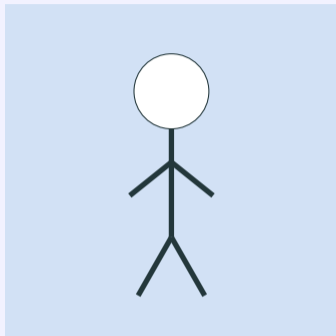




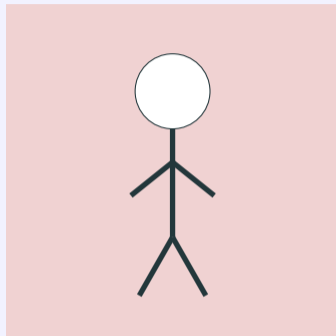
EUROPE-IGM-ATLAS

How much does where you start shape where you end up?

A Simple Question



Child A

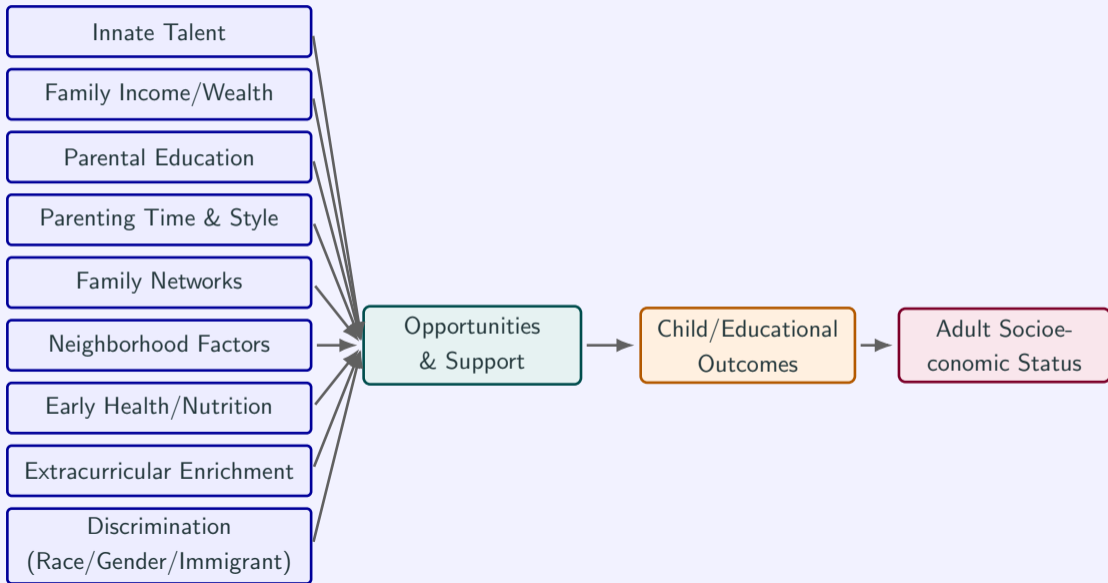


Child B

Same talent. Different families.

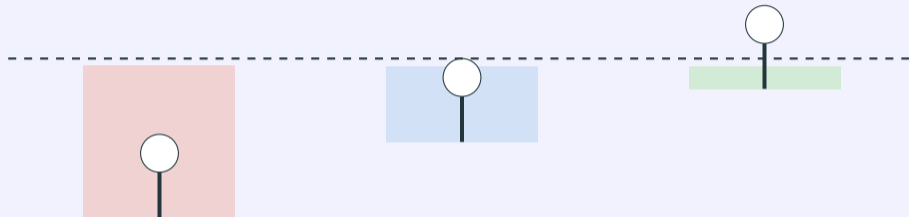
Do they have the same opportunities?

Existing Evidence Suggests Probably Not



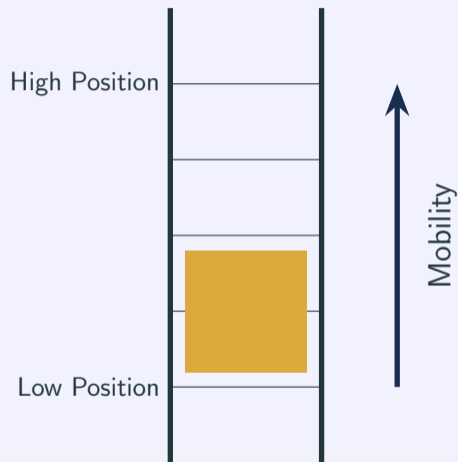
Is intergenerational mobility the same as equality of opportunity?

