Payments Under the Table in Latin America

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Index

Introduction

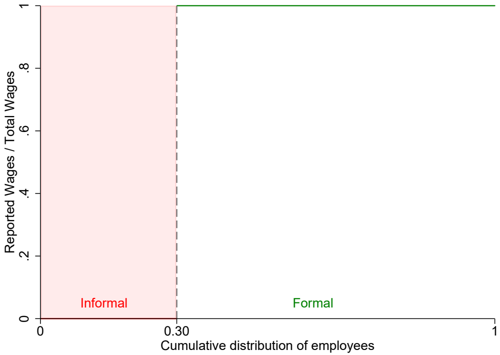
Payments Under the Table:
Part of the wage of formal employees that is not reported in the payroll

1. Unlawful payments: avoids wage-related taxes
2. Frequency: in the concept of labor provision
3. Knowledge: known by both employer and employee

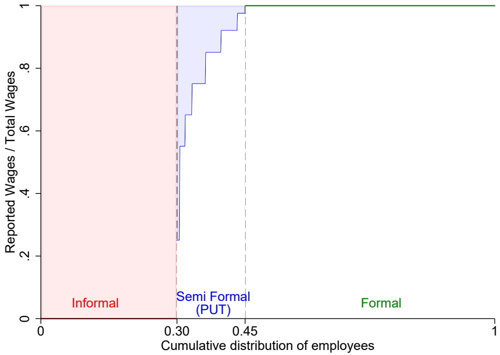
Traditional household surveys do not capture PUTs. *What are we missing?*

Introduction

Labor market with and without PUTs



(a) Not considering PUTs



(b) Considering PUTs

Comparison for a simulated economy with 30% of informal and 15% of semi-formal (PUTs) labor relationships

Motivation: Why should we care about PUTs?

1. State capacity and tax evasion
   - PUTs imply evasion of social security contributions, income taxes, and other taxes on wages
   - Relative to classic informality? Ambiguous
     - PUTs are only a fraction of the wages, while informality is the entire wage
     - PUT receivers have potentially higher wages than informal employees
2. Design of tax and social security systems
   - Profit vs. revenue taxes (Kleven et al. 2014)
   - Many social security benefits depend on the amount reported
3. Potential misallocation
   - PUTs increase employer-employee surplus
   - Heterogeneity in preferences/capabilities to engage in PUTs creates a wedge
4. Policy interventions
   - PUTs have some ties with admin records (registered establishment and formal employees)
   - Direct interventions can be evaluated with admin data (see Feinmann and Cardoza, 2024)

Related Literature

1. Tax evasion and third-party reporting

- Third-party reporting as a silver bullet to reduce tax evasion
  → IRS 2006; Slemrod 2007; Kleven et al. 2011; Kleven 2016; Kleven et al. 2016
- Growing concern that collusive tax evasion can be profitable in many contexts
  → Doerr and Necker 2021; Naritomi 2019
- Local evidence of PUTs in the context of policy evaluation
  → Bergolo and Cruces 2014; Lauletta and Bérgolo 2023; Bíró et al. 2022; Gavoille and Zasova 2023; Kumler et al. 2020; Pelek and Uysal 2016; Bjørneby et al. 2021

This paper extends the work of Feinmann et al. 2022 to other Latin American countries to understand what drives differences across countries.

2. Informality and state capacity

- First margin: Non-registered firms
  → Rauch 1991; La Porta and Shleifer 2014; Haanwinckel 2020
- Second margin: Registered firms hiring employees *off-the-books*
  → Ulyssea 2020; Ulyssea 2018

We show the importance of extending the definition of informality further: formal employees in registered firms receive part of their wages under the table

Data Collection and Methodology

- First multi-country survey on PUTs in Latin America
- Online survey using vendor-provided panels
  - Data from Feinmann et al. 2022 for Brazil
  - Partnered with *Netquest* for Argentina, Chile, Colombia, Mexico, and Peru
- Restricted to formal employees in the private sector
- Identify PUT receivers, follow-up questions on *how* it works
- Dealt with representativity and truthful responses

