Intergenerational Education Mobility in Africa: Has Progress Been Inclusive?



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Motivation

- Reforms in education systems and the abolition of school fees after independence have led to improvements in enrolment in primary and secondary education in many countries in Africa (Thakur, 1991; Tomasevski, 2006).
- Although the primary adjusted net enrolment ratio in SSA increased from 59% in 1999 to 79% in 2012 (UNESCO, 2015), it doesn't mean all children have an equal chance to benefit from the expansion. Indeed, family's background plays an important role in shaping the child's socioeconomic outcome including education (Becker and Tomes, 1979, 1986).

Objective

• Analyze the trend, levels and patterns of intergenerational im(mobility) in education attainment across 9 Sub-Saharan Africa countries over 50 years, with a special focus on gender differences.

Data

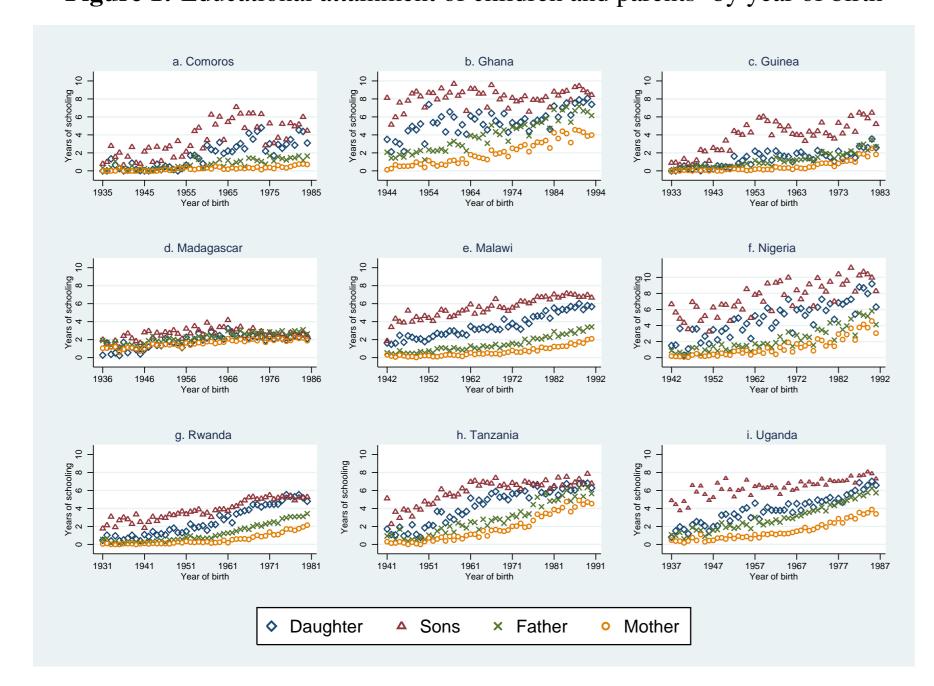
Table 1: List of Countries, Dates, Sample size and Average Years of Schooling

	<u>Dates</u>		Sample size		Average years of schooling			
					Parents			Children
Country	Svy Year	Birth Years	Total	Minimum	Cohort 1	Cohort 10	Cohort 1	Cohort 10
Comoros	2004	1935-1984	7,740	218	0.25	1.09	1.17	4.19
Ghana	2012/13	1944-1993	32,730	1,046	1.02	5.4	4.36	8.28
Guinea	2002/03	1933-1982	22,343	724	0.12	2.44	0.57	4.26
Madagascar	2005	1936-1985	23,532	508	1.21	2.47	1.05	2.44
Malawi	2010/11	1942-1991	22,926	615	0.35	2.47	2.68	6.19
Nigeria	2010/11	1942-1991	11,776	409	0.28	4.29	3.05	8.63
Rwanda	1999/00	1931-1980	12,490	310	0.16	2.50	1.36	5.20
Tanzania	2009/10	1941-1990	6,778	218	0.55	5.13	2.29	6.75
Uganda	2005/06	1937-1986	14,742	393	0.65	4.63	2.81	7.12
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i) Total refers to the total sample size of adult children aged between 20-69 in survey years in each country.

ii) Minimum refers to the sample size of the smallest 5-years birth cohort for each county. iii) Parents' year of education refers to the average year of schooling of mothers and fathers.

Figure 1: Educational attainment of children and parents' by year of birth



Framework

We use two related measures:

(i) intergenerational regression coefficient (IGRC)
$$E_{ij} = \alpha + \beta E P_{ij} + \varepsilon_{ij}, \qquad (1)$$

where E_{ij} and EP_{ij} denotes child i's and parent i's years of schooling, respectively.

(ii) intergenerational correlation (IGC) in educational attainment

$$\rho = \beta \frac{\sigma^p}{\sigma^c} \tag{2}$$

where σ^p and σ^c are the standard deviation of educational attainment of parents' and childrens generation in each 5-year birth cohort, respectively.

