

Educational Inheritance and the Distribution of Occupations: Evidence from South Africa

Sarah Girdwood, Genesis Analytics, Research Unit, School of Economics, University of Cape Town

Malcolm Keswell, Southern Africa Labour and Development Research Unit, School of Economics, University of Cape Town

Murray Leibbrandt, Southern Africa Labour and Development Research Unit, School of Economics, University of Cape Town

Abstract

Formal models of the emergence of poverty traps highlight the interplay of educational investments and occupational structure. A key feature of this literature is the idea that non-convexities in the production of human capital are induced by indivisibilities in its investment as well as imperfections in credit markets. In this class of models, the shape of the aggregate distribution of occupations (and therefore long-run inequality) is strongly dependent on the education opportunities of the previous generation. This paper looks at this aspect of inequality persistence, by investigating if the dynamical structure of the underlying transition process governing educational attainment and occupational choice, in the case of South Africa, follows a Markov process. If so, we would expect the equilibrium (long-run) distribution of occupations to be unaffected by opportunities for advancement in educational and occupational attainment. In many ways, South Africa offers up many natural experiments of this hypothesis, because of the role played by Apartheid in fostering artificial inequalities. We exploit two sources of variation in the data to test this class of poverty trap models: differences in average attainment between cohorts exposed to shifts in educational policy during Apartheid and after, as well as persistent differences in rates of intergenerational mobility by race after Apartheid. We show that the data are not consistent with the stationarity and homogeneity assumptions of Markov processes. In particular we show that our estimated rates of occupational mobility imply a transition process that is qualitatively similar for individuals acquiring more or less education than their parents, compared to the transition process for individuals with a high degree of educational persistence. These findings are consistent with the class of poverty trap models connecting educational inheritance and occupational structure.