

# **Further analysis on Bolivia**

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# Motivations

- ▶ Elaborate further on the rural/urban pillar
  - ▶ How does the rural/urban divide play out in one's lifetime?
  - ▶ When is the inflection point, if any? Does the impact of geography come earlier in life, during one's education, or manifest later, when one enters the workforce?
- ▶ Does the generational cycle of poverty really exist? How can we answer this question with cross-sectional data?
- ▶ What is the connection between the social class pillar and (in)formal employment? Disentangle the mutual influence between (in)formality and income

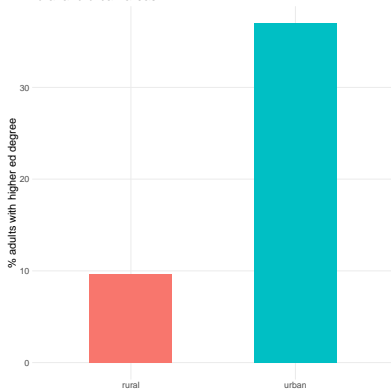
# Main components

- ▶ Wage premium of higher education between rural and urban areas
- ▶ Differences between rural households with and without domestic remittances, which are presumed to come from family members in cities
- ▶ Different generations' incomes in multi-generational households
- ▶ Incomes of individuals working in formal vs. informal jobs

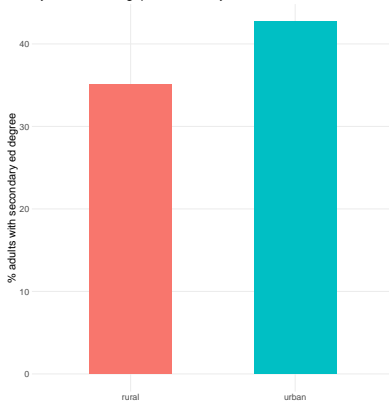
**Wage premium of higher education  
between rural and urban areas**

# Percentage of adults with higher education

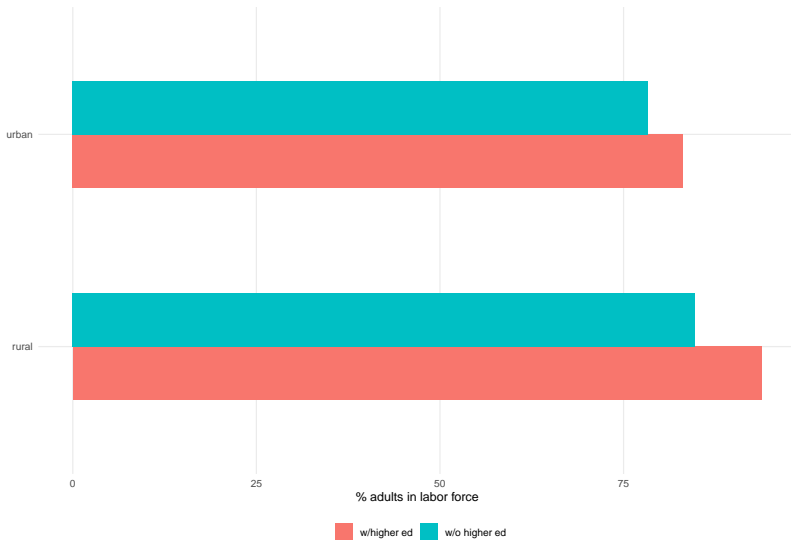
There is a large gap in higher ed attainment between rural and urban areas



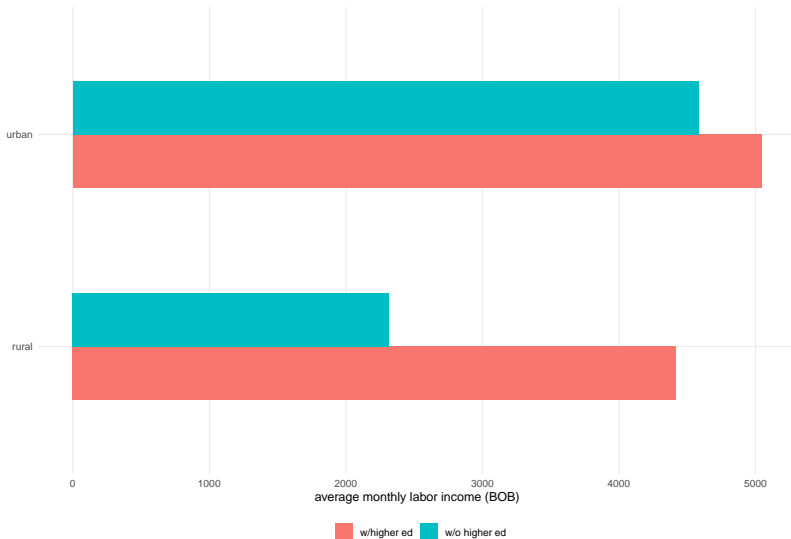
By contrast, the gap in secondary education is much smaller



