

Fair Progress?

Economic Mobility across
Generations around
the World

EQUITY AND
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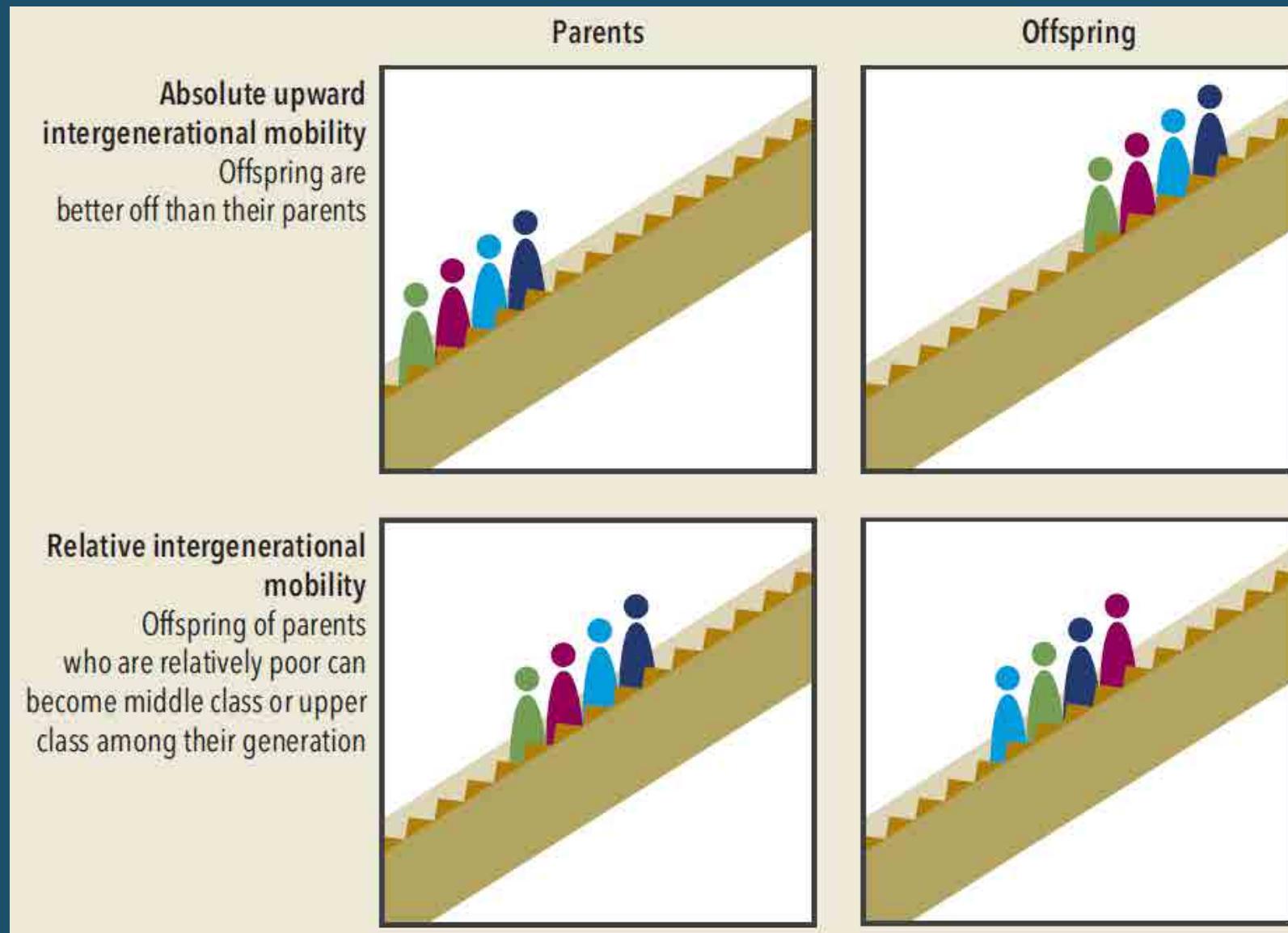
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ECONOMIC MOBILITY ACROSS GENERATIONS, OR INTER-GENERATIONAL MOBILITY, IS A KEY ELEMENT OF HUMAN PROGRESS, LINKED TO GROWTH, INCLUSION AND FAIRNESS.

This is true for both absolute mobility (whether individuals are better off than their parents) and relative mobility (how closely an individual's rank on the economic ladder is tied to their parents' rank)

Both types of mobility are essential to address the aspirations of a society



- **Absolute upward mobility:** reflects a universal human aspiration, of parents hoping for a better life for their children
- **Relative mobility:** lower inequality of opportunity, which is deeply unfair, and harmful for economic growth and social stability
- To sustain a **social contract** that addresses the aspirations of society, both types of IGM are essential

This study helps fill a large evidence gap in intergenerational mobility (IGM)

- Largest pre-existing studies of IGM cover no more than 42 countries, most of which are high-income
- In measuring, primary focus is on educational mobility – an essential element of economic mobility
 - Global coverage of data makes it possible to measure consistently across the world
 - Strongly associated with income mobility, but imperfectly (correlation ~0.5)

Global Database of Intergenerational Mobility (GDIM)

- Educational mobility of 148 economies (96% of world population), of which:
 - 111 have estimates for multiple 10-year cohorts (1940s to 1980s)
 - 111 are developing economies, of which 41 are from Sub-Saharan Africa
- Complemented by income mobility estimates (own estimates and complied from other studies) for 75 economies

Measures of mobility used in the study

Absolute mobility:

Upward mobility: The likelihood that the offspring has more years of schooling than parent

Relative mobility:

Intergenerational persistence: Impact of one more year of parental education (or income at the margin) on offspring's expected years of education (or earnings as an adult)

Correlation: Correlation b/w parents' and offspring's outcomes (earnings or years of education) – an alternate measure to check robustness

Transition matrix based measures:

	Child: Bottom half	Child: Top quartile
Parent: Bottom half	Intergenerational “poverty”	“Poverty to privilege”
Parent: Top quartile	“Privilege to poverty”	Intergenerational “privilege”

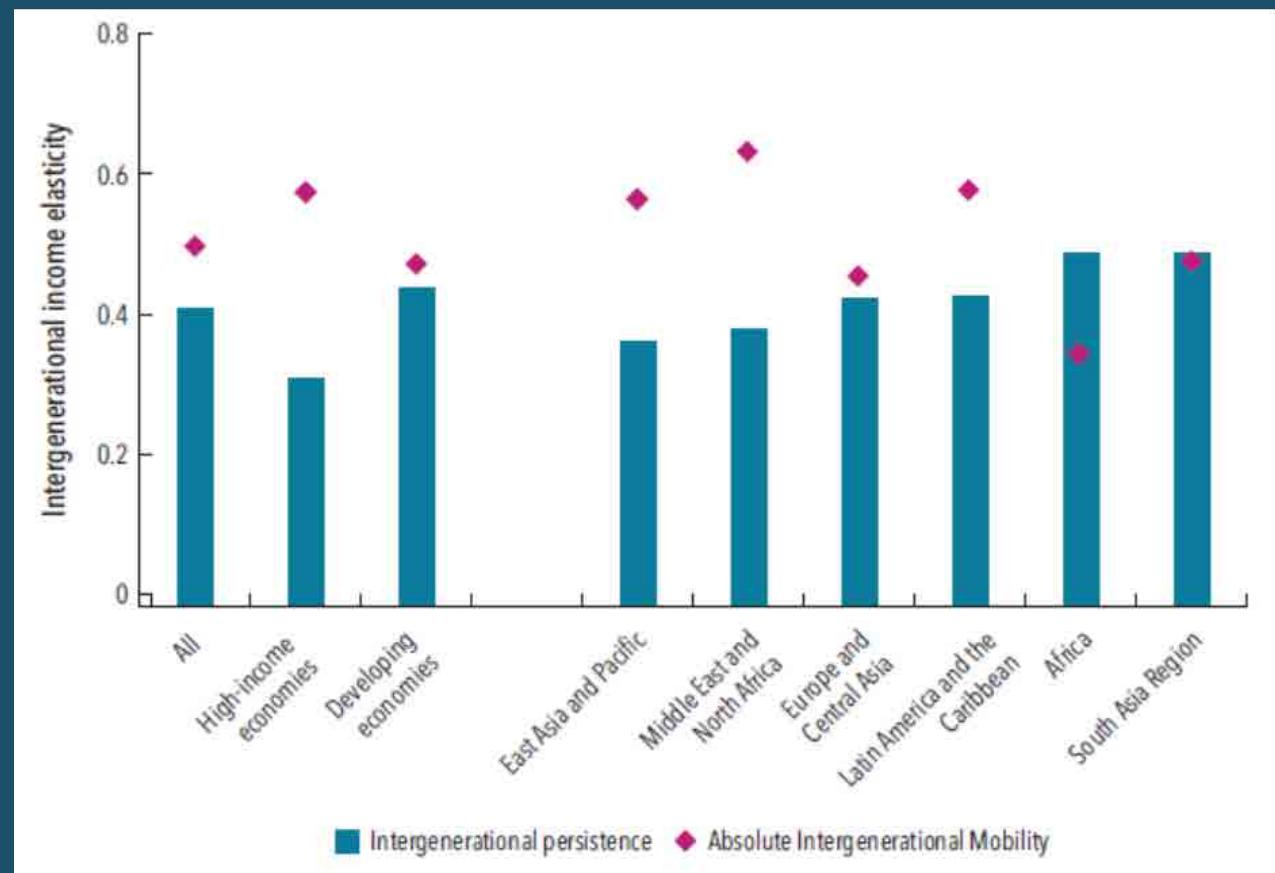
Unweighted cross-country averages:

