daniel Chen, Thiago De Gouvea Scot de Arruda, Arianna Legovini, Sveta Milusheva, Iva Trako, Caio Piza, and Manuel Ramos-Maqueda Major technological changes in the production and analysis of data have opened opportunities to transform the way we use integrated high-frequency data ecosystems and advanced analytical tools, notably when it comes to evaluating the impact of development policy interventions. In the last decade, the World Bank's impact evaluation body of research demonstrates that this approach is highly cost-effective across sectors and geographies in increasing the efficiency and effectiveness of Bank-financed investments by large margins.

Harnessing these findings, the Development Impact Evaluation (DIME) team supports several World Bank projects across Latin America and the Caribbean by conducting several impact evaluations, delivering evidence-based policy recommendations and producing high quality research papers. DIME's work in the LAC region largely focuses on using technology and technical solutions to transform the efficiency of governance, advance equal access to resources and promote economic development. This includes expanding access to markets and opportunities through digitizing systems and processes, as well as leveraging the power of technology to source data essential for delivering targeted policy responses.

# **Governance**

## Tax

**DIME team is working with the Tax Authority in Honduras (SAR)** to improve existing knowledge on data analytics and generate evidence on tax policy and tax administration. At the request of SAR, in FY23 we expect to expand that agenda, providing a series of workshops and trainings on data analytics, modern methods of impact evaluation, and machine learning techniques. Previous research engagement included research papers and policy notes on topics such as <u>corporate minimum taxes</u> and the <u>use of experiments</u> to target compliance interventions. Ongoing projects explore the use of tax data to improve inequality measurement, the impacts



of VAT withholding rules and the effects of tax exemptions to encourage firm formalization.

A joint project between DIME and DECRG researchers will support tax authorities in Honduras and Ecuador to improve the taxation of high-net-worth individuals. We will leverage our close relationship with these tax authorities to link personal income tax (PIT) and corporate income tax (CIT) registries—through the identification of the beneficial owners of companies. That is a crucial step to further the ability of tax authorities to correctly identify and tax capital income earnings.

## **Justice**

#### **PERU**

Improving the Performance of Non-Criminal Justice Services in Peru (P173860): DIME's DE JURE team is developing analytical and digital tools that span different sectors of the Peruvian justice system as part of this operation. Embedding impact evaluations in the digital innovations, DE JURE will provide rigorous evidence of the operation's impact on the efficiency and quality of justice in Peru. These projects include:

- Enhancing the Quality of Legal Aid: Impact Evaluation of Tech-Enabled Mediation in Peru (P173860): Peru's Ministry of Justice, in cooperation with World Bank operations, is in the process of revamping the legal aid services provided by Alegra Centers in Peru. These centers are responsible for providing free legal advice and assistance to vulnerable populations throughout the country. DIME's DE JURE team has developed an innovative app for extrajudicial mediators in Alegra centers to ask: Can tech-based self-monitoring improve the performance of mediators, and consequently, the wellbeing of vulnerable people in Peru? Preliminary results find that the app significantly improved mediator performance and dispute resolutions between the parties. As a next step, the team is integrating an Al-driven peer-recommendation system to enhance best practices among mediators and improve the mediation service received by vulnerable populations.
- Improving Legal Training: The Impact of Social-Emotional Learning and Class Monitoring on Judicial Performance (P173860): DE JURE works with the Judicial Academy of Peru, which is responsible for delivering mandatory training to aspiring judges and prosecutors and to current professionals seeking progression in the judicial career. Various extended curricular experiences and light-touch interventions developed by our team have been proven to change attitudes, beliefs, and high-stakes decision-making, which can improve the efficiency and motivation of court actors. (policy brief)

#### CHILE

- Information Provision and Court Performance Experimental Evidence from Chile: In Chile, DE JURE partnered with the Department of Institutional Development (DDI) to test whether nudges informing court managers on their performance affected overall court productivity. DE JURE and DDI co-designed an online platform that displays performance metrics at the court and judge levels, such as the average case duration, the case clearance rate, and/or the rate of realized hearings. Through a randomized controlled trial, DE JURE demonstrated that nudges to court administrators in the platform increased usage of the platform and reduced information frictions. More importantly, the nudges also resulted in behavioral change and improved court productivity. (draft)
- Impact of Court Digitization on Judicial Efficiency and Firm Outcomes: In 2016, the Chilean government implemented the Electronic Processing Law (LTE) in a staggered fashion, mandating the electronic processing of judicial cases throughout the country. The reform was aimed at improving judicial productivity, expanding access to justice, and promoting transparency in the judicial system. The staggered implementation of the reform across different courts offers an opportunity to estimate its causal effects through a set of event studies. Preliminary results of this project by the DIME DE JURE team show that the LTE increased case filings and the accessibility of justice, particularly for small firms. Despite the large case number, the LTE also reduced the duration of cases and improved the efficiency of justice. Furthermore, DE JURE is currently evaluating the impact of the LTE on firm outcomes.

