Migration between Rural and Urban Sectors of Lower-Income Countries

Robert E.B. Lucas
Two Main Motivations

A. Since beginnings of development economics, sectoral transformation and migration tied together

Yet dominant empirical evidence = migration between administrative regions not rural-urban

“Migration is almost always operationally defined to be a move across a political boundary.” Plane and Rogerson (1994: 93).
B. Recent exception Young (2013)

“About one out of every four or five individuals raised in rural areas migrates to urban areas as a young adult. Surprisingly, it is also true that one out of every four or five individuals raised in urban areas migrates to rural areas as a young adult.”

“a world where the population sorts itself geographically on the basis of its human capital and skill”

“the urban-rural gap \textit{in living standards} reflects the efficient allocation of labor in response to the regional demand for skill”
Data Sources Utilized

Restrict to
   Nationally representative
   Identify rural or urban birthplace or childhood spent
      Some direct
      Some imputed by area

1. IPUMS
   Large samples but little economic information

2. LSMS
   Disappointing migration information

3. DHS
   Childhood spent, not where born
   Focus females 15-49 (some only married women)

4. Few country surveys

SEE HANDOUT PP: 1-2
**Comparison of Lifetime Migration Rates by Type of Data Source:**

**Females Ages 25-49.**

<table>
<thead>
<tr>
<th></th>
<th>RU</th>
<th>UR</th>
<th>RU</th>
<th>UR</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Data by birthplace</strong></td>
<td>0.375</td>
<td>-7.227</td>
<td>1.587</td>
<td>-7.901</td>
</tr>
<tr>
<td></td>
<td>0.23</td>
<td>-3.74</td>
<td>1.22</td>
<td>-4.25</td>
</tr>
<tr>
<td><strong>Urbanization rate</strong></td>
<td>0.517</td>
<td>-0.256</td>
<td>0.048</td>
<td>-0.243</td>
</tr>
<tr>
<td></td>
<td>12.38</td>
<td>-5.61</td>
<td>0.13</td>
<td>-0.46</td>
</tr>
<tr>
<td><strong>Year</strong></td>
<td></td>
<td></td>
<td>0.238</td>
<td>0.002</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1.09</td>
<td>0.00</td>
</tr>
<tr>
<td><strong>Intercept</strong></td>
<td>-0.214</td>
<td>29.594</td>
<td>-457.636</td>
<td>26.912</td>
</tr>
<tr>
<td></td>
<td>-0.14</td>
<td>10.91</td>
<td>-1.08</td>
<td>0.04</td>
</tr>
<tr>
<td><strong>Country fixed effects</strong></td>
<td>Yes</td>
<td>Yes</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>No. observations</strong></td>
<td>96</td>
<td>96</td>
<td>56</td>
<td>56</td>
</tr>
<tr>
<td><strong>R²</strong></td>
<td>0.646</td>
<td>0.322</td>
<td>0.260</td>
<td>0.479</td>
</tr>
<tr>
<td><strong>F-statistic</strong></td>
<td>78.893</td>
<td>26.160</td>
<td>2.930</td>
<td>7.658</td>
</tr>
</tbody>
</table>

T-statistics beneath coefficient estimates; heteroscedasticity robust standard errors.
Urban to Rural Migration Incidence: Females Age 25-49

- Childhood in urban
- Born in urban
UR and RU are symmetric on average across countries in DHS data
Confirmed here

But are they symmetric

within individual countries
at the same time?
RU and RU Average Adult Propensities by Urbanization Rate

- Urbanization Rate %
- RU and RU Average Adult Propensities

Legend:
- UR
- RU
Migration is not symmetric in both directions

RU propensity very high where rural base small
UR not so high where urban base small

Outcome=
Net rural-urban migration dominates almost everywhere
Revealed both in by-birth and by-childhood data
Some basic migration propensities

SEE HANDOUT PP: 3-5: Rural Born and Urban Born Adults, by Migration Category and Gender

- All adults ages 15+

- Stay = always lived here

- RR or UU = moved place within rural or within urban since birth

- Known return = Born rural/urban, now in same, but known abroad or cross urban-rural at some point
  **BUT** clearly undercounts (over count stay or within)

- RU or UR = residence crossed rural-urban divide since birth
Substantial literature on gender mix in migration, though most attention on international migration

In India    NSS shows 3/4 persons who had ever changed usual residence by 2007-8 are female. Much discussion of this as marriage (not labor) RR migration. Propensity RU slightly higher among women than men.