Average mobility reported for groups of economies are unweighted by population

The developing world lags significantly behind high-income economies in educational mobility – absolute and relative

- The 15 economies with the lowest relative mobility are all developing economies
- 47% of the 1980s generation are more educated than their parents in the average developing economy, 57% in the average high-income economy
- The poorest regions are also the least mobile

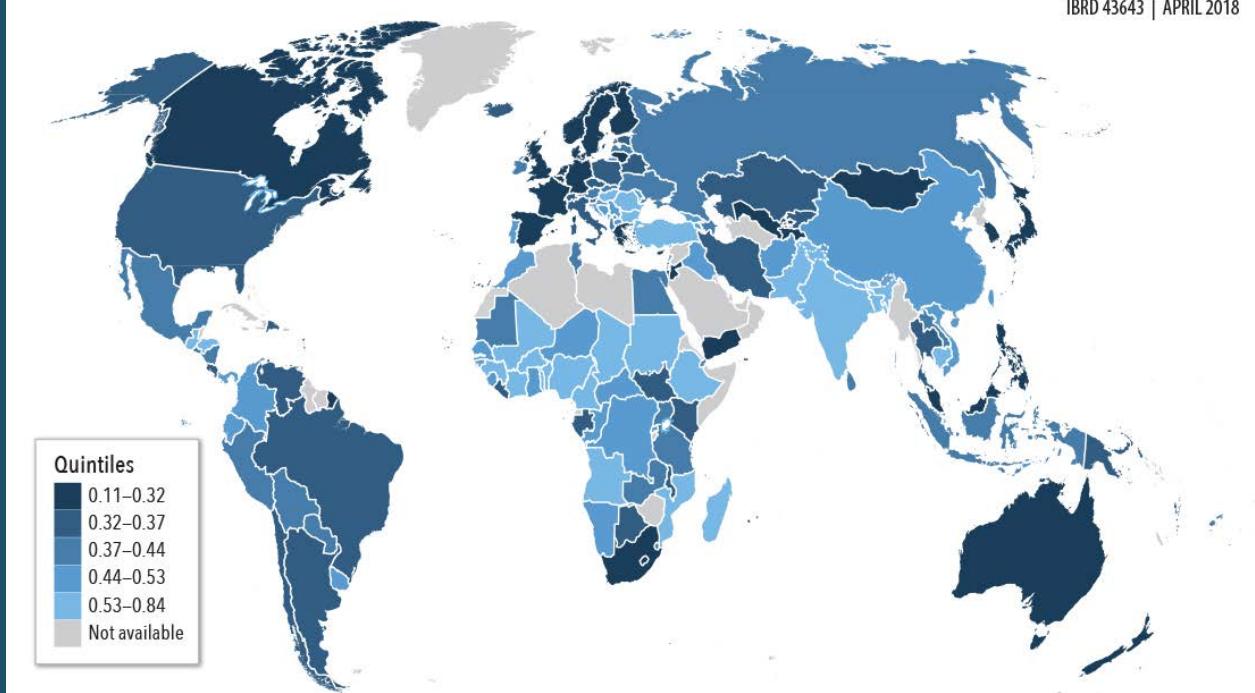
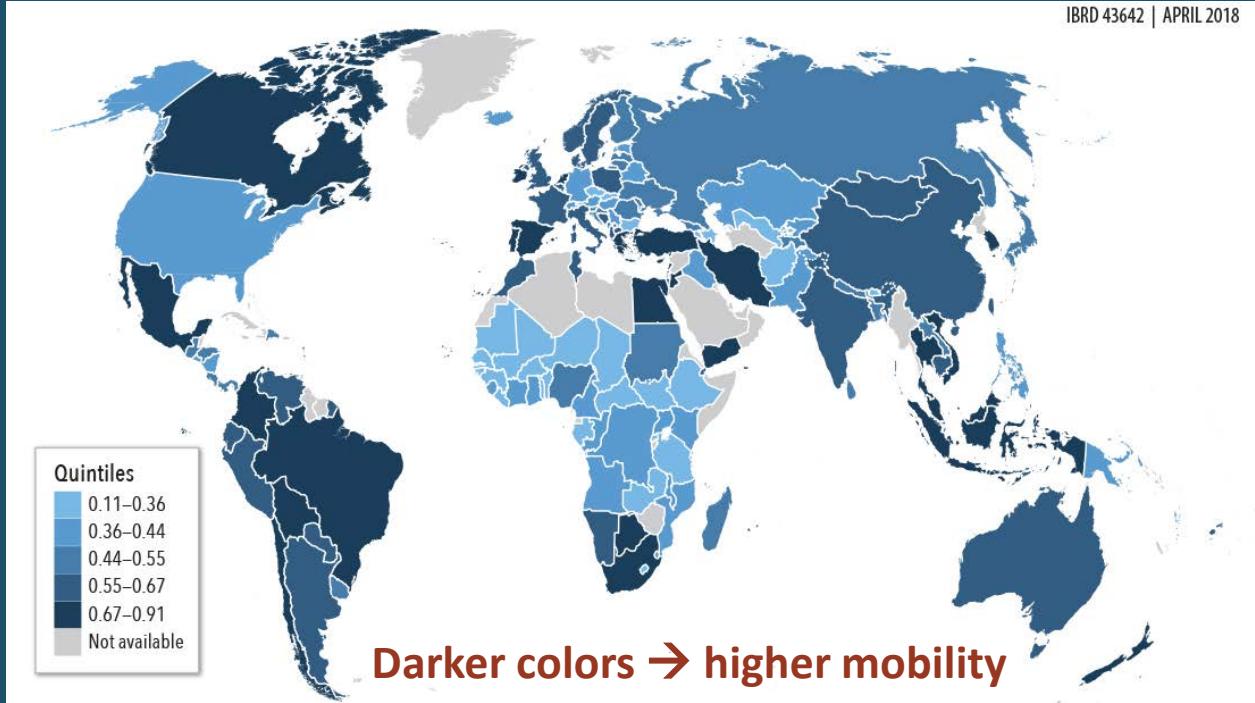
Average mobility – absolute and relative – by region and income-group



Notes: 1) Higher persistence = lower relative mobility
2) Developing regions exclude high-income economies

Mobility varies a lot across developing economies

- Absolute mobility ranges from 12% in some low-income or FCV economies in Africa to >80% in parts of E. Asia
- 13 of the bottom 15 economies by either mobility among young adults are in Africa and South Asia