Table with sample sizes by country

Data Coverage

We cover 6 of the 7 largest countries in Latin America and the Caribbean

$\rightarrow$ The countries in our survey represent 79% of the total labor force in the region

Economic and Informal Employment Statistics for Countries in our Sample in 2023

Country	GDP per capita	Informal / Employees	Informal / Labor Force	Population
Chile	US$ 15,923	6.1 %	29.2 %	19.49 M
Argentina	US$ 10,729	35.96 %	49.4 %	45.81 M
Mexico	US$ 10,045	37.65 %	57.6 %	126.19 M
Brazil	US$ 8,570	22.17 %	47.2 %	213.99 M
Colombia	US$ 6,131	28.36 %	62.1 %	51.27 M
Peru	US$ 5,358	34.30 %	68.4 %	33.36 M

Source: World Bank Database

Harmonization

Cross-country studies presents representativity and comparability challenges

1. Within country representativity
   - Each country's household survey to reweight observations
   - Weight cells: income, firm size, age, gender, education
   - Dropped 0.5% highest weights (outliers)
2. Crossed-country comparison
   - Definition of formal employee (exclude self-employed and business owners)
     1) Does your employer contribute to your pension plan? (common to all)
     2) Question used in household survey (may differ across countries)
   - Salaries expressed in each country's minimum wage
   - Survey in Brazil does not contain some of the questions
   - Results are re-weighted within a country, but non-weighted across countries

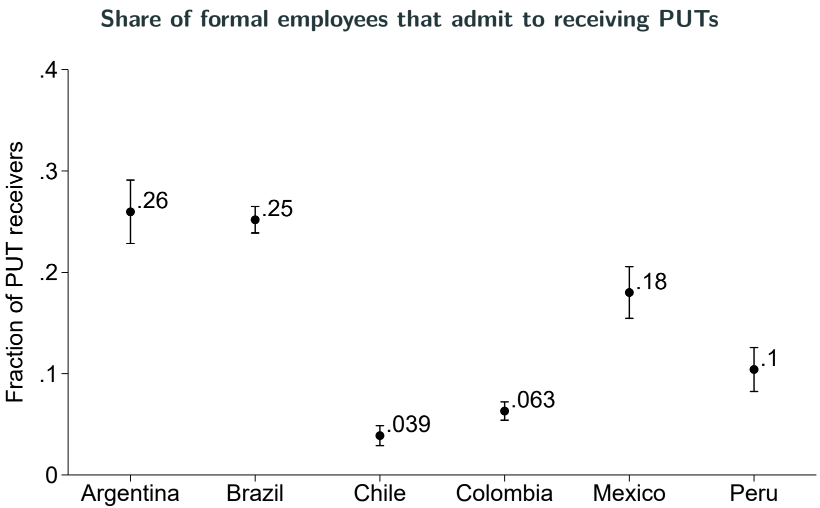
Results

Prevalence

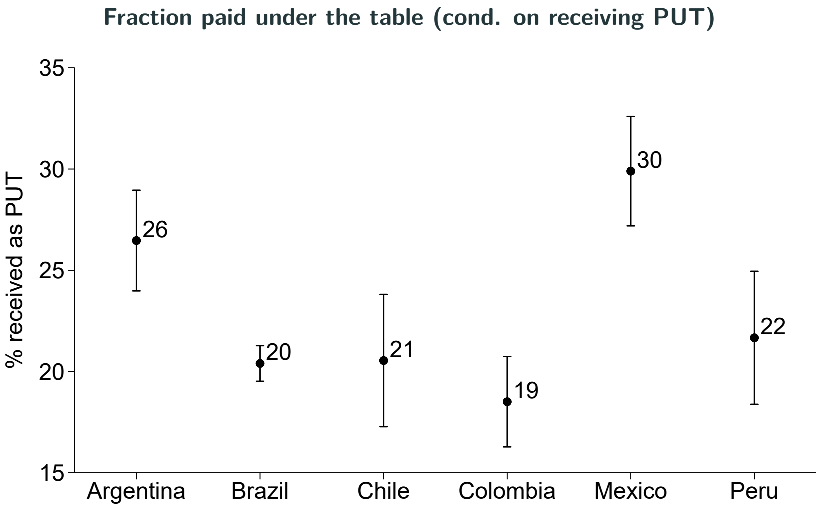
Questions:

