Formal salaried employment generation and transition to formality in developing countries. The case of Latin America

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Motivation

Informality continue to be one of the most important characteristics of Latin American labor markets. However, during the 2000s, overall improvement of labor market variables, including an increase in the proportion of salaried formal workers.

Labor formalization process took place together with a generalized decline in labor income concentration, reversing the increasing inequality during the 1990s.

Most studies analyze informality from a static point of view, not including the analysis of labor market flows.

Most of the literature on the evolution of inequality emphasizes the role played by returns to education. Few studies evaluate the effects of other labor market changes, in particular, those derived from the decline in informality.
Objetives

- Analyze the labor formalization process among wage earners in five Latin American countries -Argentina, Brazil, Ecuador, Paraguay and Peru- during the new millennium.

- In particular,
  - Evaluate the intensity and characteristics of inflows to a formal job.
  - Identify the policies fostering labor formalization implemented in these countries.
  - Assess the impacts of formalization on wage inequality.

- Links between inequality and informality are not obvious. The fall of informality can have different impacts. Therefore the link between both dimensions is an empirical question.

- Labor conditions are particularly relevant since 80% of household incomes comes from the labor market.
Data and Approach to Informality

- Microdata from household surveys:
  - **Argentina.** Encuesta Permanente de Hogares (EPH). 2003-2017
  - **Brazil.** Pesquisa Mesal de Emprego (PME). 2003-2015
  - **Ecuador.** Encuesta Nacional de Empleo, Desempleo y Subempleo (ENEMDU). 2003-2016
  - **Paraguay.** Encuesta Permanente de Empleo (EPH). 2003-2017
  - **Peru.** Encuesta Nacional de Hogares (ENAHO). 2004-2017

- **Pool of panel data.** One transition for each individual, based on a one-year interval between observations. Pool of panels.

- **Coverage:** urban areas.

Empirical identification of formality/informality:

- **Argentina:** a wage earner is formal if his/her employer pays social security contributions.

- **Brazil:** a wage earner is formal if he/she has signed a labor contract.

- **Ecuador, Paraguay and Peru:** a wage earner is formal if he/she is affiliated to a pension system.
1. Analysis of occupational flows

1.1 Decomposition of inflows to formality. Three channels:
- Formalization “in situ”: a worker becomes formal in the same occupation.
- Entries into a formal occupation coming from non-formal jobs (informal or self-employed job).
- Entries into a formal job coming from unemployment or inactivity.

1.2 Econometric analysis
Duration models. Estimation of hazard rates from the Proportional Cox Model. The probability of entering formality is decomposed into two factors: the probability of leaving the initial state (different from a formal job) \(-P(E_i)\) –, and the conditional probability of entering a formal job after leaving the initial state \(-P(E_j|E_i)\) –:

\[
P(E_{ij}) = P(E_j|E_i) P(E_i)
\]
2. Estimate of the distributive impact of formalization

Decomposition method proposed by Firpo, Fortin and Lemieux (FFL, 2011). It extends the Oaxaca-Blinder approach to decompose changes in distributive statistics between a ‘composition effect’ and a ‘returns effect’.

Two different stages:

1) The estimate of **aggregate** composition and return effects, employing a reweighting methodology.

2) The **disaggregation** of those effects into the individual contribution of each attribute by using Recentered Influence Function (RIF) regressions for each inequality indicator.
LABOR FORMALIZATION: INTENSITY AND CHARACTERISTICS
Generalized reduction in informality in Latin America during the new millennium
Three channels of transitions to formality

Most part of transitions (except in Peru) to a formal job is explained by “in situ” formalization.
### Contribution to the whole labor formalization process

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>ARGENTINA</th>
<th>BRAZIL</th>
<th>ECUADOR</th>
<th>PERU</th>
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<td>14.2</td>
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<tr>
<td>Comp. Secon-incomp. Terc.</td>
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<td>49.4</td>
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<tr>
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<td>14.6</td>
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<td>47.3</td>
<td>42.2</td>
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<td>19.7</td>
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<tr>
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<tr>
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- **Number of initially non-formal workers**
- **Probability of exiting this initial state**
- **Conditional probability of entering formality after leaving the initial state**
DRIVERS OF LABOR FORMALIZATION
Informality and unemployment are counter-cyclical in several countries.