Fafchamps (2012:461) puts it well: “Once we recognize that these women join a self-provision unit where their labor is valued, their migration should be seen as an equally important labor allocation process.”

In SSA
“Women’s mobility in sub-Saharan Africa has continued to receive little attention in migration studies, in part because of an enduring paucity of national-level data for the study of sex-specific migration patterns in the region.” (Camlin, Snow and Hosegood, 2014: 528).

In LAC
Common perception women dominate
But evidence?
Gender Mix in Rural-Urban Lifetime Migration

RU rate: Male-female
Logit regressions for each country on rural born, move to town or not

Controls:
- Age group (15-24, 25-49, 50+)
- Education (none, primary, middle, higher)
- Marital status (married, never married, separated, widowed)
- Ethnic/religious group (varies by country)

Female dummy significantly negative only in Rwanda
Significantly positive even in most SSA
Stigma against ‘autonomous’ migration of women?

Percent of never-married women migrating from rural-to-urban
Greater in most regions than for never-married men

But never-married male migrants in town more likely to be living without relatives

Never-Married Adults, Age 21+
Cross-Country Averages

<table>
<thead>
<tr>
<th></th>
<th>Male-Female %</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>RU propensity</td>
</tr>
<tr>
<td>C ASIA</td>
<td>-3.9</td>
</tr>
<tr>
<td>E ASIA</td>
<td>-5.4</td>
</tr>
<tr>
<td>LAC</td>
<td>-10.4</td>
</tr>
<tr>
<td>MENA</td>
<td>0.6</td>
</tr>
<tr>
<td>SSA</td>
<td>-1.5</td>
</tr>
</tbody>
</table>
Age of RU move peaks around 20 (well known)

Age of return (less well known). SEE HANDOUT PP: 6-9.
  NB includes only where age of previous move known (excludes where-lived 5 years ago)

Features:
  Return migration of young folk
    Born rural
    Spend childhood in urban
    Return rural
    Hence DHS UR looks greater

“Africans have generally preferred to return to their place of origin on retirement”
  (Peil, 1995: 149).
  Not much solid evidence
  No clear hint of retirement to village here
Percent of Rural-Urban and Urban-Rural Migrants Resident for Less than 5 Years

- Urban to rural
- Rural to urban

60                  40                   20                   0                      20                   40

60
For a few countries have two comparable data sets at different times
  And also both report duration of residence

  Construct numbers that should have been here at later date
    If all the earlier migrants stayed

    SEE HANDOUT: PP 10-12.

Large gaps: many earlier migrants no longer there
  Both RU and UR
Additional view

For both RU and UR PDF skews right among older age groups

E.g. Migrants age 50+ had migrated at older ages

Either cohorts migrated at very different ages
Or those who migrated younger had re-migrated

Combined evidence strongly suggests RU and UR migrations are far from permanent
Return and Onward Migration are Common

“Migrating is like sinning; after you have done it once it is easier to do again”.

Selection and Sorting on Education

Young (2013)

Notes (using DHS data) on average across countries:

- mean years of schooling among rural-to-urban migrants is higher than for lifelong rural dwellers
- mean education of urban-to-rural migrants is lower than for lifelong urbanites.