1. Do <u>you</u> receive PUTs?
   $\rightarrow$ *Yes, No*
2. If yes, what fraction of your wage is PUTs? (use mid-points)
   $\rightarrow$ *0-5%, 6-10%, 11-20%, 21-30%, 31-40%, 41-50%, >50%*

Prevalence: Extensive Margin



Prevalence: Intensive Margin

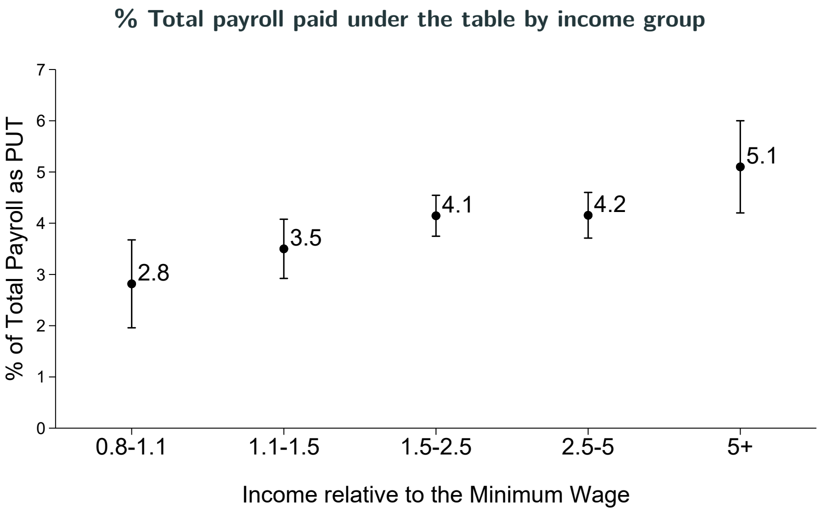


Income and Firm Size Distribution

Questions:

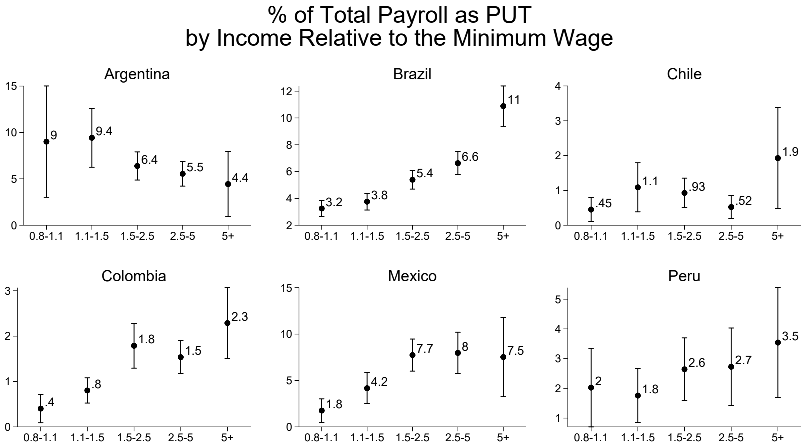
1. What is your monthly salary in your main job?
   $\rightarrow$ *Bins* (Brazil) *Number Entry* (other countries)
2. In addition to you, how many other employees work in your workplace?
   $\rightarrow$ *0, 1-4, 5-9, 10-49, 50-99, 100-499, 500-999, 1k-5k, >5k*