# LFP rates among adults with higher ed, by area



# Average labor earning by higher ed status and area



**Inflection point: when rural residents  
migrate to cities?**



# Rural households with and without domestic remittances

- ▶ Households receiving domestic remittances are poorer and not that much smaller
- ▶ The recipients do not work much less because of the remittances, as there is no difference in LFP rates and only a small gap in average work hours

**Table 1:** Rural households by remittance

has_remit	nhh	hhsz	remit	pc_inc	inc	lfp	lfp_paid	work_hr
FALSE	1599	3.78	0	1156	4374	85.7	66.4	45.3
TRUE	299	3.45	540	918	3172	85.0	65.7	43.7

# Examine the assumption: which way do remittances flow?

**Table 2:** Rural households by remittance

has_remit	nhh	hhsz	remit	pc_inc	inc	lfp	lfp_paid	work_hr
FALSE	1599	3.78	0	1156	4374	85.7	66.4	45.3
TRUE	299	3.45	540	918	3172	85.0	65.7	43.7

**Table 3:** Urban households by remittance

has_remit	nhh	hhsz	remit	pc_inc	inc	lfp	lfp_paid	work_hr
FALSE	6325	3.71	0	2133	7902	80.5	73.1	47.1
TRUE	888	3.46	907	1808	6258	76.6	67.7	44.3

16% of rural households and 12% of urban households receive domestic remittances

# Examine a deeper assumption: what is rural, what is urban?

- ▶ Bolivia's definition of "urban": Localities with 2,000 inhabitants or more (UN, *World Urbanization Prospects*, 2011)
  - ▶ The way a "locality's" boundary is drawn can determine whether it counts as urban or rural
- ▶ While on paper it seems like 80% of adults live in urban areas (EH 2018), trends like peri-urbanization, expansive urban growth, and diffusion of urban form in villages blur the rural-urban boundaries (O'Hare & Rivas 2007)



# Examine a deeper assumption: what is rural, what is urban?

- ▶ We don't know which way the remittances really flow
- ▶ The summary statistics on households w/remittances could change if the threshold of rural/urban is moved
- ▶ Moreover, this calls into question the rural/urban pillar itself

## Another look: there are still differences

**Table 4:** Rural households by remittance

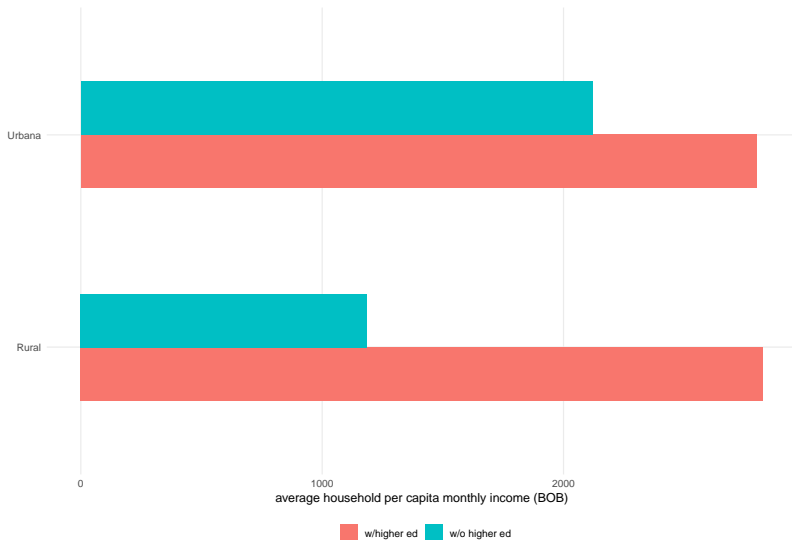
has_remit	nhh	hhsz	remit	pc_inc	inc	lfp	lfp_paid	work_hr
FALSE	1599	3.78	0	1156	4374	85.7	66.4	45.3
TRUE	299	3.45	540	918	3172	85.0	65.7	43.7