Builds model assuming

- Unobserved skills positively but imperfectly correlated with observed education
- No barriers to free internal migration

Combined with equal propensity to migrate RU and UR

Results in efficient sorting:
- Smarter, better educated in town
- Less able, with lower education in rural areas

This completely explains the rural/urban gap in living standards (main source of global inequality)
Confirm positive selection on education RU
negative selection on education UR

SEE HANDOUT P: 22
(Interesting exception: Iran)

Also significance of steps in logit equations mentioned earlier
Multinomial logit (e.g. Stay rural, RR, RU)
More education = more likely RR
but even more likely RU

more likely move UU
but less likely move UR

But sorting?
Given poor educational opportunities and outcomes in rural areas

Even though a higher fraction of well-educated rural-born move to town
They are in small numbers

A smaller fraction of the less well-educated rural-born move to town
But they represent large numbers

RU migration dilutes the education base in town
UR migration enhances the education base in rural areas

Selection but not sorting on education
Un-observables? TBD
Migration and Conjugal Separation

Why of concern?

Effects upon:
• Fertility
• Impoverishment of de facto female-headed households
• Marital stability
• Transmission of sexual diseases
• Upbringing of children
THREE ASPECTS OF DATA ANALYZED

Cohabitation of married couples

Among migrants, who moved first and by how long

Separation by temporary/seasonal migration
**Cohabitation of Married Couples**

Reported marital status:
- Never married
- Currently married or in consensual union
- Separated or divorced
- Widowed

How many currently married women/men not living with partner?

But problem ...
• Emigration of married men
• Polygamy
• Attitude to commitment!
Temporary Separation

Three aspects:

Who moves first?
How long is the separation?
Seasonal migration as separation
Who moves first?


Samples: Married, now living with spouse
Male and female
UR and RU migrants

Categories:
Migrant followed spouse who had migrated earlier
Both spouses migrated here in same year
Migrant preceded spouse who migrated later
Migrant joined spouse who was born here

NB Whether married before migration = unknown
Formal marriages not always common
Rural-Urban Migrant Joined Spouse Who Was Born in Town

No obvious regional pattern
Percent of Rural-Urban Migrant Couples who Arrived Simultaneously

Arrived together  Arrived separately
Where one RU migrant partner arrived before the other, how long was the gap?


Positive years = wife arrived first
Negative years = husband arrived first

- On average husband arrived first in every country (true too for UR moves)
- Most countries peak at husband arriving one year earlier
- But can be much longer
- In 8 of the 15 countries > 10% of men had been in town > 10 years before their wives arrived
- In only 2 countries > 5% of women arrived more than 5 years before their husband.
Temporary separation by seasonal migration

LSMS asks months away during year

Coverage:
- Only married persons where partner present
- Where couple both away part year, not known if go together
  Assume yes, so table shows net months away of longer partner


Note additional countries included
Logit – away 1+ month more than partner; rural and urban separately

**Gender:** Women less likely to be absent than men, both from rural and urban homes.

**Age:** Younger more commonly away from home and their partners.

**Education:** Mixed; no clear evidence of less well educated, such as for seasonal work in agriculture.

**Kids at home:**
- **Fathers** are more commonly away the larger is their family (perhaps to fulfill greater consumption needs).

- **Mothers** are less likely to be away than are their husbands or partners.

**RU & UR** migrants are more likely to be away from their new homes.
Children and Migration

Implications for education:
   Absent parents vs remittance inflows
   Migrant children (with and without parents)

   In progress!

Family presence
Ethnicity, Language and Religion

In many countries the migration propensities of various communities differ substantially

SEE HANDOUT PP: 31-35.

In logit estimates of individuals’ odds of RU or UR lifetime migration

With controls for gender, age, education and marital status
A vector of dummies for the various groups is strongly significant in almost all cases

Interpretations are not always obvious
Discrimination in job markets
Remoteness of location
Poverty constraints

More testing is needed (and answers are probably country-specific)
Meanwhile: One pattern stands out.

Most groups less likely to leave their home area, the larger their fraction in population at home.
( Tested with interaction terms appended to aforementioned logits).

Results stronger with respect to leaving home rural area
And for minority groups.

Again multiple interpretations possible:

Concentration at home may signify smaller network at destination
Initial explorations suggest not
Preference to be in homogeneous setting more likely (insurance?)
THANK YOU