PUTs across the Income Distribution



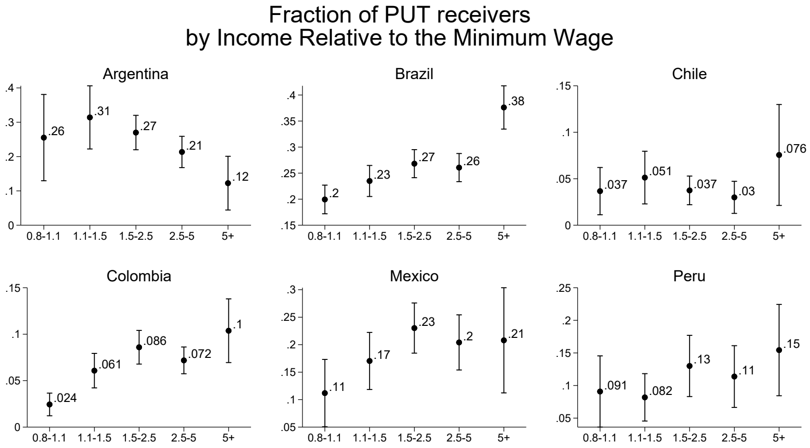
PUTs across the Income Distribution

% Total payroll paid under the table by income group (by country)



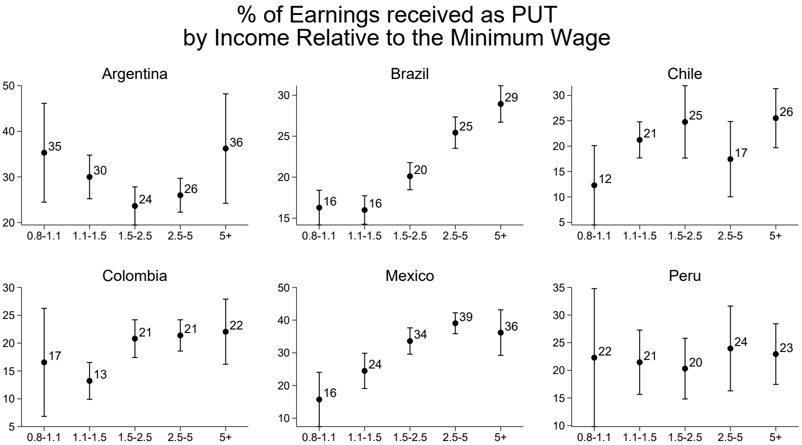
PUTs across the Income Distribution

Extensive margin by income group (by country)

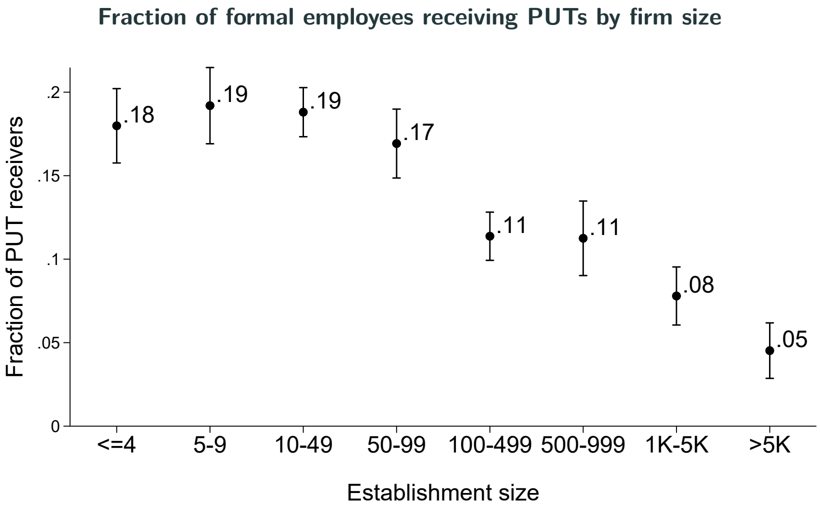


PUTs across the Income Distribution

Intensive margin by income group (by country)