## **BRAZIL**

■ Exploratory Dialogue with the Tribunal of Rio de Janeiro:
The DE JURE team is engaging in exploratory dialogue with the Tribunal of Rio de Janeiro (TJRJ) Court. The goal of this engagement is to conduct research on debt settlements and tax compliance, policy areas under the jurisdiction of the TJRJ Rio Court

## **Procurement**

Policies and strategies to make public procurement open, competitive, accessible, and inclusive towards small-medium firms (SMEs). Under a Knowledge for Change (KCP) program, we are studying how procurement rules affect the participation of small firms and tender outcomes. In Brazil, we are investigating the effects of a law that allows tenders below a certain value

to be exclusive for SMEs. We are also creating a database of all procurement and payments at the municipal level to understand how the timing of payments might explain procurement outcomes. In Chile, we are collecting data at the invoice level to evaluate whether changes in the timing of payments due to a government reform affected firms and/or procurement outcomes. In both settings, we will use administrative data on public procurement, firm registries, and employer-employee data to assess the impacts of these policies.

# Comptroller function

Leveraging Accountability and Oversight of Public Funds in Chile (P176884): DIME is working with the Governance Practice under a RAS to train public officials in Chile's Comptroller's Office (CGR, for its Spanish acronym) on impact evaluation methods. This activity supports the CGR in measuring the impact of its interventions through a diagnostic of good international practices in the definition of key impact evaluation indicators for audits, as well as by developing a methodology for impact evaluation for the audit and legal interventions of the CGR.

# Infrastructure

## **COLOMBIA**

The price of mobility: Assessing the impact of Bogotá's Integrated System of Transportation (SITP) tariff policies on the well-being of vulnerable populations. This research project takes advantage of a significant upcoming reform in the transit subsidy policy of Bogota to assess the effects of targeted transit incentives, under imperfect take-up, on mobility, access to healthcare services and job opportunities, as well as effects on overall indicators of well-being such as income, food security and psychological well-being. This project aims to contribute to policy and evidence in several fronts, including on: (i) the impact of transit subsidies beyond transportation outcomes, by measuring household well-being across a variety of dimensions; (ii) the effects of large-scale targeted public transportation incentives; (iii) the implications of low take-up of government social programs and the impact of addressing informational constraints.

# **Private sector**

#### **PERU**

Effects of a risk-based inspections system on business safety conditions (P170739): This joint work between DIME and the FCI GP evaluates the impact of a risk-based inspection electronic system, coupled with independent inspection verification, on safety and quality. Inspection quality verification is conducted

for two intervention groups: high-intensity verification vs. low-intensity verification. Every two weeks inspectors receive individual reports on their performance, and municipalities receive aggregated reports and a list of best performers. In addition, a short experiment (6-week intervention) was conducted to assess the impact of conducting inspections with tablets vs. paper on inspection safety, inspection quality, and inspector efficiency. This work aims to contribute to our understanding of how to improve accountability and e-governance mechanisms to improve governments' regulatory function. Preliminary results expected early next FY.

#### BRAZIL

- SEBRAE-SP's post-COVID recovery "Crédito Retomada": How does access to working capital impact firms' survival and performance? (in partnership with the Brazilian Central Bank). Preliminary impact evaluation results show that access to credit reduced firms' death rates in 60% in a six-months period.
- Foster culture of evidence-based policy design in the Brazilian Business Support Program to Micro and Small Enterprises (SEBRAE-SP) in São Paulo state: Build an Impact Evaluation Lab in partnership with the Centre of Microfinance Studies at Getulio Vargas Foundation (FGV-SP) to improve SEBRAE-SP's technical capacity and support the generation of high-quality evidence for well-informed decision-making.
- Management quality and SME recovery: DIME and the PSD team in the Brazil CMU partnered with SEBRAE-SP to collect six rounds of the COVID-19 Business Pulse Survey with a panel of 1,800 micro and small firms. The team integrate survey data, SEBRAE administrative data, and employer-employee data to investigate whether firms with best managerial practices were able to mitigate the negative demand shocks brought by the pandemic.