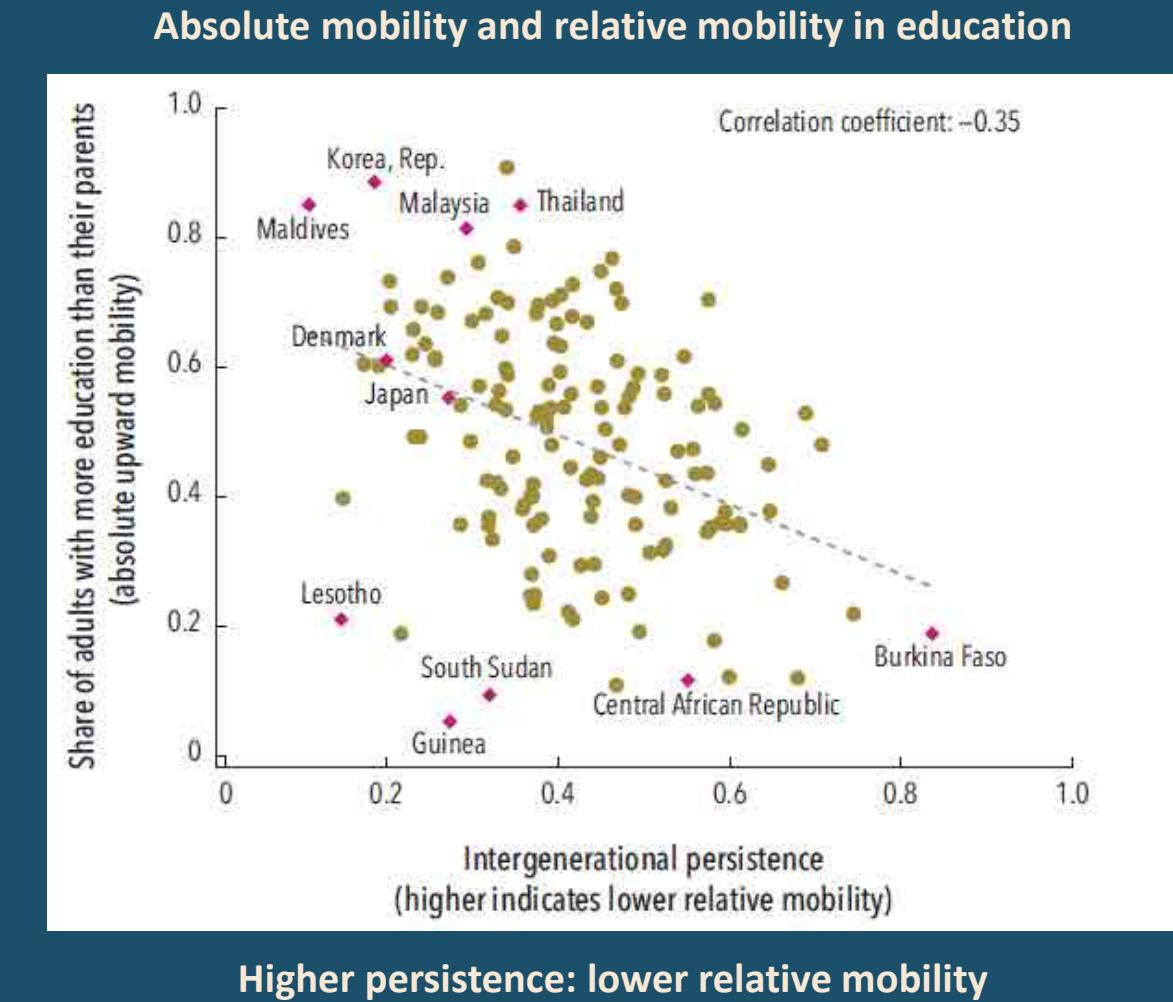


Absolute mobility in education (1980s generation)

Relative mobility in education (1980s generation)

Absolute and relative mobility are correlated, but imperfectly

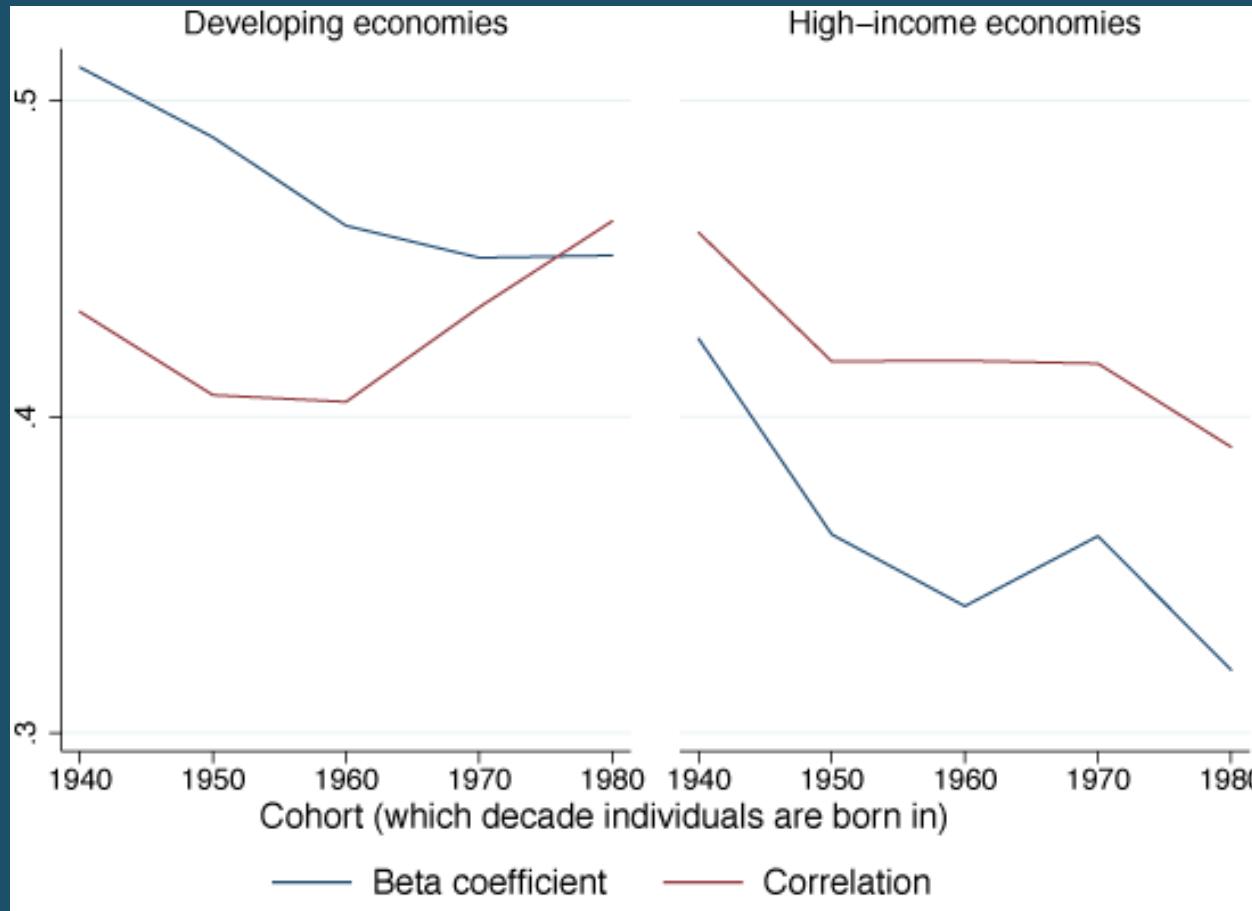
- Economies with higher absolute mobility, on the average, have higher relative mobility
- But note the outliers
 - High absolute vis-à-vis relative (e.g. Korea Rep., Malaysia, Thailand)
 - Low absolute vis-à-vis relative (e.g. Guinea, Lesotho, South Sudan)
- Clearly, high relative mobility has little meaning in the absence of absolute mobility



Over time, the gap between developing economies and high-income economies in relative mobility has increased

Intergenerational persistence in education

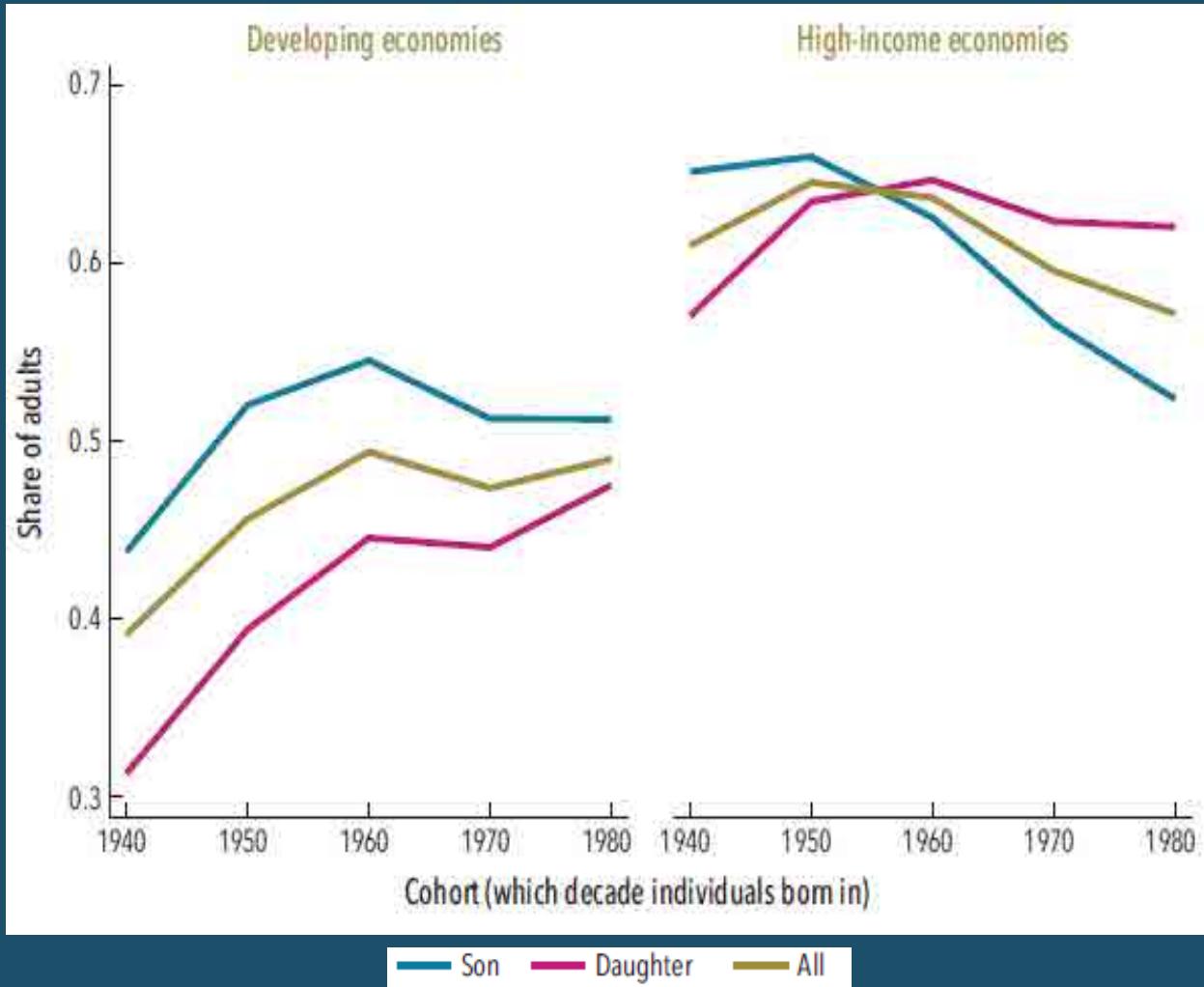
Higher indicates lower relative mobility