**Table 5:** Urban households by remittance

has_remit	nhh	hhsz	remit	pc_inc	inc	lfp	lfp_paid	work_hr
FALSE	6325	3.71	0	2133	7902	80.5	73.1	47.1
TRUE	888	3.46	907	1808	6258	76.6	67.7	44.3

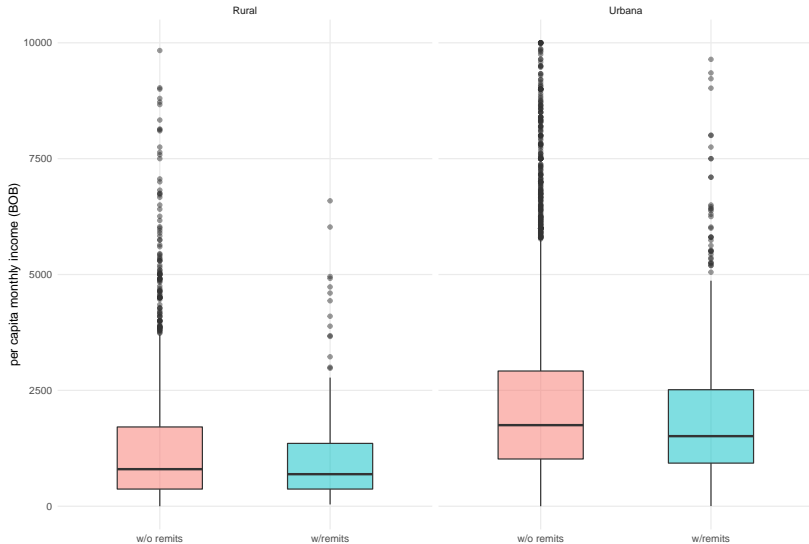
- ▶ Remittances are higher among urban households
- ▶ Inflection point: **higher education**

# Who are the migrants?

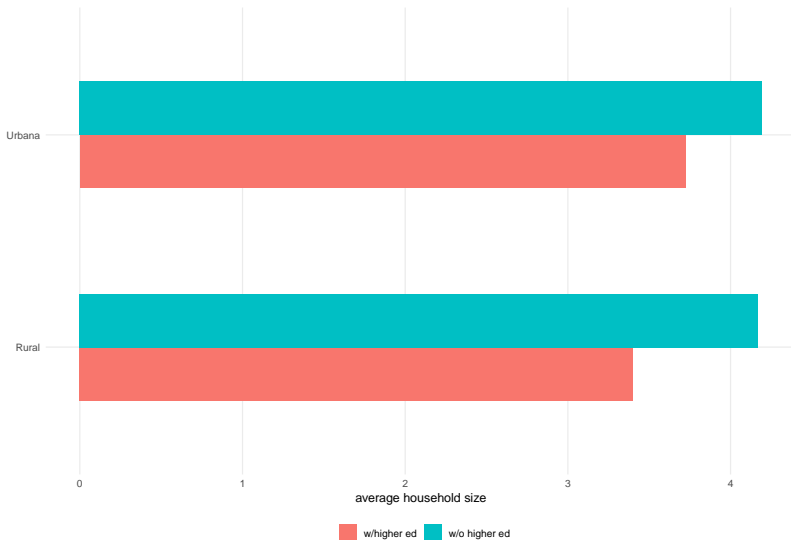


People without higher ed come from poorer families, aka families that are more likely to have remittances

