Informality, Remittances, and Youth Workers

Andres Cuadros-Menaca

Universidad Icesi

06 October 2017

WIDER Development Conference-Migration and Mobility
Roadmap

Introduction

Context

Empirical strategy

Main Results

Discussion

Conclusions
Remittances and Working Conditions

Labor market outcomes

- Informal employment
  - Informal type of employment as one of the main types of employment in developing countries (Bacchetta et al., 2009)
Remittances and Working Conditions

Labor market outcomes

- **Informal employment**
  - Informal type of employment as one of the main types of employment in developing countries (Bacchetta et al., 2009)
  - Most of these jobs characterize by long working hours and lack of social benefits (Maloney, 2004; ILO, 2014, La Porta and Shleifer, 2014)
Remittances and Working Conditions

Labor market outcomes

- **Informal employment (Sub-Saharan Africa)**
  - By 2014 the share of own-account and unpaid workers in total employment was 76.6% (ILO, 2015)
  - Eight in ten young workers were into the category of self-employment (ILO, 2015)
  - Self-employment accounted for 53% of non-agricultural employment (ILO, 2015)
Roadmap

Introduction

Context

Empirical strategy

Main Results

Discussion

Conclusions
Labor Market Outcomes

The context

- **Informal employment (Colombia)**
  - Increase in the informal sector during the 1990s
  - The share of informal workers (*work in firms with five or fewer employees, unpaid jobs, domestic workers, self-employed, business owners of firms with five employees or less*) is above 60%
  - Six of every ten new jobs available to youth are informal
  - Informal workers report working around 47 (h/week) and 60% of them report having neither health insurance nor pension contribution
Labor market outcomes

≈ 8% of total population outside the country; 4th remittance-recipient in Latin America

- **Colombia**: Migrant-sending country
  - **Main destination countries**: The United States, Spain and Venezuela (account for more than 70 %)
  - **Remittances**: 73% of the remittances came from the United States and Spain
Labor market outcomes

≈ 8% of total population outside the country; 4th remittance-recipient in Latin America

- **Colombia**: Migrant-sending country
  - **Main destination countries**: The United States, Spain and Venezuela (account for more than 70%)
  - **Remittances**: 73% of the remittances came from the United States and Spain

- **International remittance income** relases constraints
Labor market outcomes

≈ 8% of total population outside the country; 4th remittance-recipient in Latin America

- **Colombia**: Migrant-sending country
  - **Main destination countries**: The United States, Spain and Venezuela (account for more than 70%)
  - **Remittances**: 73% of the remittances came from the United States and Spain

- **International remittance income** relaxes constraints
  - **Question**: Remittance income $\Rightarrow$ hours worked, health insurance
Labor Market Outcomes

Data and variables

- **Data**: GEIH Household Dataset, 2008-10

- **Key parameters:**
  - Adult labor participation (intensive)
  - Health insurance coverage
Labor Market Outcomes

Data and variables

• **Data:** GEIH Household Dataset, 2008-10

• **Key parameters:**
  - Adult labor participation (intensive)
  - Health insurance coverage

• Addressing endogeneity: **IV estimations**
  - Historical migration rate and macroeconomic shocks as IV
  - Migration rate interacted with unemployment shocks (⇒ region FE)
  - Unobserved regional confounders (⇒ region var)
Labor Market Outcomes
Data and variables

- Financial crisis $\Rightarrow$ main host countries
  - **Great Spanish Depression (2008-):** The Spanish economy contracted by 3.7 p.p. during 2008-2010
Labor Market Outcomes

Data and variables

- Financial crisis $\implies$ main host countries

- Financial crisis $\implies$ unemployment rates
  - The United States: ↑ by 86 percent during (2008-2010)
  - Spain: ↑ by 125 percent during (2008-2010)
Labor Market Outcomes

≈ 17% decrease in remittance flows during 2008-2010

Financial crisis

![Graph showing a 17% decrease in remittance flows during 2008-2010](image)
Labor Market Outcomes

Remittance recipients and unemployment rates in host countries
Roadmap

Introduction

Context

Empirical strategy

Main Results

Discussion

Conclusions
Labor Market Outcomes

Empirical strategy

First stage: \( R_{ht} = \alpha RegionUnempShock_{rt} + X_{it}\beta + \varphi_t + \psi_r + \mu_{it} \)

\[
RegionUnempShock_{rt} = \sum_{j=1}^{J} s_{rj} \times DestUnempShock_{jt}
\]

Estimation strategy
- **2SLS** for extensive margins and adults hours worked
Labor Market Outcomes

Empirical strategy

- **Other observables:**
  - **Individuals:** gender, age, years of education, relationship with the HH
  - **Household:** % of members in the household younger than six years old and older than sixty-five years old, total labor and non-labor income
  - **Regional controls:** Gini coefficient and regional domestic product growth
  - **Time/month FE**
Labor Market Outcomes

Empirical strategy

• **Data**: *Gran Encuesta Integrada de Hogares, 2008-2010*
  → Repeated cross-sections
  → 284,371 observations of informal workers
Roadmap

Introduction

Context

Empirical strategy

Main Results

Discussion

Conclusions
Labor Market Outcomes (Hours-Informal Workers)