- Average relative mobility in developing economies has not improved from the '60s to the '80s generations
- Developing economy average for the '80s generation is close to the high-income average for the '40s generation

Absolute mobility has stopped rising worldwide since the 1960s generation

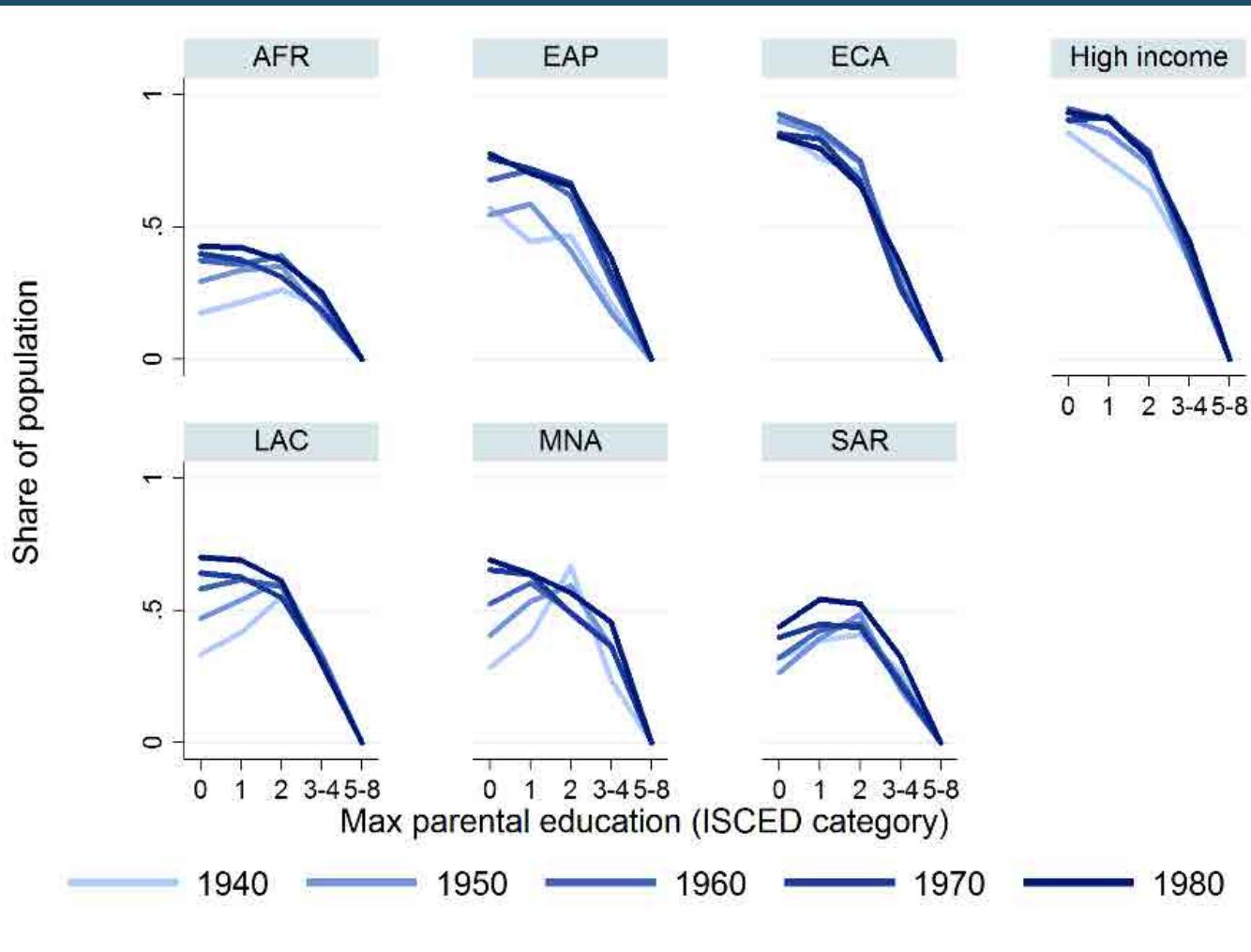
% of adults with more education than their parents
(Absolute mobility)



- High-income and developing averages are converging since the 1950s
- Developing economy average stopped rising since 1960s, at a much lower level of education
 - Average tertiary attainment in developing economies today is similar to the high-income average 40 years ago

In developing economies, absolute mobility is limited by low upward mobility among those born to parents with lower levels of education

Absolute mobility versus parental education levels

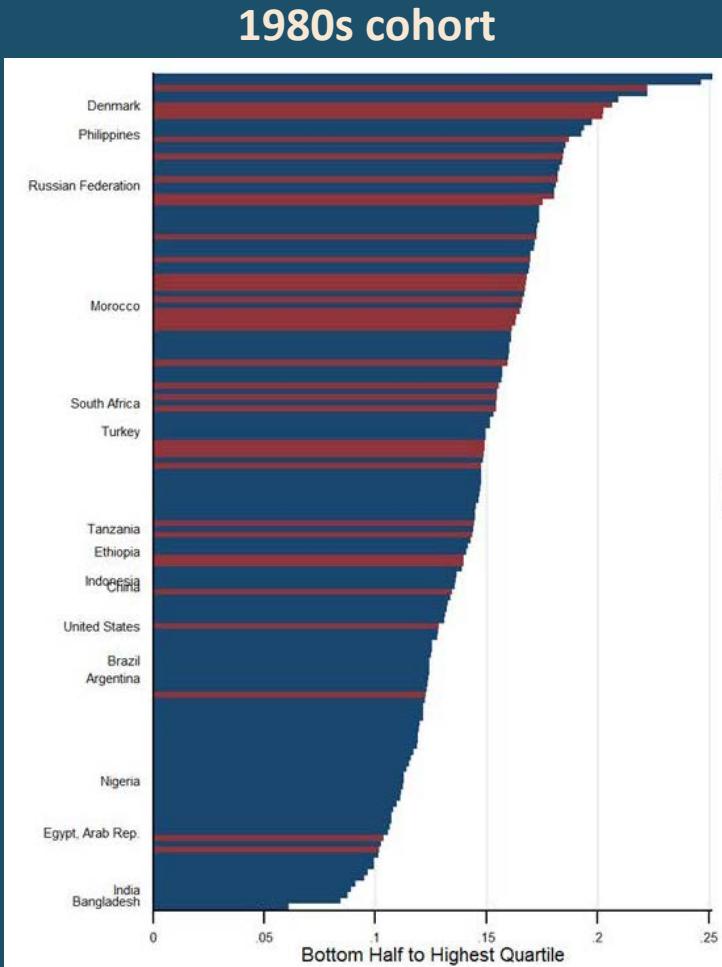


- One would expect absolute mobility to *decline* as parental education rises
- It does decline with parental education in high-income economies
- But in developing regions, an inverted-U relationship – consistent with a “poverty trap”
 - Inverted-U is most pronounced in the two poorest regions – stronger poverty trap
- The poverty trap is weaker for richer regions, and appears to be weakening over time

Almost everywhere, those born into the bottom half (by parental education) have a low chance of rising to the top quartile