# Who are the migrants?



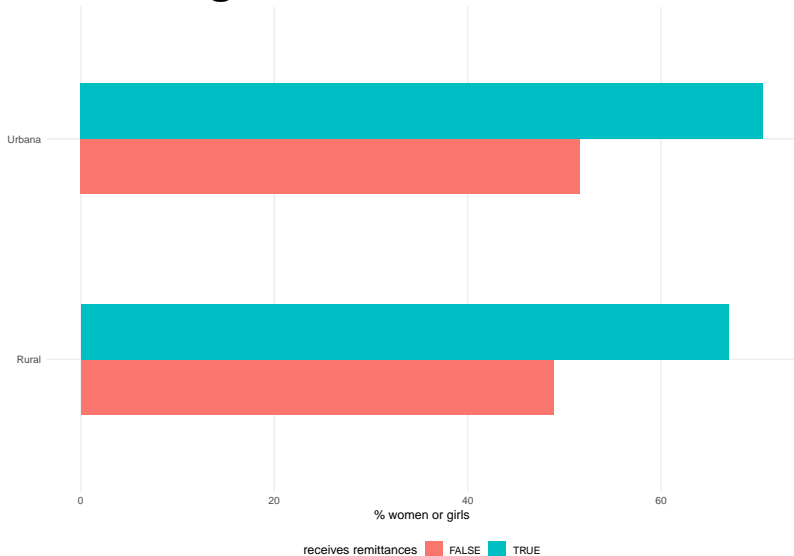
# Who are the migrants?



People without higher ed come from slightly larger families, who are more likely to produce surplus labor who flows to cities



# Who are the migrants?



Think: women and girls also tend to be the ones doing unpaid labor

# Connect the dots: extrapolate a “typical” migrant

- ▶ From a poor household in need of extra income
- ▶ A man
- ▶ Without higher education
- ▶ There are enough hands at home for subsistence farming or other unpaid family-based productive activities
- ▶ Drawn to lucrative jobs in the cities
  - ▶ Remember that even someone without a college degree in cities earns a bit more than someone with a college degree in villages
- ▶ Make it in the city? How does he stack up against other migrants from (smaller) urban areas, who are more likely to be college educated?
- ▶ Migration flow: rural villages → small cities → large cities

# The bottom line

- ▶ The (first) inflection point comes earlier in life, in higher education attainment
- ▶ While the premium for higher ed is high in rural areas, the educational opportunities are low: only  $<10\%$  go to university
- ▶ The disadvantage in education is manifested later on whether one migrates to cities or stays in the countryside and takes on low-paid jobs
- ▶ But the educational discrepancy is also a structural issue, where university is reserved for the rich

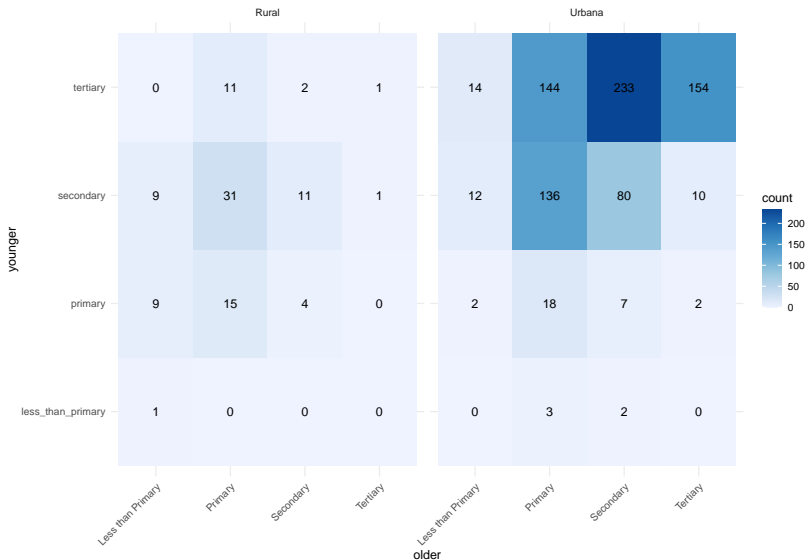
## **Generational cycle of poverty**

# Sample

- ▶ To investigate inter-generational effects, I filtered for multigenerational households, defined as households with at least two generations of **adults between 25 and 60**
- ▶ This subset includes 3462 adults from 1523 households, representing 21.8% of all adults sampled in the household survey

