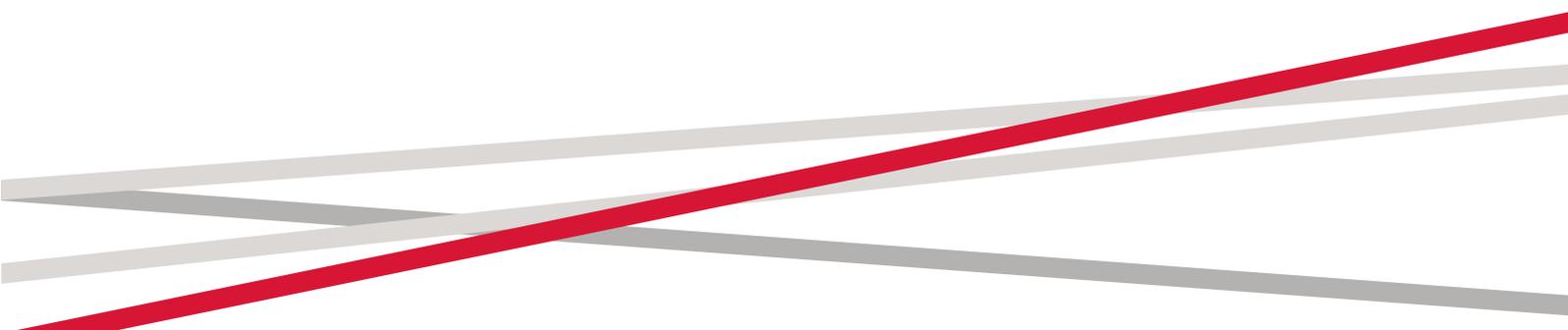




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Intergenerational Mobility in Africa

Recent economic research suggests that childhood environments in part determine success in life. So far, most of this evidence comes from rich countries. In a new paper, we use education data to measure intergenerational mobility across 26 African countries and find large differences across space. Results using data on migrants suggest that regions have causal effects on social mobility of Africans.



Why do people “make it” in life? Few of us can claim, as Robert Strauss, former U.S. ambassador to the Soviet Union and Russia, once quipped, that we were born in a log cabin we built ourselves. One chunk of individual success in climbing the social ladder is determined by our parents – be it through their genes (Sacerdote 2002, 2004), their parenting style (Doepke and Zilibotti 2017), or their income and connections. Another chunk is individual effort. Companies like Apple or Google were started in garages. That leaves our surroundings. Can the places we grow up in raise us up or pull us down? A growing body of research suggests that they can.

Growing evidence that “places matter” for individual mobility

At the forefront of these efforts, Chetty and Hendren (2018a, 2018b) have compared the incomes of American children to those of their parents. They link parents to kids through social security numbers in tax returns. Among families that moved, they find that children exposed to places with higher average social mobility for longer during childhood do better than children exposed to places with lower average mobility. Importantly, this holds when comparing the kids of parents with the same income and other observable characteristics, i.e. holding the “starting line” constant for everyone. Their findings have been reproduced for the U.S. (Chetty, Hendren, and Katz 2016), (Chyn 2018), Canada (Laliberte 2018), Australia (Deutscher 2018), and Denmark (Eriksen 2018). By contrast, studies identifying the causal effects of places on individual mobility in developing countries are still rare (a recent contribution by Asher, Novosad, and Rafkin (2018) on India is a notable exception).

New evidence from Africa

In a new paper (Alesina et al. 2018) we fill part of this gap by examining intergenerational mobility in Africa. After decades of stagnation, there is optimism about Africa’s future. Growth has returned (Young 2012), and some now see Africa

as a continent of “1.2 billion opportunities” (Economist 2016). At the same time, anecdotal evidence suggests large inequalities, indicating that the recent aggregate gains may not be broadly shared, and that social mobility remains limited.

Measuring intergenerational mobility using education data

Measuring intergenerational mobility in Africa is difficult because of patchy data. Economists typically think of mobility in terms of income or wealth. In Africa, we lack tax records as well as administrative information linking children to parents. Instead we rely on censuses from 26 African countries and measure mobility using education data on children that share a household with their parents. [Card, Domnisoru, and Taylor 2018; Azam and Bhatt 2015; Narayan et al. 2018; Black and Devereux 2011 also study intergenerational mobility using education data.]