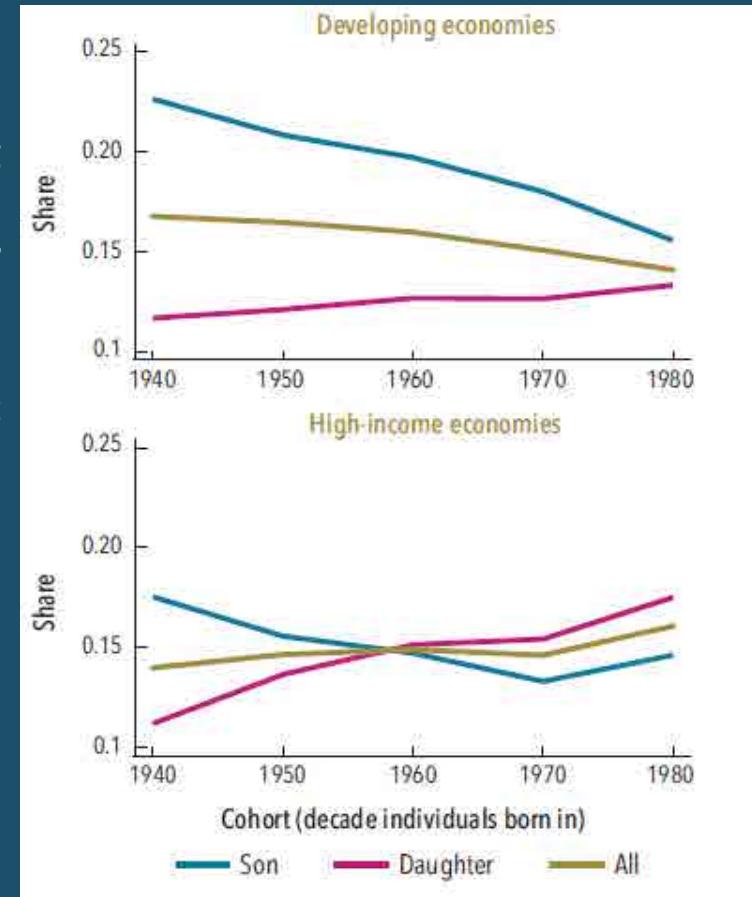
Share exceeds 20% rarely; the “ideal” would be 25%

Blue: developing
Red: high-income



Developing economy average has fallen over time, high-income economy average has been flat

Averages for cohorts over time



- 46 of the bottom 50 by upward mobility from the lower half are developing economies
- In the median developing economy, more than 2/3 of those born in the lower half stay in the lower half

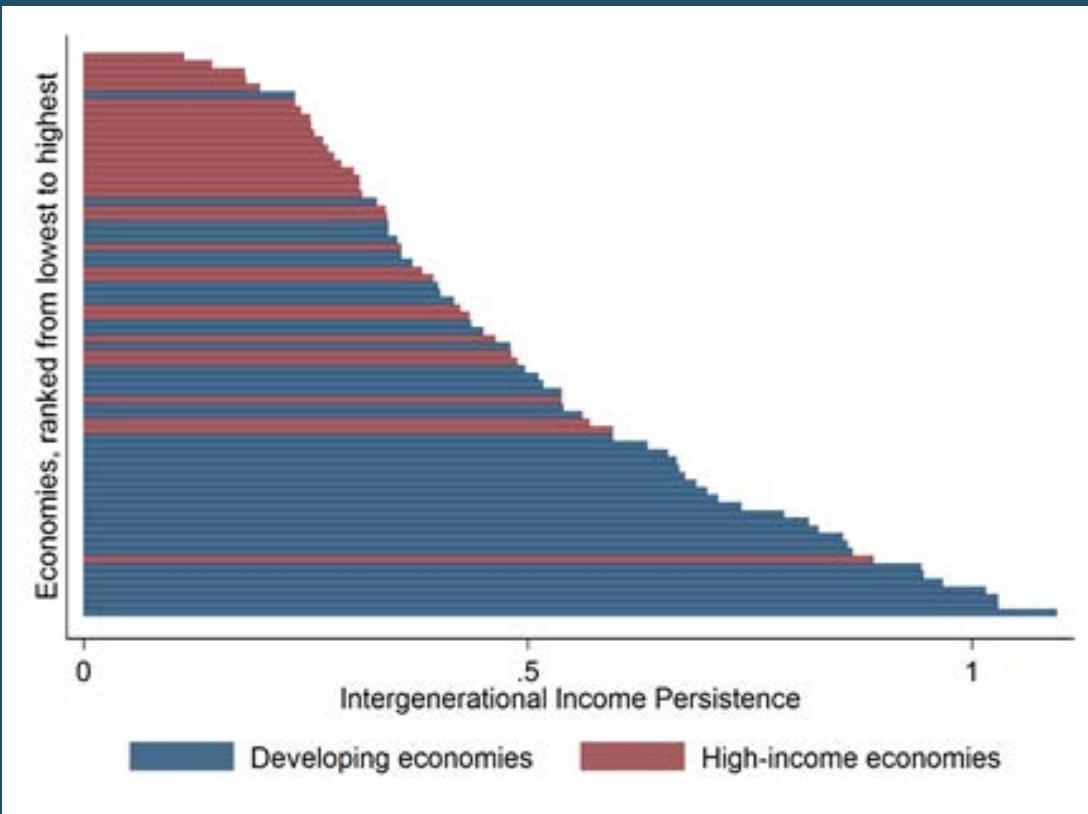
Not all gloomy in the developing world on educational mobility

- Changing the status quo is possible with policy action
 - Rapid rise in educational mobility in parts of East Asia, Latin America, and the Middle East from the '50s to the '80s generations
- In Africa and South Asia, rising enrollments in the last two decades
 - Predicted to raise absolute mobility among future generations of adults (generation '90s or later)
- Worldwide, girls are catching up with boys in educational mobility
 - Gender gaps in tertiary education and absolute mobility were reversed in high-income economies in the 1960s and are narrowing in developing economies

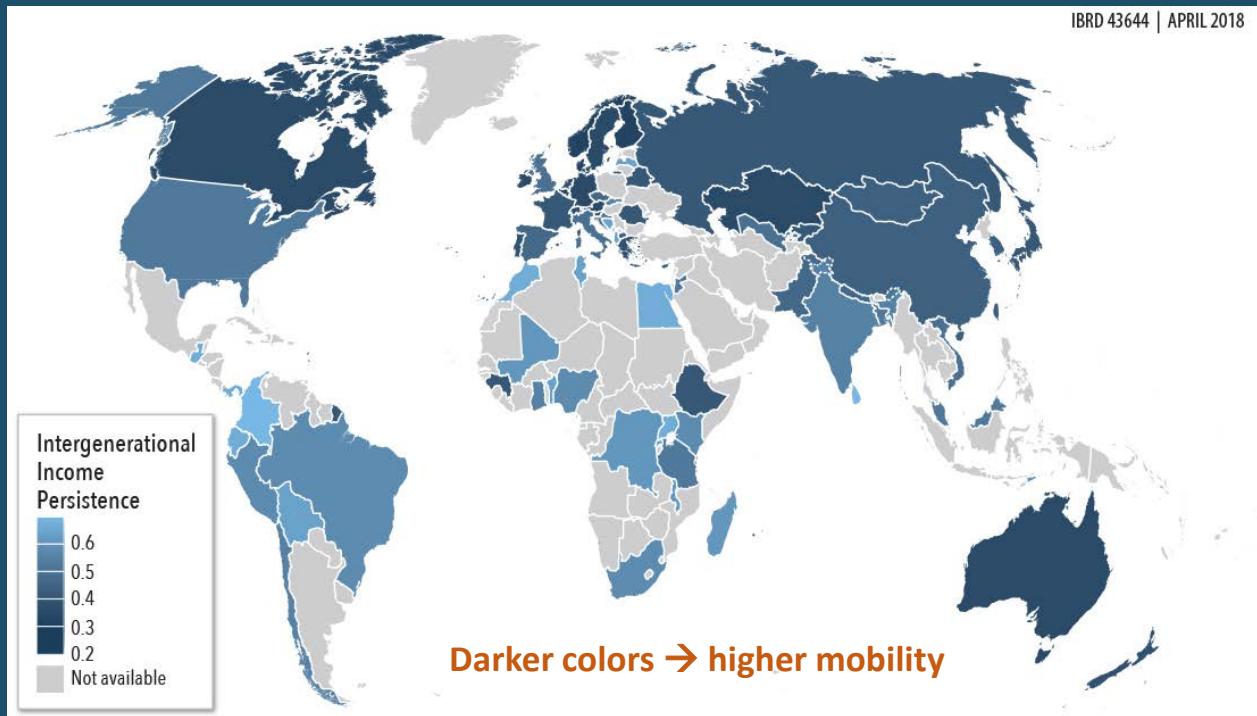
Relative mobility in income, measured for about half the world, show roughly similar patterns as relative mobility in education

- Low income mobility in many parts of Africa, South Asia, the Middle East, and Latin America