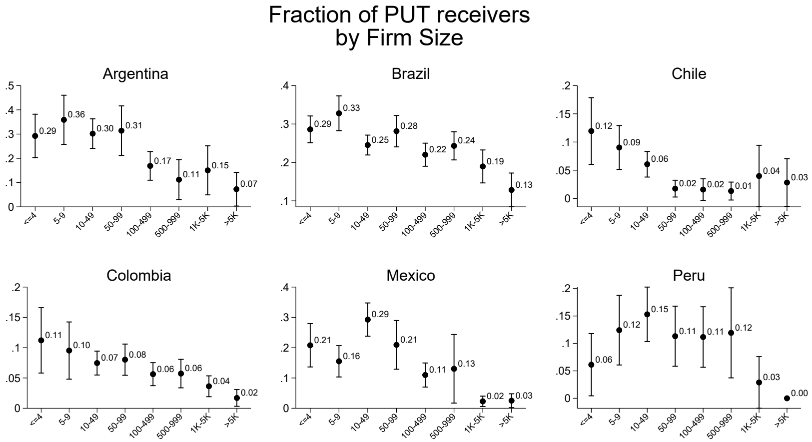


PUTs across the Firm Size Distribution



PUTs across the Firm Size Distribution

Fraction of formal employees receiving PUTs by firm size (by country)



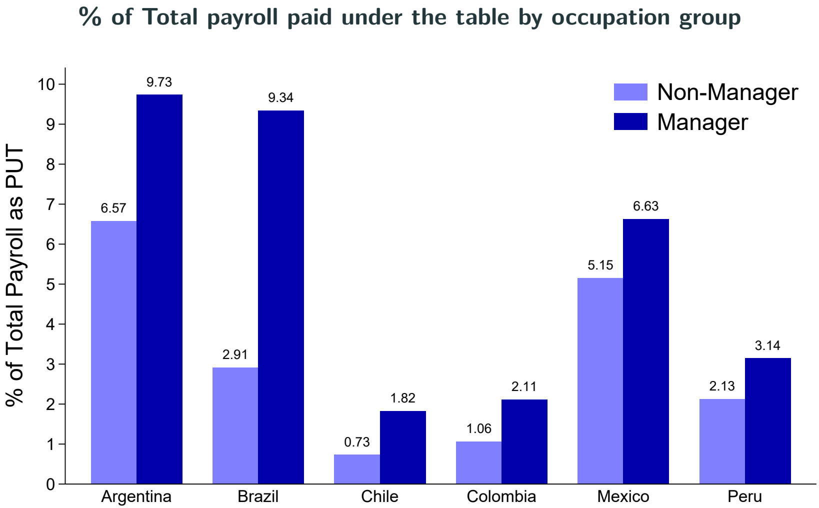
Managers and Interactions with Owners

Questions:

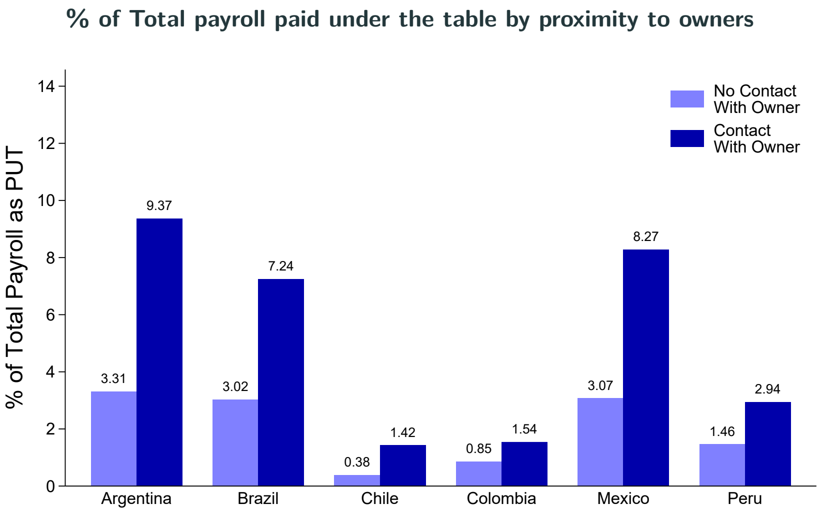
1. In your main job, Do you hold any managerial position?
   $\rightarrow$ *Yes, No*
2. Do you have frequent interaction with your employer?
   $\rightarrow$ *Never, Sometimes, Usually, Always* (Brazil) *Yes, No* (other countries)