No. But they are related.



A society with a high level of mobility is not one where everyone *starts* at the same place, or one where everyone is provided identical opportunities, rather, where you start does not determine where you end up.

What is intergenerational mobility?

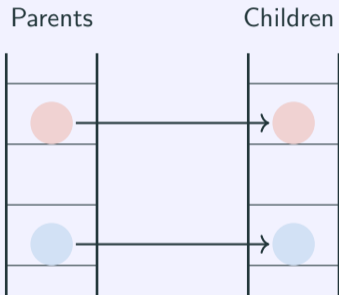


Intergenerational mobility measures how much a person's *own* future depends on their parents' position, in terms of:

- income,
- wealth,
- occupational status,
- or education

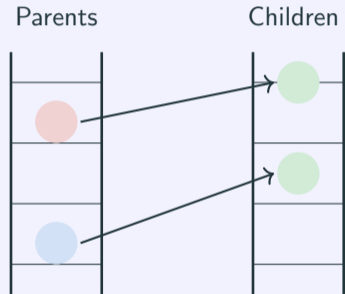
High Mobility vs Low Mobility

Low Mobility



Family background strongly determines outcomes.

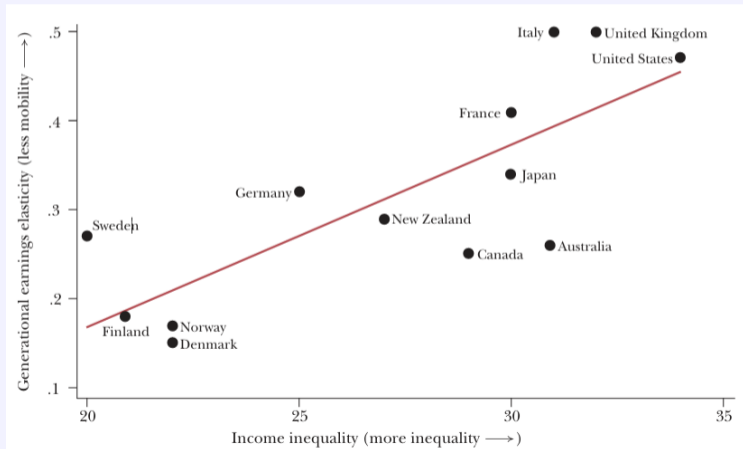
High Mobility



Children can move beyond their social origins.

Inequality and Mobility: The Great Gatsby Curve

Higher within-generation inequality \leftrightarrow lower
between-generation mobility.



Source: Corak (2013).

Notes: Income inequality measured as Gini coefficient, using 1985 disposable household income.

Intergenerational economic mobility measured as elasticity between paternal earnings and son's adult earnings, for cohort of children born ~early-mid 1960s and adult outcomes measured ~mid-late 1990s.

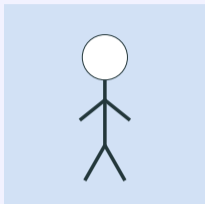
How do these concepts differ?

Even though equality of opportunity and intergenerational mobility are not the same, they are related:

- **Q1.** Is the door open? (formal opportunity)
- **Q2.** Can people realistically walk through it? (substantive opportunity)

The issue is not only whether opportunities exist, but whether background systematically shapes who can benefit from them.

Going Back to Our "Simple Question": The Same Opportunities Problem

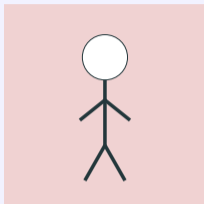


Child A

Child A: has a high-income family.

Child B: has a low-income family.

Suppose, based on talent, both are offered admission to the same university with the same scholarship.