# Gender

#### **PERU**

Women Officers, Gender Violence and Human Capital: Evidence from Women's Justice Centers in Peru: Many developing countries have unequal access to justice, especially for women. What are the implications of this inequality for gender-based violence, intra-household bargaining and investments in children? This paper provides quasi-experimental evidence on the effectiveness of women's justice centers (WJCs) in Peru, which are specialized institutions that provide police, medical and legal services aimed at reducing violence against women. Examining the gradual rollout of the WJCs across districts and villages, we find that the opening of a center in the vicinity of the household

led to a 10% reduction in the incidence of gender-based violence, as measured by self-reported domestic violence, female deaths due to aggression (femicides) and hospitalizations due to mental health. This decrease in women's exposure to violence also has inter-generational effects: WJCs substantially increase human capital investments in children, raising school attendance and test scores. The evidence suggests that these results are driven by an increase in enforcement against gender violence. After a WJC opens in a district, there is an increase in reporting and prosecutions for gender-specific crimes by 40%.

#### **BRAZIL**

## Demand for Safe Spaces - Avoiding Harassment and Stigma:

DIME conducted a novel revealed-preference experiment to estimate women's willingness to pay to avoid harassment using crowdsourced data from 22,000 rides on the public train system in Rio de Janeiro, Brazil. Participants were offered a series of paid opportunities to ride either a carriage reserved for women (although, in practice this was not enforced) or a mixed carriage, with a pay differential between the women's and mixed carriages that varies from ride to ride. A fifth of riders were willing to forgo 20 percent of the fare to ride in the "safe space." This foregone payment equals \$1.17–2.25 per incident avoided, or approximately 0.4 percent of minimum wage annually. Such a wage penalty would cause a 0.48–0.60 percent reduction in female labor supply.

## **EL SALVADOR**

Gender-based violence and empowerment of adolescent girls in conflict-affected settings. In partnership with colleagues from DECRG, DIME is contributing to strengthening the evidence base on policies and programs that can prevent gender-based violence (GBV) through two components: (i) by creating a valid and reliable measurement tool to examine social norms surrounding GBV, and (ii) by designing an innovative randomized impact evaluation that will measure girls empowerment interventions as well as parental engagement interventions on the prevention of GBV in conflict affected settings. In the first component, the measurement tool will examine both descriptive and injunctive social norms and personal beliefs that maintain and tolerate GBV in conflictaffected settings, and it will identify the composition of the relevant reference groups, as well as sanctions inflicted for nonadherence. In the second component, we will evaluate the impact of two types of interventions: (i) the Girl's Club program, which provides adolescent girls with critical like skills for their transition to adulthood, and (ii) the Strong Families (Familias Fuertes) workshop, which is designed to ensure that the families of vulnerable young girls (e.g., parents, grandparents, or any other family member who have relationship with the girls) provide the support, guidance, and oversight they require to remain in school or in their jobs.

# **Jobs**

#### **HONDURAS**

Temporary Jobs for At-Risk Youth (P152314): This IE examines the protective role of a labor market intervention for youth growing up in high-violence settings. It was embedded in the Honduras Safer Municipalities Project and focuses on a Temporary Jobs Program for at-risk youth. This includes vocational training, group-based vocational training, and a temporary job. Evidence on supply-side programs aiming to enhance the technical/vocational skills of individual job candidates through education and on-the-job training in high-violence contexts is disappointing, suggesting little benefit beyond limited/rare short term positive impacts. However, literature examining interventions targeting soft skills and personality traits suggest these have the potential to augment and sustain short-term impacts observed in more traditional jobtraining interventions, but there is limited evidence of combined soft-and-hard skills approaches from high-violence settings in lowand middle-income countries. This project is designed to help fill this gap. Follow-up data collection is ongoing.

# **Environment**

#### **MEXICO**

Payments for environmental services supported social capital while increasing land management: Payments for environmental services (PES) programs incentivize landowners to protect or improve natural resources. Many conservationists fear that introducing compensation for actions previously offered voluntarily will reduce social capital (the institutions, relationships, attitudes, and values that govern human interactions), yet little rigorous research has investigated this concern. We examined the land cover management and communal social capital impacts of Mexico's federal conservation payments program, which is a key example for other countries committed to reducing deforestation, protecting watersheds, and conserving biodiversity. We used a regression discontinuity (RD) methodology to identify causal program effects, comparing outcomes for PES participants and similar rejected applicants close to scoring cutoffs. We found that payments increased land cover management activities, such as patrolling for illegal activity, building fire breaks, controlling pests, or promoting soil conservation, by ~50%. Importantly, increases in paid activities as a result of PES did not crowd out unpaid contributions to land management or other prosocial work. Community social capital increased by ~8-9%, and householdlevel measures of trust were not affected by the program. These findings demonstrate that major environmental conditional cash transfer programs can support both land management and the attitudes and institutions underpinning prosocial behavior (article).