

WORKSHOP ON EDUCATION

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Extended Abstract

Status Traps and Human Capital Investment

Abstract: Access to higher education is widely seen as a pathway to economic success, better health and well-being. Whereas income inequality is low- and intergenerational-income mobility is high in Nordic countries compared with other OECD countries, the intergenerational persistence in education is at a similar level in the Nordic countries as in the US. The strong role of parental background in educational attainment is rather surprising in the context of the social welfare state and an environment in which education is freely available and a generous scholarship system exists. This puzzling phenomenon raises the question at which margins along the educational distribution this strong persistence arises and whether there are specific dimensions of the family background or the interplay of various dimensions that are the most important drivers for the intergenerational persistence in education. The mechanisms through which social background influences educational and labor market outcomes are likely highly complex and include both nonlinear effects and interactions between various dimensions of the social background. Recent literature discusses, for example, the role of neighborhoods or regions in shaping social mobility. Moreover, several papers show that the traditional parent--child model does not sufficiently describe social mobility and will underestimate the long-term persistence of social status across generations. By leveraging rich administrative data and machine learning techniques that allow for highly flexible functional forms, we explore how the interplay of various background dimensions determine educational attainment. Because university education is often described as a pathway to greater job market opportunities, we focus on inequality in access to universities and elite educations that offer the best chances of labor market success. Hence, we study---indirectly---mobility into high-income jobs. Using this machine learning framework and registry data of individuals born from 1955 to 1980 and their parents, we first uncover strong nonlinearities in intergenerational persistence in educational attainment. That is, we show that the educational attainment of children is not a continuous function of parental years of education. There are clear discontinuities at different parental education levels. For example, there is a large jump in the likelihood that girls obtain a master degree (about 8--10 percentage points) if the girl's father has 17 years of education (corresponding to a completed master degree) compared with 16 years of education (corresponding to started but not completed a master degree). We further explore borrowing constraints as an explanation for educational status traps and show that parental income is a much less important predictor of children's education once mother's and father's education is controlled for. In particular, there are some nonlinearities in parental earnings toward the bottom of the earnings distribution for obtaining bachelor degrees and toward the very top of the earnings distribution among highly educated parents to explain elite education attendance of daughters. As a second channel, we study cognitive ability (for men) that is both highly correlated with college attendance rates. Whereas we present evidence that cognitive ability is a good and non-linear predictor of educational attainment, we show that our main findings are not solely driven by the transmission of cognitive ability between generations and that mothers' and fathers' education level is still very important. There are also interesting interactions between parental education and cognitive ability and our findings suggest that father's education can compensate for son's lower cognitive ability in terms of obtaining educational degrees. Moreover, we show that grandfathers' education, aunts' and uncles' education, as well as interactions of all these dimensions, are much less important than mothers' and fathers' education.