Economies ranked by income persistence



Income persistence (relative mobility in income) globally



- 24 of the bottom 25 by relative income mobility are developing economies

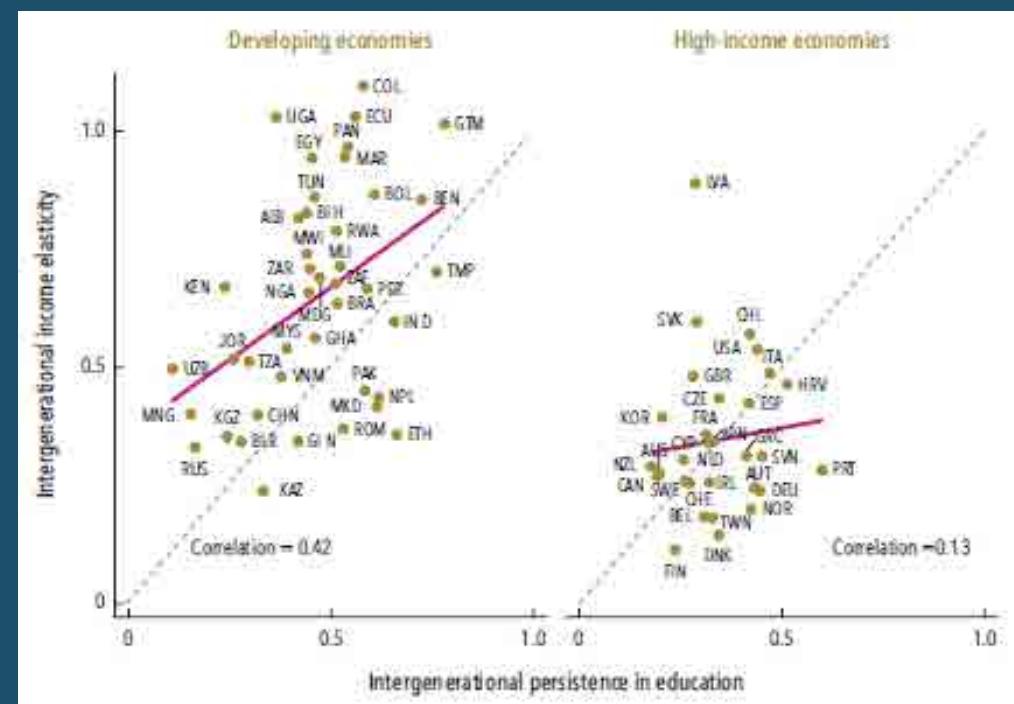
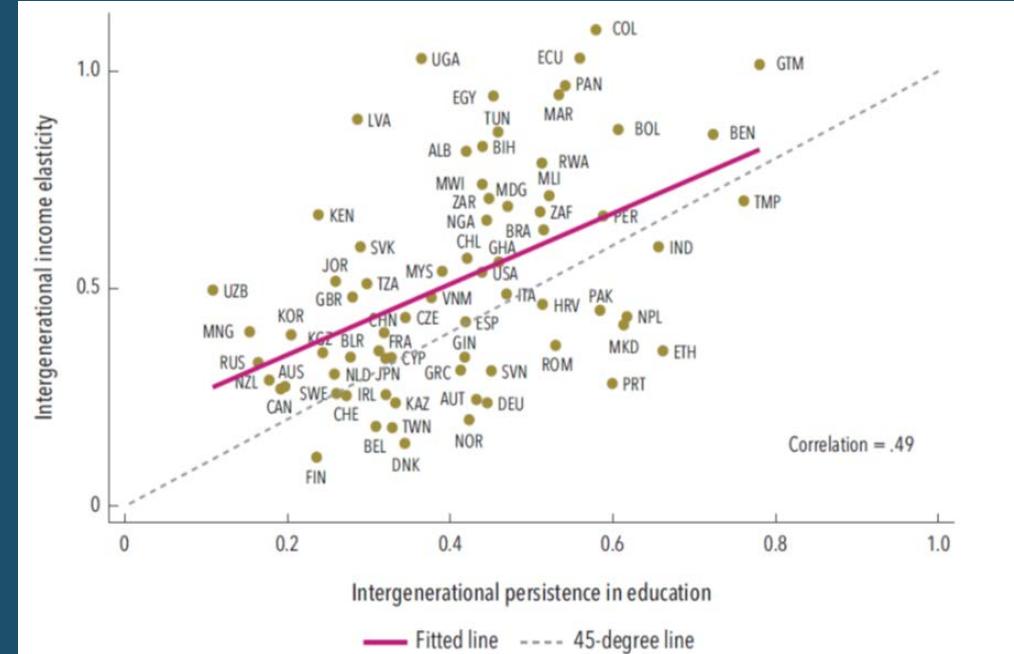
Relative mobility in education and income are imperfectly correlated to each other

Depends on: (i) how similar countries are on returns to education, (ii) how well education predicts income

Income mobility << educational mobility is common:
e.g. Egypt, Tunisia, Morocco, Uganda, Colombia

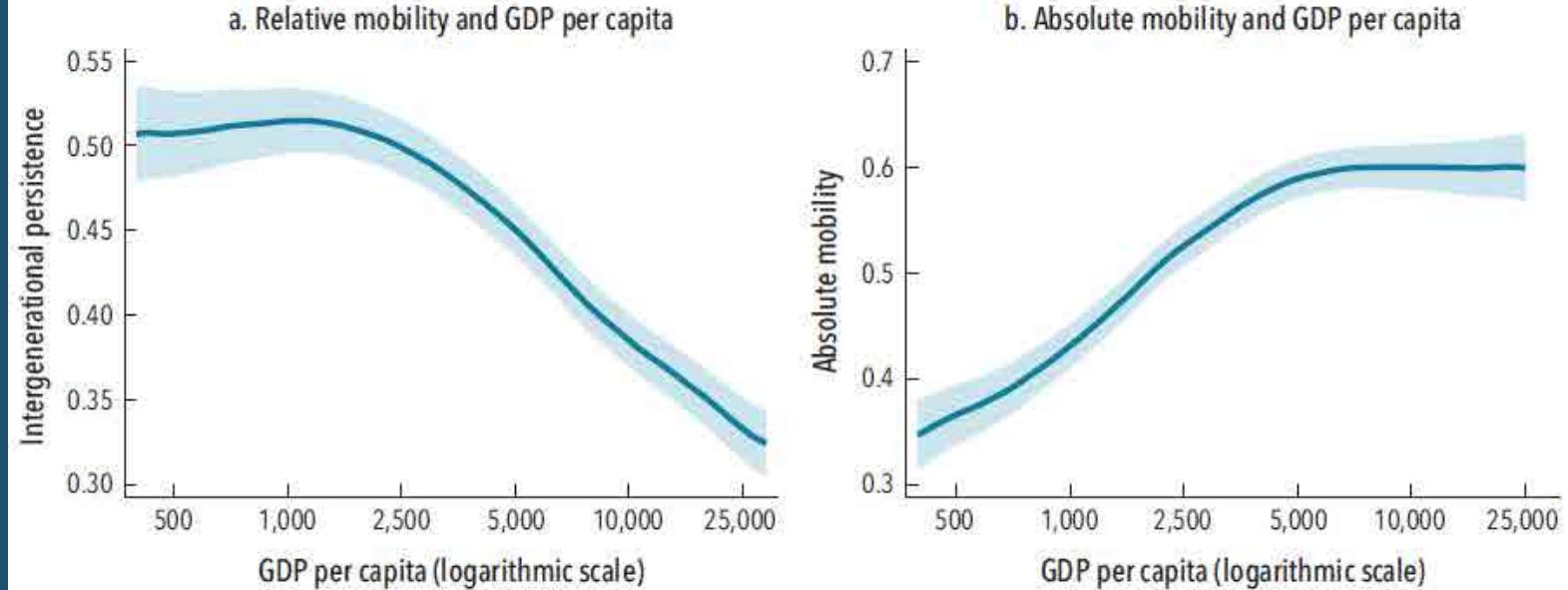
Much more strongly correlated for developing economies than for high-income

Attributes other than parental education tend to matter more for income persistence in richer economies