Results

Figure 2: Educational mobility has increased among the youngest cohorts

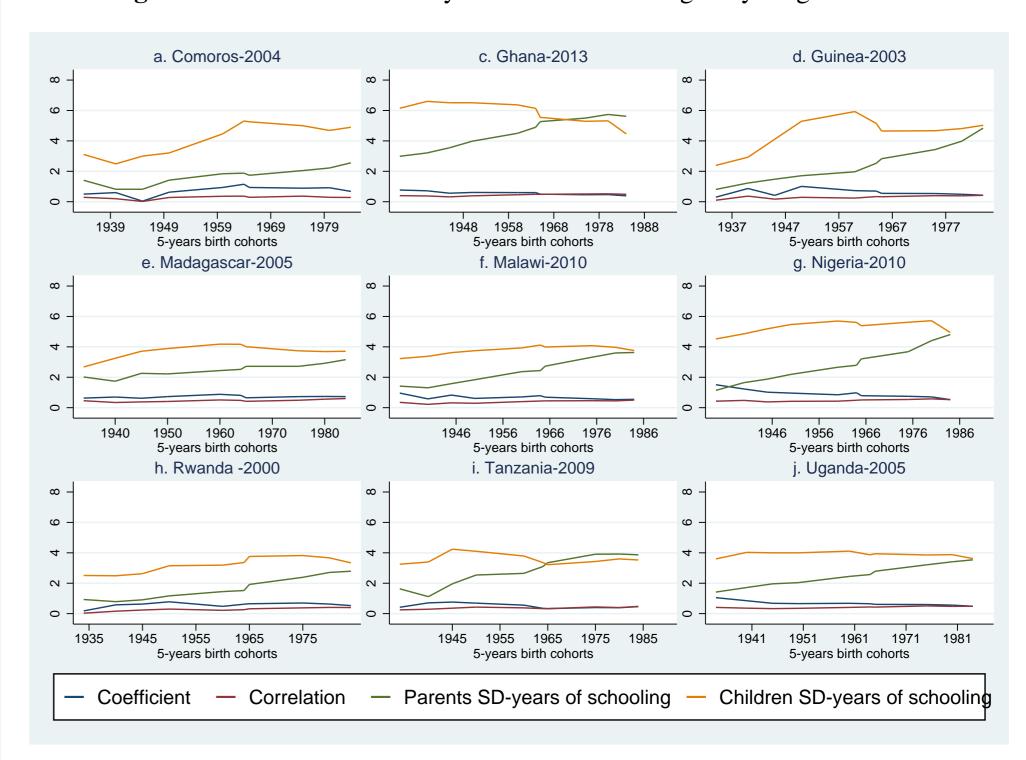
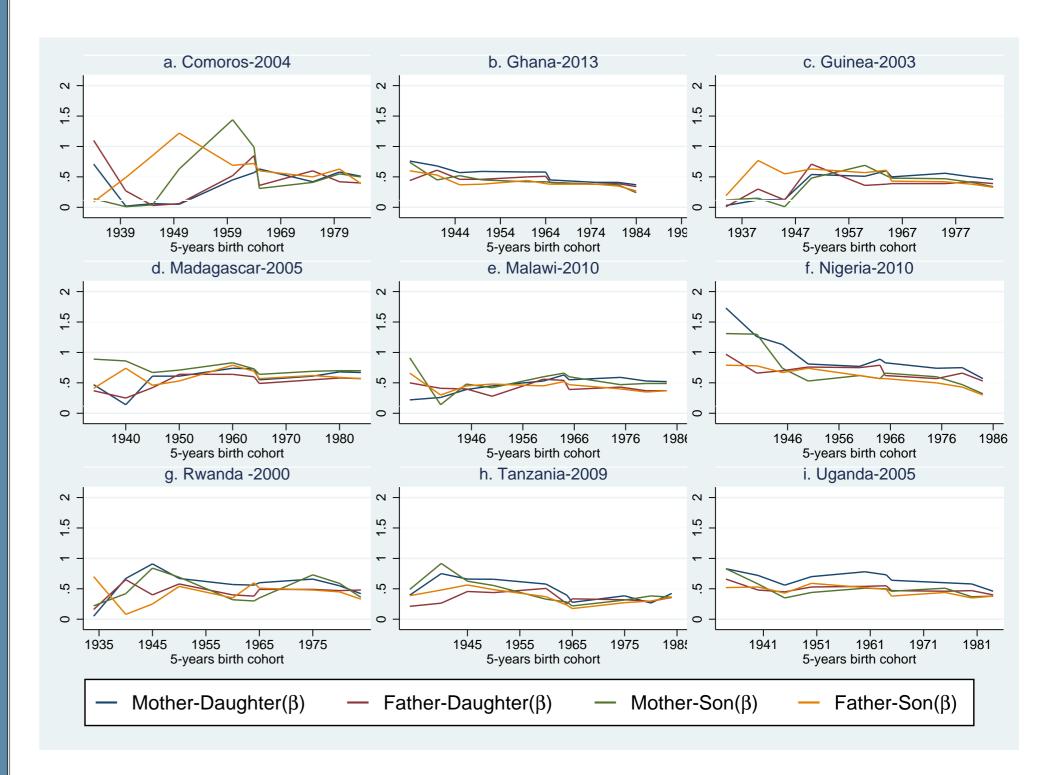


Figure 3: Intergenerational transmission of education from mother to daughter is higher



Summary of results

- There has been a significant improvement in intergenerational educational mobility during the last five decades. Nevertheless, parents education remains to be a strong determinant of children's education.
- There are considerable gender differences, daughter's education highly correlates with her parents' years of schooling than sons.
- Mother's education is significantly more important than father's education for both daughter's and sons, the effect is much stronger to daughter's.

Policy implications

- Results suggests the demand for targeted redistributive policies that improve intergenerational mobility in the region.
- Putting in place concussive environment for women (mothers) that are worse-off in terms of human capital accumulation might have a crucial role to promote social mobility in the long run.

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