Child B

But, the same formal opportunity may not be equally *usable*. Family background affects:

- expectations about education,
- knowledge of how institutions work,
- financial safety if something goes wrong,
- social networks,
- confidence navigating elite environments,
- information about careers,
- willingness to take risks.

A Theory: Education Matters in Aggregate

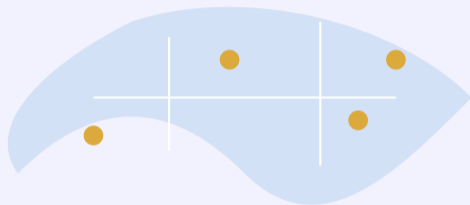
We focus on intergenerational *educational* mobility



When mobility is low, it leads to inefficient human capital:

- accumulation (Barro, 1991; Hanushek & Woessmann, 2008)
- allocation (Galor & Tsiddon, 1997; Hassler & Mora, 2000)

Education builds human capital: skills, knowledge, and abilities that make people productive. But when your educational opportunities are limited, so is your ability to reach your productivity potential.



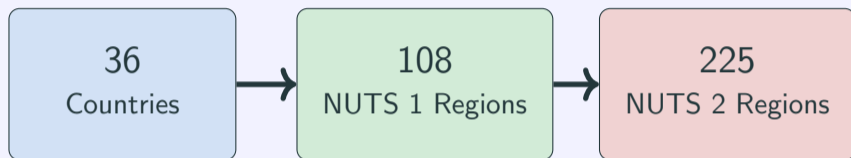
The EUROPE-IGM-ATLAS maps intergenerational educational mobility and inequality across regions and generations.

Across Generations



The EUROPE-IGM-ATLAS measures how mobility has changed for those born throughout the twentieth century.

Across Regions



It also allows us to describe intergenerational mobility at multiple spatial scales.

What does the EUROPE-IGM-ATLAS actually measure?

Persistence

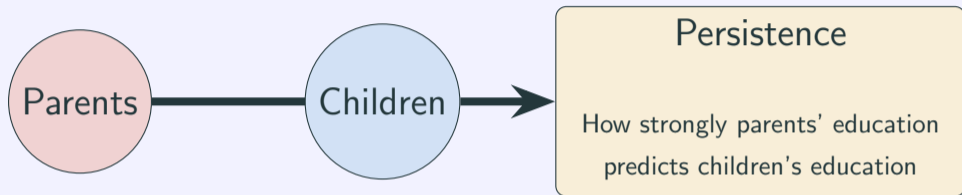
Standardized Persistence

Average Education

Educational Inequality

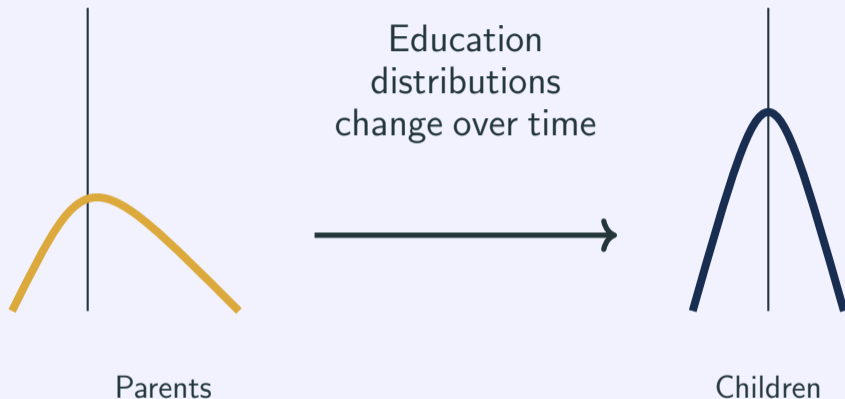
The EUROPE-IGM-ATLAS not only provides measures of intergenerational mobility, but also the educational environment.

How is intergenerational mobility measured?



Higher Persistence = Lower Mobility

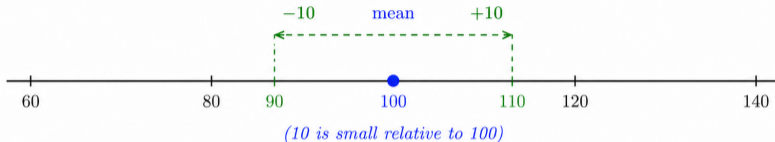
Why use standardized persistence?



