Intergenerational Mobility
Around the World

Ancona, May 27 2017

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Motivation
Why Intergenerational mobility (IGM)?

Promoting IGM essential for achieving sustainable, long term poverty reduction and shared prosperity.

**Absolute Upward Mobility**
- Improvement of welfare over time
- Individuals enjoying higher earnings, education and general well-being as their parents

**Relative Mobility**
- Origin independence/equality of opportunities
- Conditions/circumstances into which an individual is born do not determine his/her future outcomes (earnings, education, wellbeing...)

*END POVERTY*
Why should countries care about absolute and relative mobility?

Intergenerational mobility (absolute and relative) linked to long term growth and social stability

1. Absolute upward mobility across generations is always (politically) desirable, as it indicates sustained progress in the level of welfare in a society, including among the less well off.
   - Vietnam: 20 fold increase in per capita GDP between 1990 and 2014; 75% reduction in poverty

2. Improving relative mobility/equalizing opportunities key to reducing inequality and maximizing productivity in the long run:
   - Low relative mobility/inequality of opportunities associated with high inequality and waste of human potential (World Bank, 2005)
   - High inequality lowers mobility leading to higher inequality in the next generation (low mobility/high inequality trap)
   - Low mobility (or perceptions thereof) negatively affects aspirations and socio-economic inclusion, potentially leading to disenfranchisement, marginalization and even conflict.
Data on Educational Mobility

- **Survey question:** ask respondents (e.g. household head) for education of their parents; need not live with their parents (no ‘co-residency bias’)
- **Surveys identified from literature** (e.g. Hertz et al.), searching World Bank repository of questionnaires, standard multi-country surveys
- **Sources:** European Social Survey (ESS), Life in Transition Survey (LITS), World Bank LSMS-ISA, LAPOP, individual country surveys
- **Measure:** educational attainment of respondents (“children”) and their parents; no quality adjustment
- **Harmonization of surveys:**
  - Survey questions differ: Convert to standardized ISCED categories (5 common global categories): <Primary; Primary; Lower Secondary; Upper Secondary; Tertiary
  - Education systems differ: Convert to years of education using country-specific UNESCO info
- **Survey years:** 2007-2016 (avg. of 2013)
- **Analysis by decades of birth cohorts:** 1940-1980, focus on 1950-1970
Database coverage

<table>
<thead>
<tr>
<th>Region</th>
<th>No. of countries</th>
<th>Included in presentation</th>
<th>Final database</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No. of countries</td>
<td>Population coverage</td>
<td>No. of countries</td>
</tr>
<tr>
<td>East Asia and Pacific</td>
<td>24</td>
<td>6</td>
<td>87%</td>
</tr>
<tr>
<td>Eastern Europe and Central Asia</td>
<td>31</td>
<td>29</td>
<td>99%</td>
</tr>
<tr>
<td>Latin America and Caribbean</td>
<td>30</td>
<td>9</td>
<td>48%</td>
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<tr>
<td>Middle East and North Africa</td>
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<td>5</td>
<td>50%</td>
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<tr>
<td>South Asia</td>
<td>8</td>
<td>3</td>
<td>78%</td>
</tr>
<tr>
<td>Sub-Saharan Africa</td>
<td>48</td>
<td>8</td>
<td>46%</td>
</tr>
<tr>
<td>Industrialized countries</td>
<td>39</td>
<td>20</td>
<td>52%</td>
</tr>
<tr>
<td>Total</td>
<td>194</td>
<td>80</td>
<td>70%</td>
</tr>
</tbody>
</table>

- LAPOP surveys (Latin America): Only ask for mother’s education, so not included here – This presentation uses surveys which ask for mothers and fathers and takes the maximum.
- Expand coverage by including co-resident children/young adults and their parents: How deal with incomplete education? How big is co-residency bias?
  - Bring global coverage closer to 90%; East Asia & South Asia: ~95%, Sub-Saharan Africa: ~80%

Work in progress: Some surveys in Latin America, Sub-Saharan Africa and Industrialized countries are not yet harmonized
Measures of mobility

