

Comparing Intergenerational Educational Mobility for Minorities Around the World

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There has been a resurgence of interest in intergenerational mobility (IM) following innovations in both methodology and data (Chetty et al., 2014, 2017a, 2017b). A key advantage of the rank-based measures of intergenerational mobility generated by this work (such as absolute upward mobility) is that they can be compared across population subgroups (Chetty et al., 2018).

Analogous measures for intergenerational educational mobility (IEM) have not been widely used. IEM is a measure of mobility which is interesting in its own right because (i) education is a key driver of opportunity; and (ii) there are many contexts where linked parent-child education data is available but linked income data is not, especially in developing countries.

Current measures of IEM are inconsistent and difficult to compare with each other. Absolute upward mobility ($E(y|x=25)$, where x is child education rank and y is parent education rank) cannot be calculated with education data because the parent at the 25th education percentile is in a coarsely measured education bin; this measure is undefined. Thus, even in the United States, there is no study that produces an estimate of intergenerational education mobility for a racial subgroup that can be measured over time. For example, in a recent working paper, Card, Domnisoru and Taylor (2018) compare educational mobility over time by comparing the average education rank of a child born to parents in the middle of the educational distribution (e.g. percentiles ~30-70) in the 1920s, to the average income rank of a child born to parents at the 25th percentile of the income distribution in the 1980s — this is the best they can do with the conventional methods, but it is clearly not the ideal comparison. The same problem is faced by Alesina et al. (2019), who define upward mobility in Africa as the likelihood that a child born to a parent who has not completed primary school manages to do so—thus conditioning on substantially different parts of the education distribution in different times and places. None of these estimates can be meaningfully compared, because all these papers are constrained by the available bin boundaries in the education data.

Our prior work in Asher, Novosad and Rafkin (2019) establishes the first set of methods that can generate rank-based measures of intergenerational educational mobility that are both valid for population subgroups and can be meaningfully compared across time and country. Specifically, we show that $E(y|x \in [0, 50])$, which we call upward interval mobility, is a measure which is closely analogous to absolute upward mobility but can be tightly *bounded* with education data.

This paper will use these methods to compare intergenerational mobility among minority groups in several different countries. Using education as a measure of socioeconomic status, we will produce estimates of upward mobility for four countries: Brazil, India, South Africa, and the United States. We will then focus on population subgroups: blacks and whites in Brazil, South Africa and the United States, and Scheduled Castes and Muslims versus upper castes in India. This will highlight the advantages of our methodological approach, because these subgroup

measures cannot be calculated with conventional methods. Each nation presents a case study in the evolution of mobility among advantaged and disadvantaged groups. A cross-country comparison of IM among marginalized groups is also of interest (e.g., blacks in Brazil vs. blacks in the United States). Our paper will further shed light on the ongoing debate over whether educational mobility is lower in the United States than in other developed countries (Landersø and Heckman, 2017).

It is as yet unknown whether the rapid growth enjoyed by some populous lower income countries, including Brazil and South Africa, has affected the persistence of socioeconomic status across generations. *Absolute* outcomes have certainly improved for most people in the world. But it is of substantial interest whether developing countries have experienced improvement in *relative* outcomes — the ability for children born at the bottom of the social hierarchy to attain a higher rank than their parents did — and whether marginalized groups have experienced changing upward mobility with economic growth and various policies aimed at their advancement. This will be the first work using modern rank-based methods to establish these basic facts about mobility around the world.

References

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