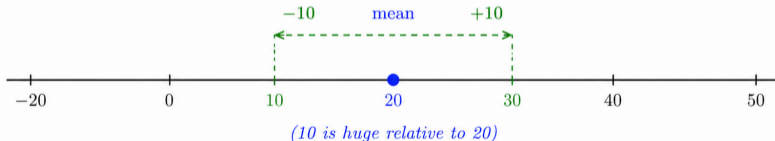
Standardized persistence adjusts for changes in educational inequality across generations.

Educational Inequality: Coefficient of Variation in Years of Education

Group A: mean = 100, standard deviation = 10

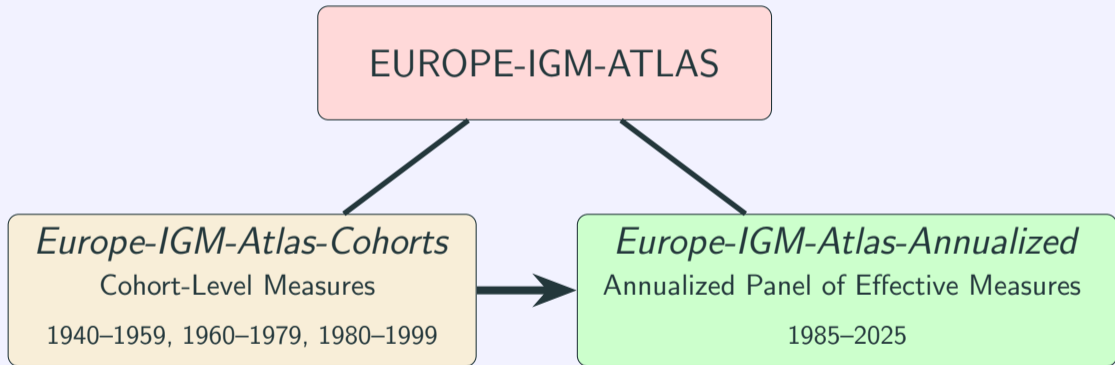


Group B: mean = 20, standard deviation = 10



The coefficient of variation measures how large the spread (standard deviation) is relative to the average (mean)

The EUROPE-IGM-ATLAS Contains Two Datasets



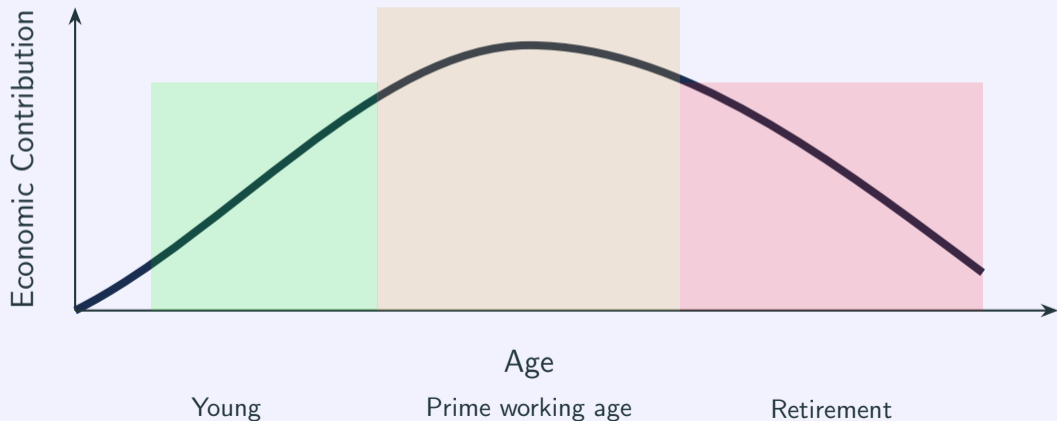
From Cohort-Level Measures to Annual Measures

The annualized panel answers: *"What level of mobility characterizes the economically active population in this year?"*