We measure upward mobility as the likelihood that kids of parents with less than primary education complete at least primary school. Similarly, we call an individual downwardly mobile if her parents have completed at least primary education and she has failed to do so. We compute these measures among children aged 14-18. This gives them enough time to complete primary school if they were ever going to do so. At the same time, most children at that age still live with their parents, which limits potential bias from co-residence selection.

Using education to measure social mobility has five advantages. First, education is a broad measure of living standards, reflecting not just income, but also aspirations and capabilities. Second, unlike income, much of which is informal and therefore under-reported in poor countries, schooling can be easily measured. Third, education, once completed, remains fixed and so intergenerational mobility can be assessed early in life. Fourth, “Mincerian returns” – how much extra income one more year of schooling commands in the labor market – seem to be especially high in Africa (Young 2012;

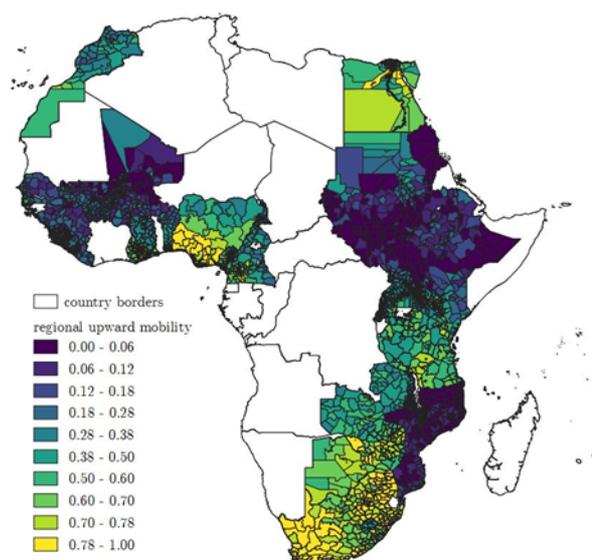


Psacharopoulos 1994; Caselli, Ponticelli, and Rossi 2014), suggesting that education is a meaningful proxy of income. Finally, more schooling is correlated with many positive outcomes: household asset ownership, lower fertility, and even support for democracy. These correlations hold strongly comparing two individuals living in the same place, which means that education “quantity” is a useful stand-in-measure of living standards, even if the quality of schooling differs from place to place.

Main data patterns

The census data give us millions of individual observations to accurately measure intergenerational mobility over time (birth-cohorts) and in small geographic areas. First and most prominently, the descriptive analysis reveals differences in mobility both across and within countries. Figure 1 shows the geography of upward mobility across the 26 countries. Darker regions indicate places with lower mobility – children of illiterate parents are less likely to finish primary school.

Figure 1. Upward mobility across Africa

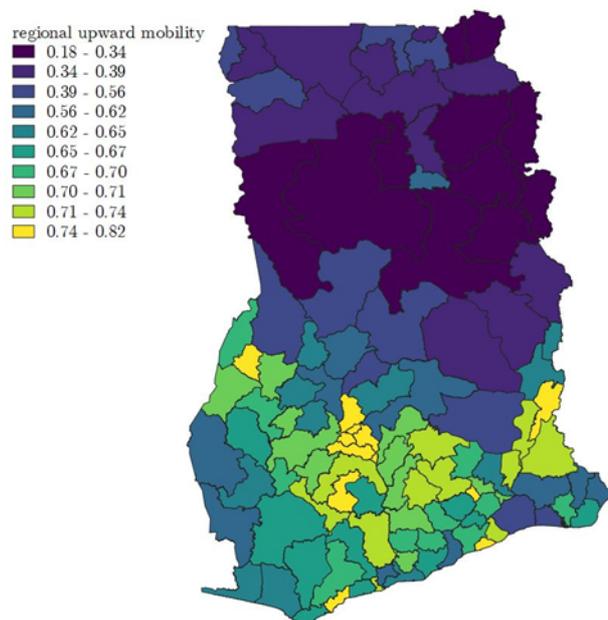


Source: Alesina et al. 2018

Country-differences are clearly important – South Africa is more mobile than Mozambique. Still,

even within countries, there are vast differences as figure 2, which zooms in on Ghana, illustrates.

Figure 2. Upward mobility in Ghana



Source: (Alesina et al. 2018)

In some regions in Northern Ghana, average mobility is below .2 while it exceeds .8 in Accra, the capital. Second, while mobility does increase over time, these increases are modest and most pronounced in the most recent decades. This is still consistent with overall rising education, since average schooling in Africa was low until recently. Taking patterns one and two together, the persistent variation in mobility between places is more important than changes in mobility over time.