We group Brazil's answers in two: *"Never"* and *"Sometimes"* as *"No"*, and same for *"Yes"*

Managerial Positions



Interaction with Owners



Tax Morale

Questions:

1. From 1 to 10 (where 1 is not justified at all, and 10 is fully justified), How justified is it to evade taxes?

   → *1, ..., 10*

$$PUT^{ext}_{i_{(j)}} = \sum_{c \in C} \alpha_c \mathbf{1}[c = j] + \varepsilon_{i_{(j)}} \tag{1}$$

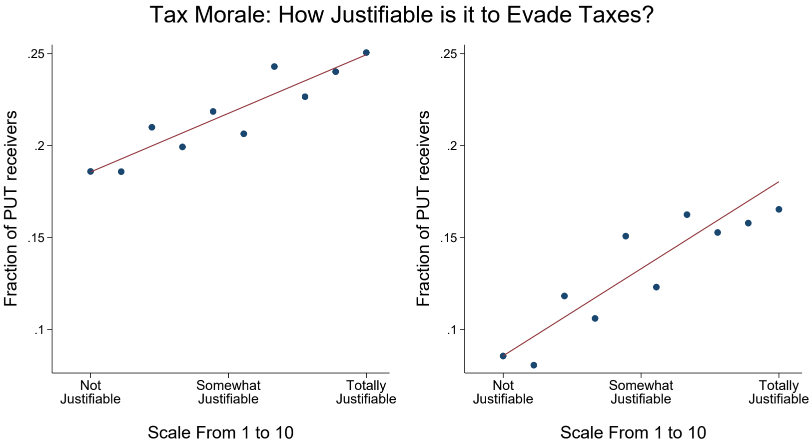
$$PUT^{ext}_{i_{(j)}} = \sum_{c \in C} \alpha_c \mathbf{1}[c = j] + \Gamma X + \epsilon_{i_{(j)}} \tag{2}$$

→ Where $PUT^{ext}_{i_{(j)}}$ is whether individual i from country j receives PUTs or not.
→ X includes wage and firm size fixed effects

We plot the mean-corrected residuals $\hat{\varepsilon}_{i_{(j)}}$ and $\hat{\epsilon}_{i_{(j)}}$ on question 1.

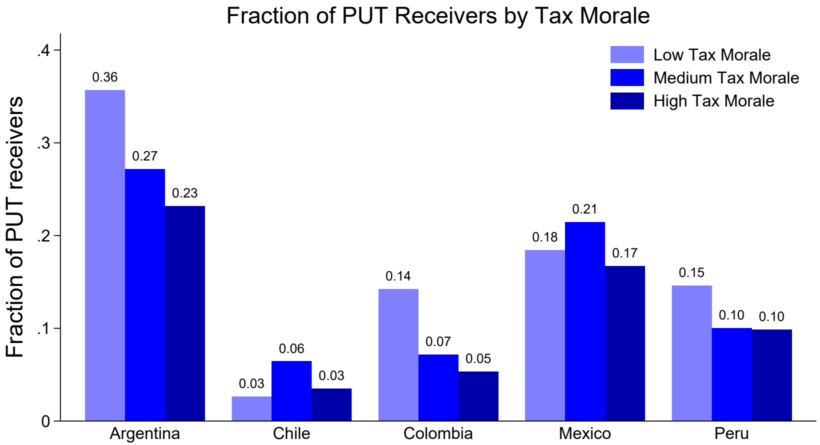
Tax Morale

Fraction of formal employees receiving PUTs by level of tax morale



Tax Morale

Fraction of formal employees receiving PUTs by level of tax morale (by country)