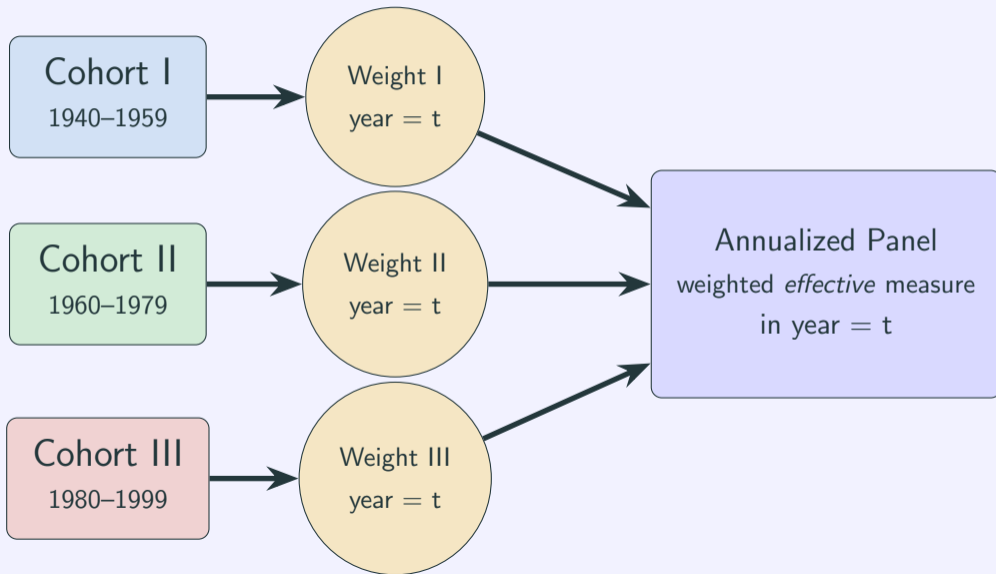
To construct the annualized measures, we combine the cohort measures using weights that reflect how economically important each generation is in a given year.

Why do cohorts receive different weights?

People in their prime working years contribute more to the economy, so they receive a larger weight.



The Weighting Procedure



Different Weighting Profiles Emphasize Different Things

Labor Profiles (Who contributes most to work?)

Patent Profiles (Who contributes most to innovation?)

Income Profiles (Who earns the most income?)

Five Weighting Profiles Used in the EUROPE-IGM-ATLAS

Profile	Based on	Measuring
I	Labor Supply	Economic Participation
II	Patents	Patenting activity
III	Highly Cited Patents	Frontier Innovation
IV	LIS Employment	Actual Employment
V	LIS Total Income	Actual Income Contribution

Different weighting profiles measure *effective* intergenerational mobility from different economic perspectives.



EUROPE-IGM-ATLAS

The European Atlas of Spatially Disaggregated Intergenerational Mobility

<https://europe-igm-atlas.github.io/app/>



Sarah McNamara
ZEW Mannheim



Guido Neidhöfer
*ZEW Mannheim;
Turkish-German University*



Patrick Lehnert
*UZH; Hoover Institution,
Stanford University*

References

- Barro, Robert J. (1991). "Economic Growth in a Cross Section of Countries." *The Quarterly Journal of Economics* 106(2): 407–443.
- Corak, Miles (2013). "Income Inequality, Equality of Opportunity, and Intergenerational Mobility." *Journal of Economic Perspectives* 27 (3): 79–102.
- Galor, Oded, and Daniel Tsiddon. (2026). "Technological Progress, Mobility, and Economic Growth." *The American Economic Review* 87(3): 363–82.
- Hanushek, Eric A., and Ludger Woessmann (2008). "The Role of Cognitive Skills in Economic Development." *Journal of Economic Literature* 46 (3): 607–68.
- Hassler, John, and Jose V. Rodriguez Mora (2000). "Intelligence, Social Mobility, and Growth." *American Economic Review* 90 (4): 888–908.
- McNamara, Sarah, Guido Neidhöfer and Patrick Lehnert (2026). "Intergenerational Mobility Fosters Innovation in Europe." *Nature*. DOI: 10.1038/s41586-026-10736-9.