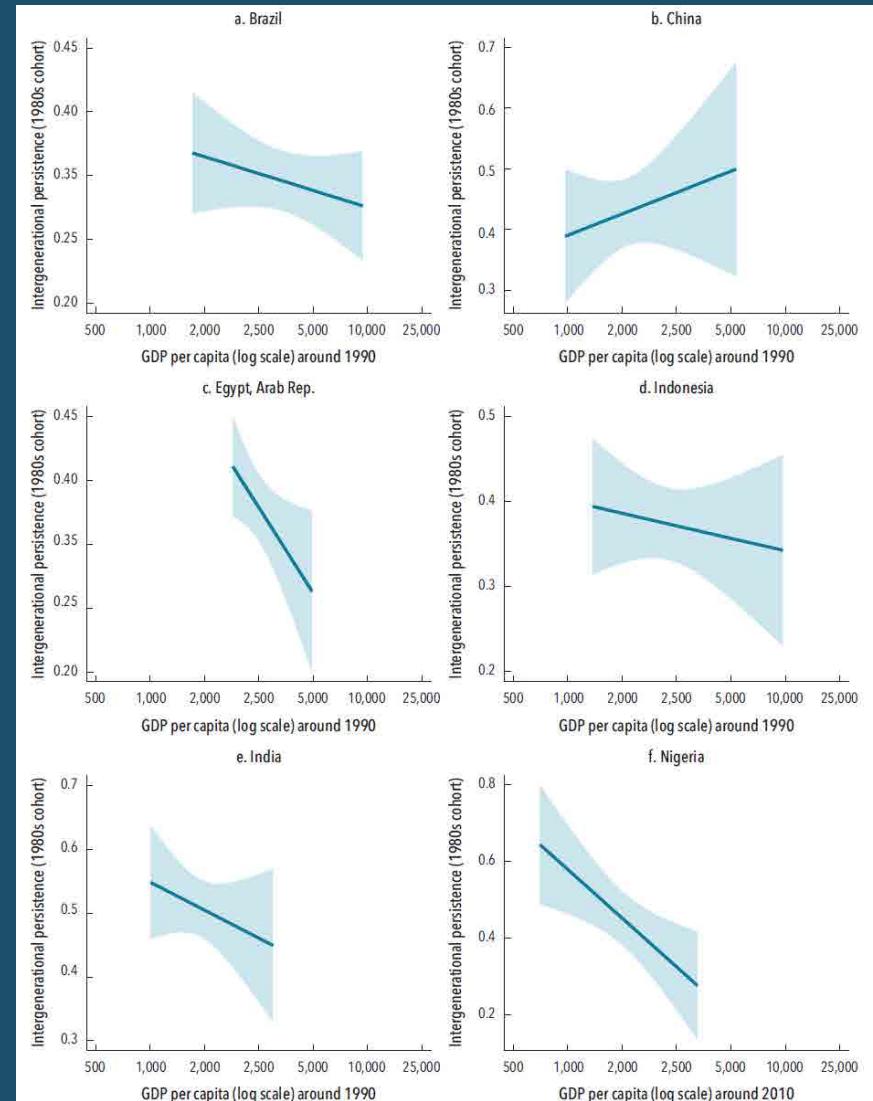


Richer places tend to have higher educational mobility

Across countries



Relative mobility across provinces within countries



Among 6 large countries, China is the only exception to this pattern across provinces within countries

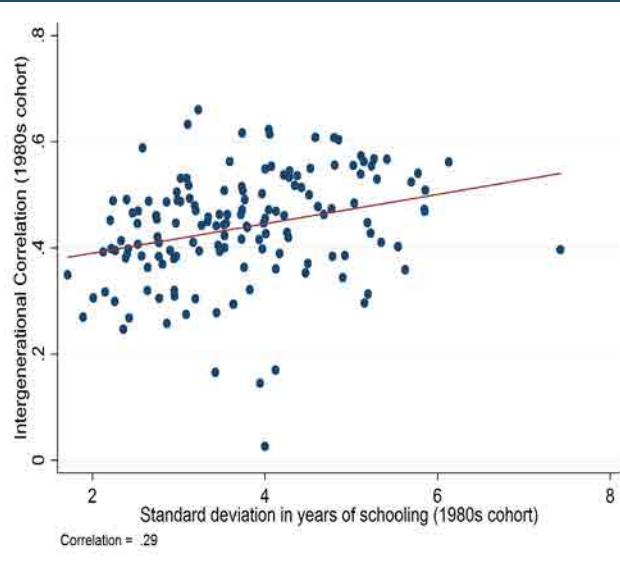
Higher mobility and economic growth tend to reinforce each other

- Economic growth helps increase mobility, absolute and relative
 - Weakens the credit constraints that limit investments among the poor
 - Generates more resources to finance higher public investments to equalize opportunities
- But economic growth does not automatically translate to high mobility
 - Absolute upward mobility is higher, greater the share of population who benefit from growth
 - Requires deliberate policy and investment choices
 - ✓ E.g. more mobile economies have higher public spending as a share of GDP, for a given level of income
- Greater mobility is in turn good for growth and poverty reduction over time
 - Since human potential is harnessed more efficiently in a society with higher mobility
 - E.g. being in the top quartile by relative mobility in education is associated with ~10% higher GDP per capita, compared to being in the bottom quartile

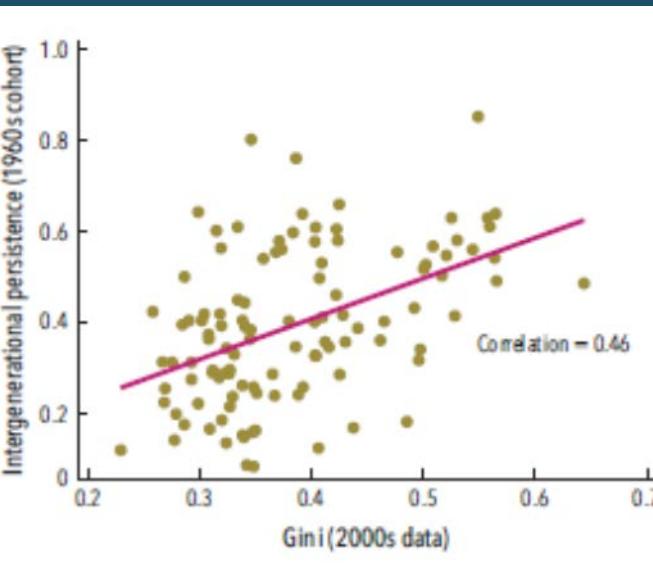
Low relative mobility is probably both a cause and consequence of higher inequality

- Lower relative mobility in income is associated with higher income inequality (the “Great Gatsby curve”)
- Low relative mobility in education is associated with higher inequality in education (schooling years of cohort) and income (peak earning years of cohort)
 - Stronger association for developing than high-income economies

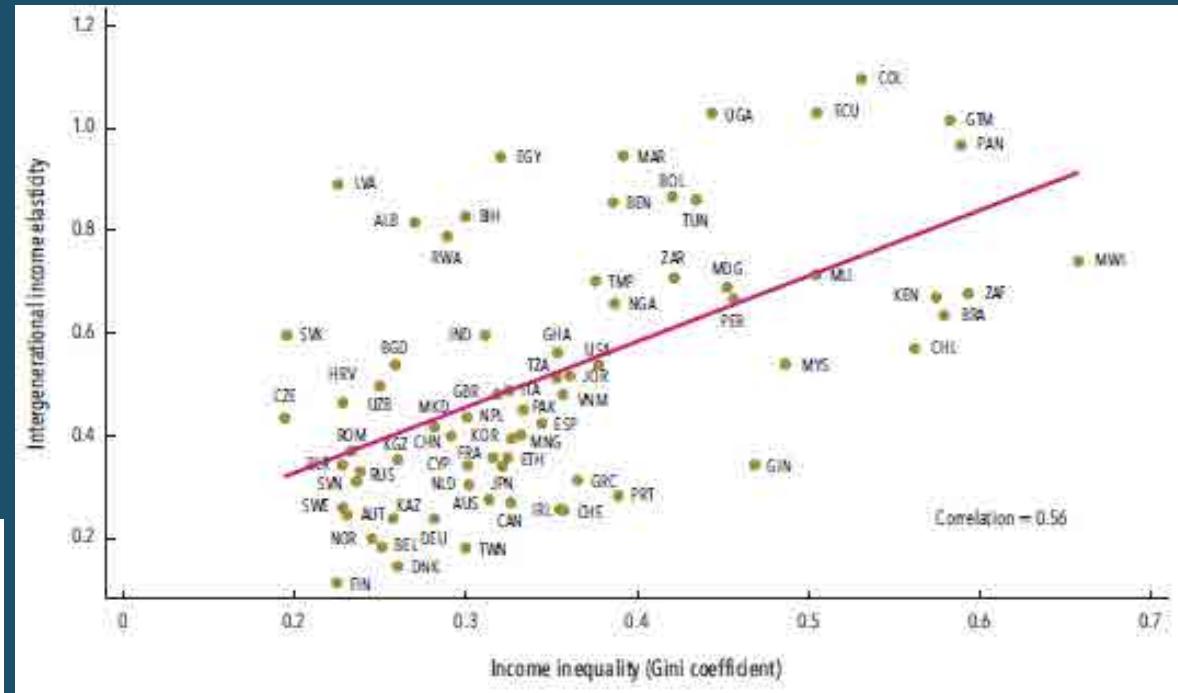
Education persistence (correlation) and education inequality