What accounts for differences in mobility across space? By far the strongest correlate of intergenerational mobility is the average literacy in the same place in the generation of the parents. This means that, comparing two individuals that grew up as children of illiterate parents in different regions, the individual that grew up in the region that has higher literacy in her parents’ generation has a greater chance of completing at least primary school. Several explanations might account for this pattern. Most simply, some regions have more schools than others, and can educate more individuals “per period”. One



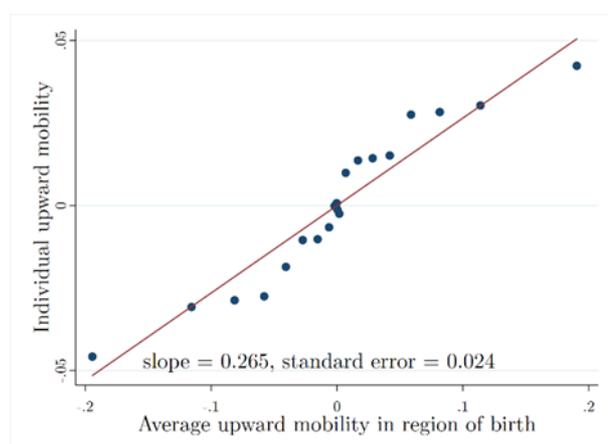
alternative story are peer effects: even though my parents are uneducated, I learn by example from the people around me that going to school is possible and desirable.

Beyond the correlation with initial education, we find that geography, colonial history, and at-independence development matter for intergenerational mobility. There are two important caveats to these results. First, pinning down the mechanism of why initial literacy and mobility are related remains a challenge. Second, these results represent correlations and not causally identified effects.

Causal effects of regions

To make causal inferences, we use data on families that have moved between two regions within a country in two ways. First, we compare siblings from migrant households, one child born in the origin of migration, the other in the destination. Figure 3 shows a (binned) scatter plot of the association between average birth-region upward mobility (computed among non-migrants) on the horizontal and individual likelihood of upward mobility on the vertical axis, conditional on household as well as birth-cohort effects. The slope indicates that kids born in a region with a ten percent higher mobility are 2.65 percent more likely to complete primary school compared to their siblings born in a different region with lower mobility.

Figure 3. Migrant vs non-migrant siblings



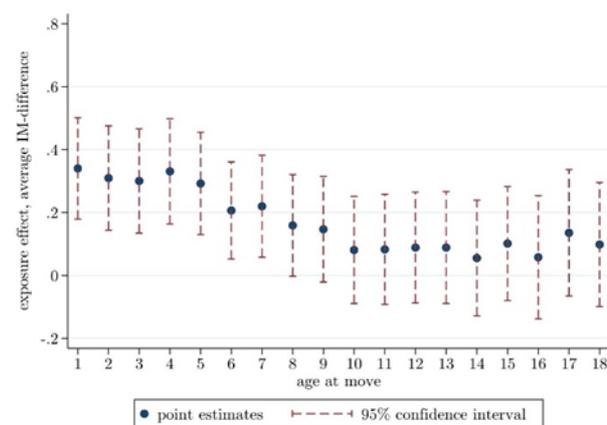
Source: (Alesina et al. 2018)



Second, we compare migrants that moved at different ages during childhood. Figure 4 plots the effects on individual outcomes of moving from a place of on average zero mobility to a place where all children of uneducated parents become educated against the age of the child at which the move occurred, once again comparing individuals within the same household. As intuition would suggest, earlier moves to better regions have larger positive effects than later moves, and effects turn insignificant towards the end of the period relevant for primary school.

For both empirical strategies, the sibling comparisons (enabled by household fixed effects) are crucial to separate treatment effects of regions from sorting whereby illiterate parents that may be more motivated/capable in educating their children move to regions with greater average opportunities.

Figure 4. Migration exposure effects



Source: (Alesina et al. 2018)

Conclusion

New research points to the importance of “places” in shaping individual social mobility. Complementing several recent works on developed economies, we document that opportunities for educational advancement vary widely within and across African countries. The strongest correlate of differences in mobility between places are differences in the initial education level in the generation of the parents, with more educated places showing higher

mobility. Using information on migrants, we find that regions have a causal impact on individual outcomes. Taken together, our results suggest that initial conditions have persistent effects on the transmission of human capital between generations and that overall regional differences in human capital transmission in turn matter for who “makes it” in Africa.

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