25% increase at the mean of remit. $\Rightarrow$ 6 hours ↓ & 10 hours ↓

<table>
<thead>
<tr>
<th></th>
<th>Informal jobs (1)</th>
<th>Self-employment (2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Remittances</td>
<td>-5.45 (2.61)**</td>
<td>-9.69 (4.67)***</td>
</tr>
<tr>
<td>Kleibergen-Paap F statistic</td>
<td>7.22</td>
<td>5.59</td>
</tr>
<tr>
<td>Anderson-Rubin Test</td>
<td>[-14.04,-2.41]</td>
<td>[-25.03, -4.88]</td>
</tr>
<tr>
<td>Observations</td>
<td>284,371</td>
<td>181,820</td>
</tr>
</tbody>
</table>
## Labor Market Outcomes (Health-Informal Workers)

25% increase at the mean of remit.  

\[ \Rightarrow \quad 27 \text{ p.p.} \uparrow \text{likelihood of having health insurance} \]

<table>
<thead>
<tr>
<th></th>
<th>Informal jobs (1)</th>
<th>Self-employment (2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Remittances</td>
<td>0.27</td>
<td>0.27</td>
</tr>
<tr>
<td></td>
<td>(0.11)**</td>
<td>(0.13)**</td>
</tr>
<tr>
<td>Kleibergen-Paap F statistic</td>
<td>7.22</td>
<td>5.59</td>
</tr>
<tr>
<td>Anderson-Rubin Test</td>
<td>[0.16, 0.64]</td>
<td>[0.14, 0.68]</td>
</tr>
<tr>
<td>Observations</td>
<td>284,371</td>
<td>181,820</td>
</tr>
</tbody>
</table>
## Labor Market Outcomes (Hours-Informal Workers)

Heterogeneous effects by gender

<table>
<thead>
<tr>
<th>Remittances</th>
<th>Informal jobs</th>
<th>Self-employment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Men</td>
<td>Women</td>
</tr>
<tr>
<td></td>
<td>11.25</td>
<td>-20.71</td>
</tr>
<tr>
<td></td>
<td>(5.24)**</td>
<td>(4.94)***</td>
</tr>
</tbody>
</table>

*Significance levels: **p < 0.01, *p < 0.05*
Labor Market Outcomes (Health-Informal Workers)
Heterogeneous effects by gender

<table>
<thead>
<tr>
<th></th>
<th>Informal jobs</th>
<th></th>
<th>Self-employment</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Men</td>
<td>Women</td>
<td>Men</td>
<td>Women</td>
</tr>
<tr>
<td>Remittances</td>
<td>0.39</td>
<td>0.17</td>
<td>0.38</td>
<td>0.12</td>
</tr>
<tr>
<td></td>
<td>(0.11)**</td>
<td>(0.10)*</td>
<td>(0.13)**</td>
<td>(0.11)</td>
</tr>
</tbody>
</table>
Roadmap

Introduction

Context

Empirical strategy

Main Results

Discussion

Conclusions
Labor Market Outcomes
Heterogeneous effects by gender

- Disruptive effect of migration ↑ labor supply (Amuedo-Dorantes and Pozo, 2006)
  - Barriers to work in the formal sector
  - Migration patterns in Colombia have been dominated by women

- Healthcare access ↓ the probability of depression and ↑ the use of many preventive services (Baicker et al., 2013)
Labor Market Outcomes
Heterogeneous effects by gender

- Disruptive effect of migration $\uparrow$ labor supply (Amuedo-Dorantes and Pozo, 2006)
  - Barriers to work in the formal sector
  - Migration patterns in Colombia have been dominated by women
- Men benefit the most in terms of health insurance
  - Informal jobs are associated with poor health status (Giatti et al., 2008)
  - Healthcare access $\downarrow$ the probability of depression and $\uparrow$ the use of many preventing services (Baicker et al., 2013)
Labor Market Outcomes

Heterogeneous effects by age

- Youth workers (less than 25 years old)
  - Group of population as the most vulnerable to being informally employed (ILO, 2015)
Labor Market Outcomes

Heterogeneous effects by age

• **Youth workers** (less than 25 years old)
  • Group of population as the most vulnerable to being informally employed (ILO, 2015)
    • Six of every ten new jobs available to youth are informal
    • Lack of access to formal credit
    • More likely to remain informal
Labor Market Outcomes (Hours-Informal Workers)

heterogeneous effects by age

<table>
<thead>
<tr>
<th></th>
<th>Informal jobs</th>
<th></th>
<th>Self-employment</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Youth</td>
<td>Old</td>
<td>Youth</td>
<td>Old</td>
</tr>
<tr>
<td>Remittances</td>
<td>-25.73 (5.98)***</td>
<td>-3.85 (4.71)</td>
<td>-20.66 (5.03)**</td>
<td>-10.97 (5.03)**</td>
</tr>
</tbody>
</table>
Labor Market Outcomes (Health-Informal Workers)

heterogeneous effects by age

<table>
<thead>
<tr>
<th></th>
<th>Informal jobs</th>
<th></th>
<th>Self-employment</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Youth</td>
<td>Old</td>
<td>Youth</td>
<td>Old</td>
</tr>
<tr>
<td>Remittances</td>
<td>-0.01</td>
<td>0.30</td>
<td>0.0004</td>
<td>0.24</td>
</tr>
<tr>
<td></td>
<td>(0.06)</td>
<td>(0.09)***</td>
<td>(0.05)</td>
<td>(0.10)**</td>
</tr>
</tbody>
</table>
Roadmap

Introduction

Context

Empirical strategy

Main Results

Discussion

Conclusions
Labor Market Outcomes

Conclusions

- Remittance income provides an important means to relax liquidity constraints for households. By relaxing budget constraints:
  1. It reduces the amount of informal labor effort and increases the likelihood of having health insurance which may have positive consequences in terms of well-being.
  2. It reduces the amount of labor effort for youth workers, which may have positive long term consequences.
THANK YOU

afcuaadros@icesi.edu.co