Education persistence (beta coefficient) and income inequality



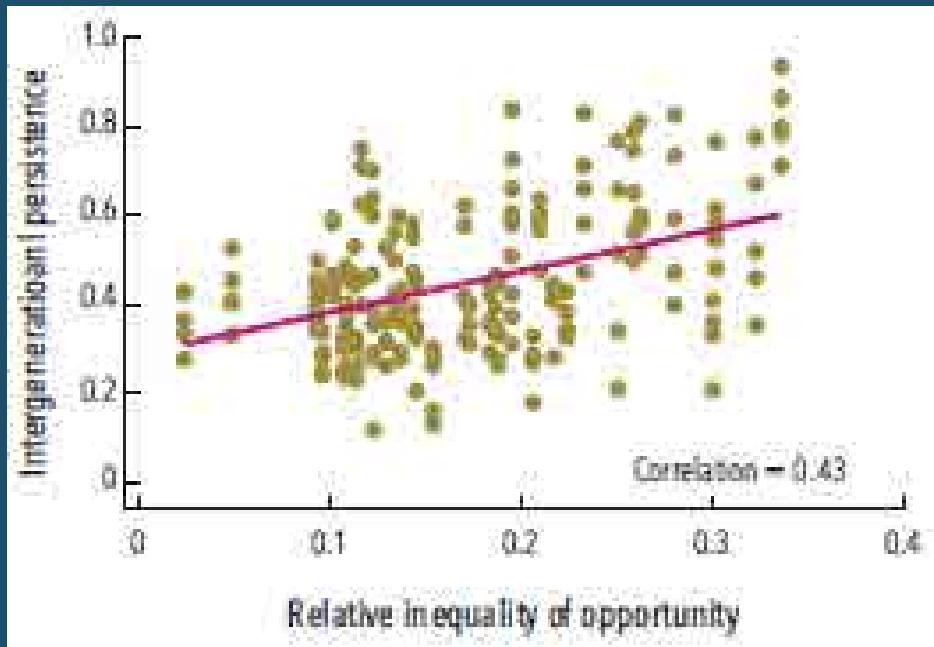
Income persistence and income inequality



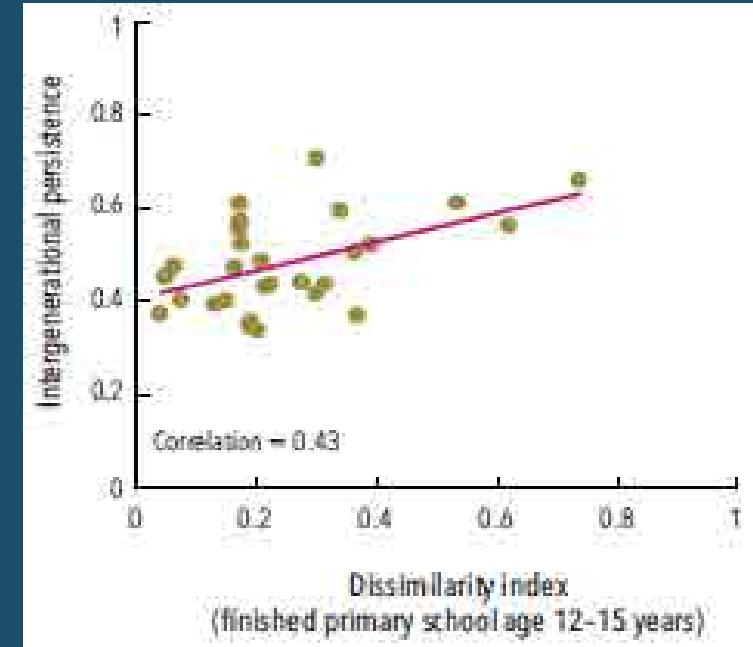
Source: Equalchances (2018), compiled from multiple studies; GDIM (World Bank); WDI for income inequality
Higher intergenerational income elasticity indicates lower relative IGM

Greater inequality of opportunity is associated with lower mobility

IOO (as a share of overall income inequality) and relative mobility in education



IOO (in primary schooling) and relative mobility in education



- Breaking the cycle of high inequality and low relative mobility requires reducing inequality of opportunities
 - Equalizing opportunities attributable to “circumstances”
 - Reducing extreme differences in circumstances – income and wealth inequality at birth

Equalizing opportunities across space: social mobility requires localized actions

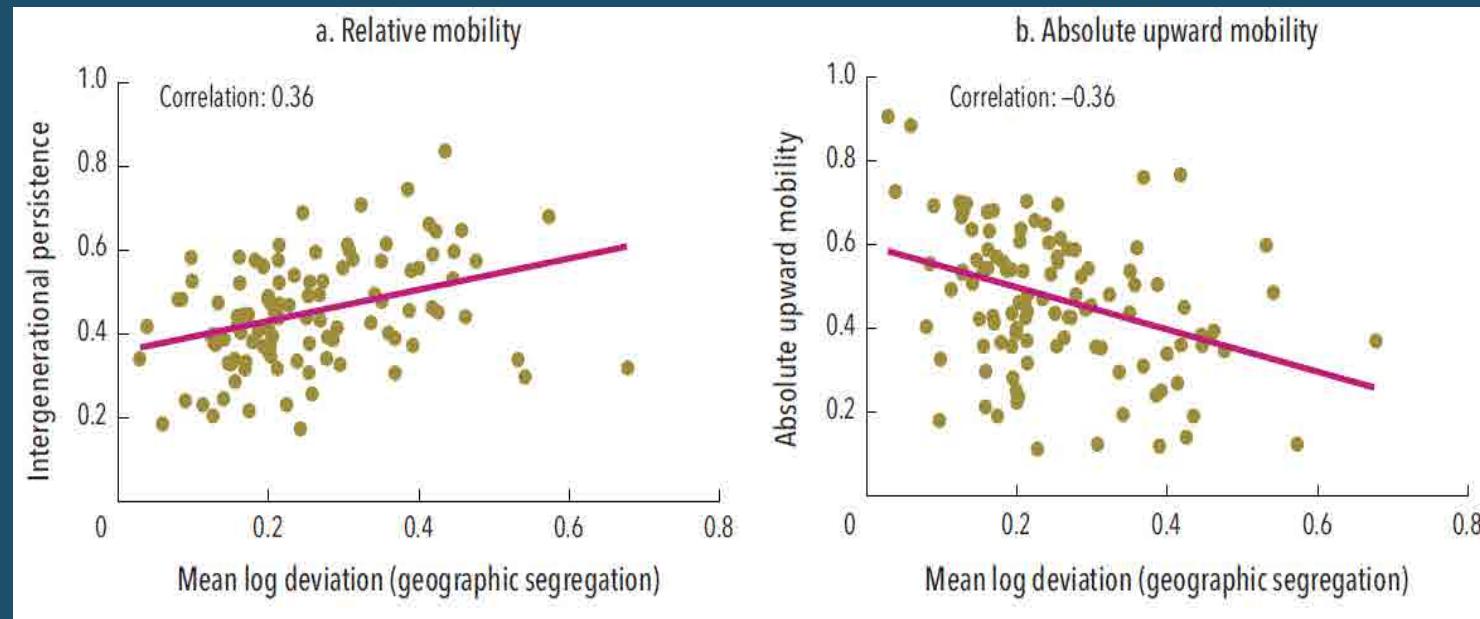
- Reducing spatial inequality in opportunities

- Lower spatial concentration in education within a country is associated with higher mobility
 - Same pattern seen within 6 large developing countries

- Improving neighborhoods and social environments

- Improving connectivity and geographic mobility

Economies with higher educational mobility tend to have lower levels of spatial segregation by education



A fiscal policy to support growth with equality of opportunity

A fiscal policy to support greater economic mobility:

reduces inequality in income and wealth (“circumstances”)

mobilizes resources to finance progressive public investments

does not impose a high cost on efficiency that limits growth

- Economies with higher tax revenue and share of direct taxes in total revenue tend to have greater relative mobility
- Investments to equalize opportunities for children and mothers
- Well-targeted transfer programs and tax credits to mitigate the effects of credit constraints on human capital investments of families

Making fair progress a reality

- Intergenerational mobility, absolute and relative, addresses the basic human aspirations of progress and fairness
- Raising mobility creates a “virtuous cycle” – breaking “inequality traps” and boosting growth by ensuring that ability and effort, rather than inherited privilege, matter for realizing one’s full potential
- The average developing economy, where progress has stalled since the 1960s, is less mobile than the average high-income economy
 - But a sustained record of success in some developing economies, rising enrollments in poorer regions in recent years, and narrowing of gender gaps worldwide provide cause for optimism
- For raising both types of mobility, economic growth must be complemented by policies to reduce inequality of opportunities at different stages of life
- This requires pro-poor policies, backed by resources that are adequate and spent wisely
 - Building ladders to opportunities early in the lives of children, and reducing opportunity gaps in education
 - Expanding and equalizing economic opportunities – in jobs, earnings and access to finance
 - Localized policies and investments to equalize opportunities across space
 - Fiscal policy to mobilize resources to finance pro-poor policies, and to reduce income and wealth inequality
 - Better evidence, and a governance environment where policies are responsive to the needs of the disadvantaged

Thank you

<https://openknowledge.worldbank.org/handle/10986/28428>

<http://www.worldbank.org/poverty>

<http://www.worldbank.org/en/topic/poverty/brief/what-is-the-global-database-on-intergenerational-mobility-gdim>

Data visualization at <http://www.equalchances.org>