**Absolute mobility:**
*Upwards mobility [MAcont]:* Prob. child has more years of schooling than parent

*Intergenerational ‘elasticity’ [IGE]:* Impact of one more year of parental education on child’s expected years of education. (The $\beta_1$ from: $\text{childeduc} = \beta_0 + \beta_1 \times \text{parenteduc} + \varepsilon$)

**Relative mobility:**
*Correlation [COR]:* Correlation btw. parental years of schooling and child years of schooling

**Quartile based measures:**

<table>
<thead>
<tr>
<th></th>
<th>Child: Lowest quartile</th>
<th>Child: Highest quartile</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parent: Lowest quartile</td>
<td>Intergenerational poverty [Q4_IGpov]</td>
<td>Rags to riches [Q4_RR]</td>
</tr>
<tr>
<td>Parent: Highest quartile</td>
<td>Intergenerational privilege [Q4_IGpri]</td>
<td></td>
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</tbody>
</table>
Preliminary Results
Education versus income mobility

Absolute Mobility: Intergenerational Elasticity (IGE)

[Graph showing data points and lines indicating intergenerational elasticity coefficients for different countries.]

- Intergenerational elasticity of income on the x-axis.
- Intergenerational schooling coefficient on the y-axis.

Countries and their corresponding points on the graph include:
- Pakistan
- Nepal
- Brazil
- Peru
- Ethiopia
- United Kingdom
- Italy
- Chile
- South Africa
- Netherlands
- Sweden
- Italy
- Bangladesh
- Vietnam
- Denmark
- Finland
- Belgium
- Norway
- New Zealand
- Philippines (rural)
- United States
- China
- Malaysia

Linear fit and 45 degree line indicated on the graph.
Education versus income mobility

Relative Mobility: Correlation Parental/Children years of schooling
Share of individuals with no education
Share of individuals with tertiary education
Share of individuals with more years of schooling than their parents
Higher mobility $\leftrightarrow$ Higher GDP growth

Log GDP (per cap) vs. IGE

coeff = -0.98077077, se = 0.33152127, t = -2.96
Higher mobility $\leftrightarrow$ Lower poverty

Log poverty vs. IGE

$\text{coef} = 5.2301795, \text{se} = 1.96593, \text{t} = 2.66$
Correlation between parent and child years of schooling: Mobility higher in high income countries
Rags to riches (Prob. of reaching top quartile given parents in bottom quartile)
Rags to riches, intergenerational poverty and intergenerational privilege
Do disadvantaged individuals do better in states with more privileged individuals?
Rags to riches, intergenerational poverty and intergenerational privilege
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Rags to riches, intergenerational poverty and intergenerational privilege

South Africa
Aspirations and Mobility
Mobility contributes to formation of Aspirations

• Lack of mobility can negatively affect aspirations and investment behaviors.
  • The poor and the disadvantaged who live in highly unequal societies may come to think of their places in the social order as fixed and unchangeable (Hoff, 2012)
  • Parental social class is strongly correlated with (i) occupational aspirations of adolescents; and (ii) parental aspirations for their children in UK (Schoon and Parsons, 2002) and also in France (Guyon and Huillery, 2016)

• Entrenched poverty may lead to depression, “learned helplessness”, diminish goals and sap the capacity for hope
  • Experiment in Bangladesh finds evidence linking poverty to hopelessness and inaction (Bryan, Chowdhury, and Mobarak, 2012).
  • Evidence also indicates that poverty is a causal factor in depression and that in poor regions depression is widespread (Case and Deaton 2009).
Aspirations matter for educational outcomes

Aspirations and educations outcomes:

• Mothers' aspirations matter for their children's education outcomes, especially for children from poorer background (Dercon, Serneels 2015);

• Role models: exposure to more equal distribution of political power (gender quotas) raise aspirations for girls and parents and contributes to closing gender education gap (Beaman et al. 2012)

• Higher future mobility aspirations among poor Mexican youth associated with staying in school longer, exercising and using condoms during sex, and less self-destructive behavior such as consumption of alcohol, junk food, paying for sex, physical fighting, excessive TV (Weintraub et al., 2015)

• Social hierarchies (caste-based identities) and education outcomes:

  • Social stigma greatly discourages school enrollment among low-caste children in Pakistan, with low-caste girls, the most educationally disadvantaged group, being the worst affected. (Jacoby, Mansuri, 2015)

  • Laboratory experiment with high and low caste boys in India: providing cues to one’s place in the caste order influence ability of low caste boys to learn and willingness of high caste boys to expend efforts – (Hoff, Pandey 2014)
Labor markets and mobility
Labor Markets and Intergenerational Mobility

Labor market functioning critical determinant of intergenerational mobility – determines how returns to human capital investments materialize.