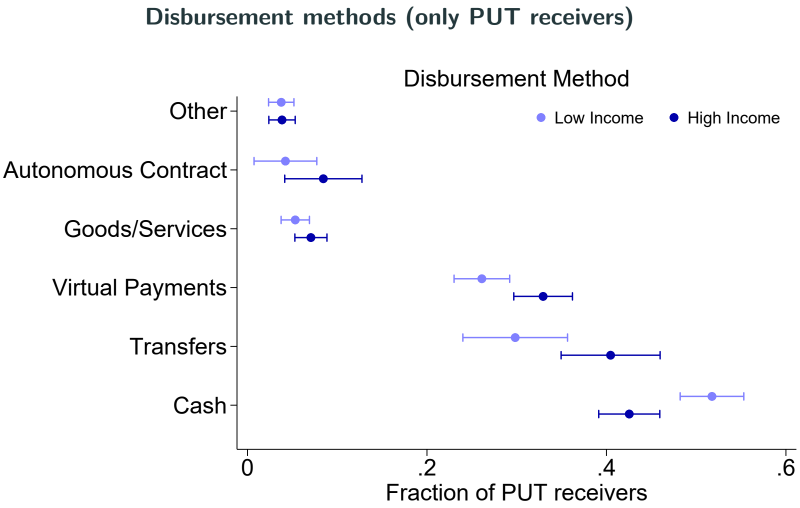


Disbursement and Reasons

Questions:

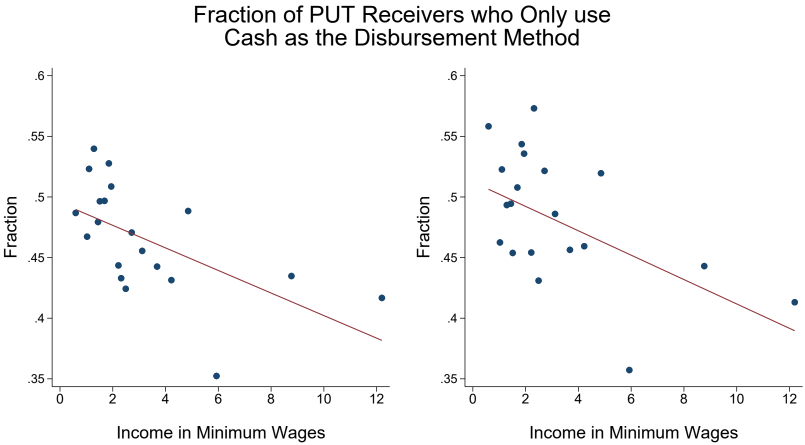
1. How do you receive the PUTs?
   → *Check, bank transfer, cash, good and services, additional self-employed contract, food or transport card, virtual app, other*
2. In your case, which were key factors when determining how much to report in the payroll?
   → *Income tax, minimum wage, employers' contributions, employees' contributions, extra-hours, tax audits, labor lawsuits, garbage tax, others*