# Overall social mobility: education

Educational attainment has improved significantly between generations

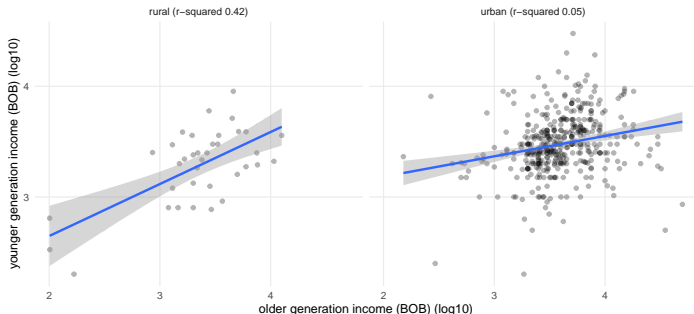


# Overall social mobility: employment

While educational attainment has improved, this has not resulted in a systematic increase in labor earnings

**Table 6:** Employment conditions by generation

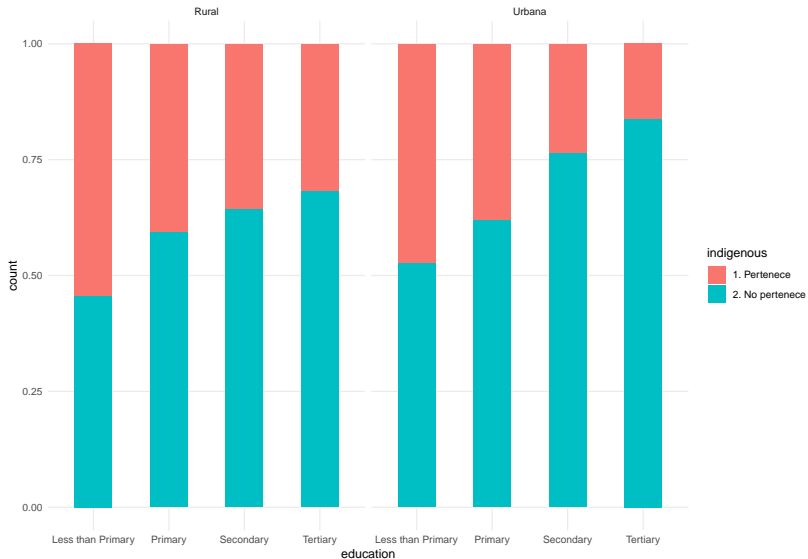
gen	lfp	lfp_paid	avg_lab_inc
older	76.2	69.2	5162
younger	77.7	60.6	3799