- **Healthy LM** – labor force participation, underemployment, (long-term) unemployment
  - Impact on LM outcomes through HC accumulation and LM effort (incentive effects, wealth effects)
- **Efficient LM** - returns depends on investments/efforts, not on circumstances.
  - Circumstances can affect LM outcomes through different channels: (educational attainments), family networks, gender/age/ethnic discrimination
- **Equalizing LM** – differences ex ante mitigated by LM institutions protecting workers and limiting earnings inequality
  - When LM heavily regulated, wages are less related to individual features (e.g. unions pressing for job-related pay scales, Visser and Checchi (2009); EPL reduces labor turnover and individual income variability/wage inequality (Checchi, Garcia Penalosa, 2008); minimum wages might contribute to containment of total inequality and inequality of opportunity (Salverda, Checchi, 2015)
Unemployment and Intergenerational mobility

Unemployment might contribute to lower IGM, perpetuating intergenerational transmission of inequality:

- **Unemployment previous generation** – negative impact on children human capital investments (health, education) for credit constrained households:
- **High youth unemployment** due to jobs shortage might have long term negative impact on more disadvantaged youth. Youth from wealthier families might
  - Delay entering the labor market and accumulate additional HC;
  - Accumulate unpaid experience (stages...): higher employability once labor demand resumes, reduced long term scarring from unemployment.
  - Better access to connections for available jobs – family networks provide non-price rationing mechanism
  - Reduce opportunity cost of waiting, therefore increasing possibility of “good job” match
Networks and intergenerational mobility

- Parental networks / inheritance of employers lowers intergenerational mobility and increases persistence of inequality
  - Loury (2006) – up 50% of jobs are found through family and friends. 10% jobs in US found through “prior-generation” male connection. Highest wages paid to those who find jobs this way.
  - Corak, Piraino (2010) – about 6% of Canadian men have the same main employer as their fathers 15-20 yrs earlier; positively related to paternal earnings and rise discretely at the top of the distribution.
  - Krishnan et al. (2016), Abras et al. (2013) – HOI analysis LM outcomes in MENA/LAC.
Inequality of opportunities, Labor market inefficiency, failure of aspirations and social stability: the case of Middle East and North Africa

• Employment has not expanded on a scale large enough to accommodate the growing population of youth;

• Extreme disconnect between the growing aspirations of an emerging youth population that is more educated than their preceding generations and the relative lack of opportunities in the labor market;

• Decline in opportunities in the public sector, the lack of opportunities in the formal private sector has meant that the younger and more recent entrants find themselves at a disadvantage compared with the earlier cohorts.
Role of family networks in allocation of “good quality jobs”

• **Scarcity of opportunities** couples with traditional **reliance on networks “wasta” (connection), for the allocation of good quality jobs** (formal, secure jobs in the public sector); implications in terms of fairness and labor market efficiency;

• **Perception of Inequality:** More than half of the respondents in all countries covered by Arab Demographic Baromether II (2010-11) believed that family and tribal identities were more important than or as important as qualifications in obtaining a government job (Brixi, Lust, and Woolcock 2015).

• ...and **actual inequality of labor market opportunities:** Crucial role of “circumstances” gender, region of birth and father’s education/employment characteristics on probability of being employed, employed full time, and in a job with a contract (Krishnan et al. (2016))
Inequality in Labor market opportunities

EGYPT:
being employed (Innermost donut); employed full time (middle); job with contract (outermost donut).

TUNISIA

Legend:
- Age
- Gender
- Region of birth
- Education
- Father's education
- Father in public sector
- Mother's education
Thank you!