Disbursement Methods



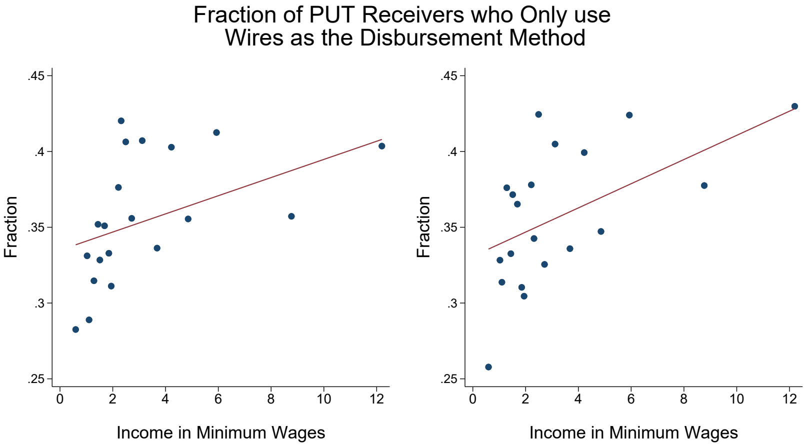
Disbursement Methods

Fraction receiving in cash (only PUT receivers)



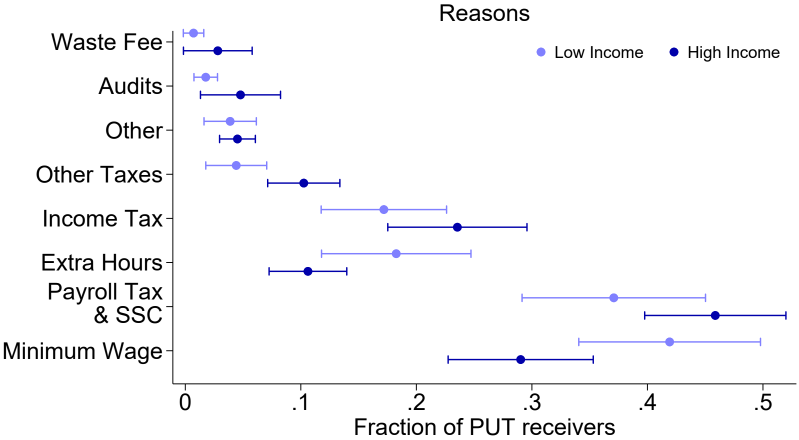
Disbursement Methods

Fraction receiving through virtual payment or wire (only PUT receivers)



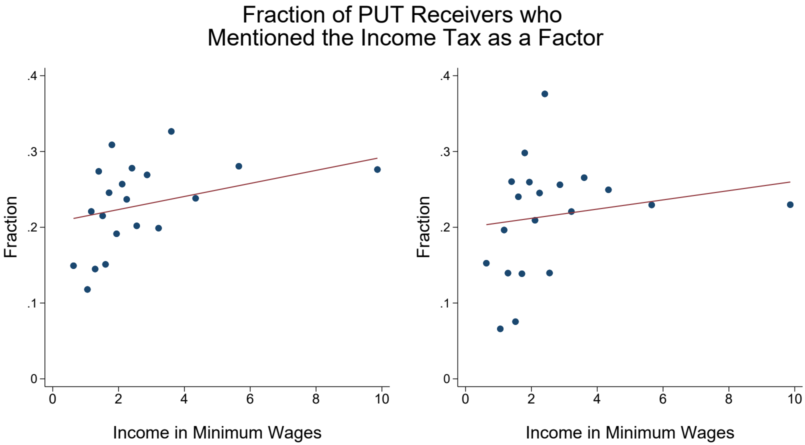
Reasons

Fraction responding that each category is relevant to determine PUTs



Reasons

Fraction responding income tax is relevant for PUT by income



Conclusions and Future Work

1. More countries: Ecuador, Venezuela, Uruguay, Bolivia, Paraguay
2. Employees' incentives
   - Top marginal income tax rate, exemption thresholds
   - Social security benefits (pay-as-you-go versus capitalization systems)
3. Employers' incentives
   - Revenue versus profit taxes
   - Labor costs
   - Whistle-blowing institutions
4. Economic development
   - Share of total employees in small and medium-sized firms
   - Classic informality