- The functioning of the labour market became more predictable as a result of sustained economic growth, thus favouring an increase in long-term contracts.
- Sustained employment growth might have lowered the expected probability of layoffs and the probability of employers having to face the costs of firing a formal worker.
- With the growth of employment and the decline in unemployment, workers’ bargaining power and reservation wage rise.
It is argued that labor costs should be reduced and administrative procedures to register workers should be simplified in order to stimulate the creation of formal employment. Several LACs have implemented this kind of incentives.


- **Uruguay**: Tax reform (incentives for investments with formal employment creation). Llambí et al. (2014) find positive effects. Creation of the National Health System that extends health coverage to the family of formal workers. Bérgolo and Cruces (2014) find positive effects.
The higher costs of informality as a result of strengthened labor inspection is another incentive for labor formalization.

In LACs, strengthening of labor inspection during the 2000s.

- **Brazil**: Berg (2010) finds **positive effects** on labor formalization. Almeida and Carneiro (2009) find that regions with stricter controls presented lower informality rates. They do not find negative effects of inspections on total employment. Henrique de Andrade et al. (2013) **positive effects**.

- **Argentina**: Ronconi (2010) finds **positive but small impacts**.

- **Ecuador**: The World Bank (2012) finds **positive impacts**.

- **Uruguay**: Estrades y Terra (2011) find **positive impacts**.
DISTRIBUTIVE IMPACTS OF LABOR FORMALIZATION
In parallel to the formalization process, widespread reduction of inequality
The size and direction of the impacts depend on:

- The magnitude of the labor formalization.
- The inequality within formal and informal workers.
- Higher inequality among informal workers.
- The wage gaps between both groups of workers along the wage distribution.
- From 30% to 50% on average, but different along the wage distribution.
- The initial and final position of formalized workers.
## Distributive impact of formalization

<table>
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<th>log(50/10)</th>
<th>log(90/50)</th>
<th>Gini</th>
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CURRENT SITUATION
After a significant reduction in informality, slowdown, stagnation or reversion in recent years.
In a regional labor context where significant deficits still persist

40% formal
8% POA+ employer
52% informal+ NOA+UFW

Wage-earners  Non-professional OA  Professional OA  Employer  UFW
Proportion of informal salaried workers in total salaried employment

- Uruguay
- Chile
- Brazil
- Costa Rica
- Dom. Repub.
- Argentina
- Colombia
- Ecuador
- LATIN AMERICA
- EL Salvador
- Peru
- Bolivia
- Paraguay
- Mexico
- Close correlation between being an informal workers and working in the informal sector. Combination of low productivity and non-fulfillment of labor regulation.

- However, proportion of informal workers in the formal sector. Space to reduce informality through labor law enforcement.
Concluding remarks

- Strong process of labor formalization in several LACs. It took place with employment growth and recovery of labor institutions. **Successful combination of different factors.**

- Formalization has been equalizing in Argentina, Brazil and Ecuador. It shows that the improvement of working conditions also can contribute to explain decreasing inequality in these countries.

- **Despite this process, informality continues to be very high in Latin America.** Source of low wages and the “working poor” phenomenon.

- “**New forms of informalities**, digital labor platform, gig economy, disguised employment.

- Define and implement a mid and long-term economic development strategy, addressing the low productivity and macroeconomic instability.

- Implement **specific schemes for some activities/workers**: low skilled, rural, domestic workers, construction, own-account workers. High informality, high occupational and income instability and lack of social protection.