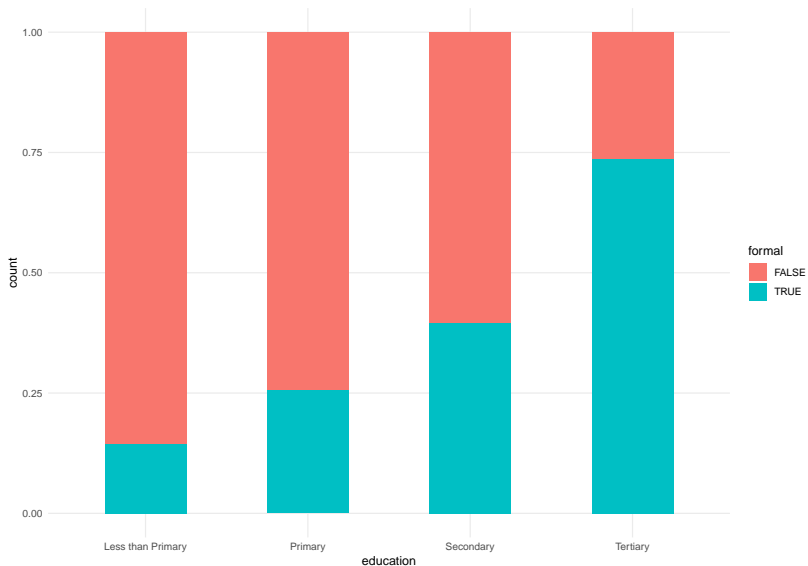
**Other exploratory stuff**



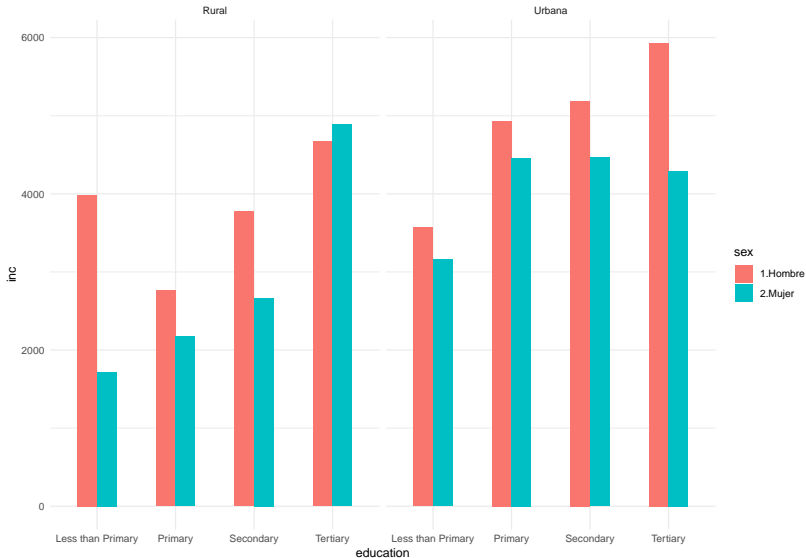
# Indigenous



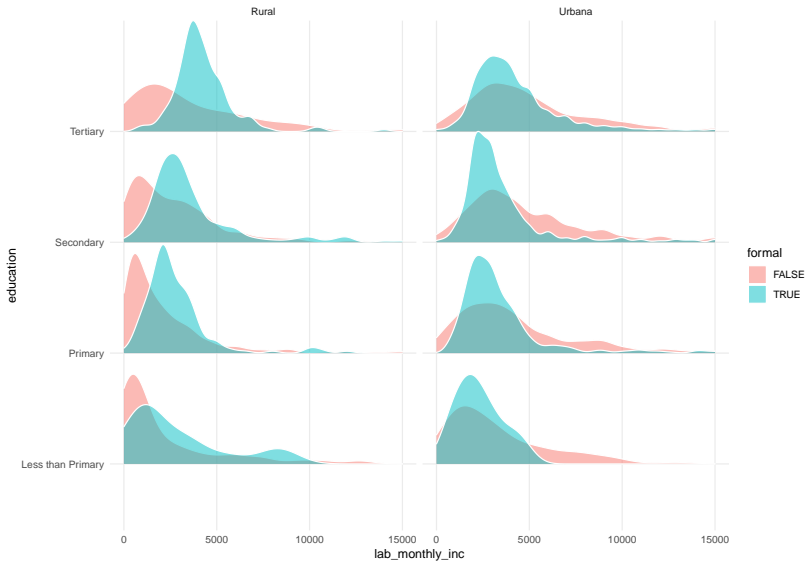
# Formality



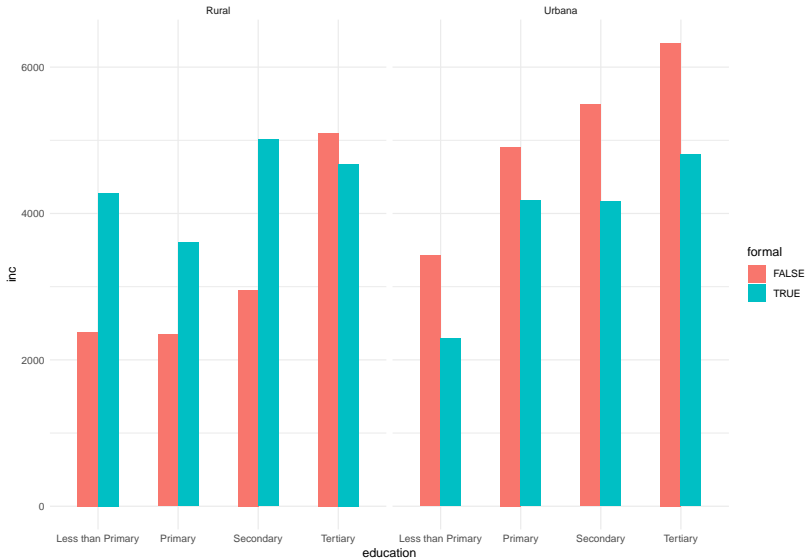
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