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Assessing Intergenerational Earnings Persistence Among German Workers

“The vitality and stability of our democracy – as well as the economy – eventually depend on the social permeability of our society.” (Horst Köhler, German Federal President, 29.12.2007, authors’ own translation)

This statement draws attention to the strong meritocratic beliefs concerning the equality of opportunity that dominate public debates. This is especially true of the education system. According to public rhetoric the aim is to enhance social mobility in Germany. Families receive a child benefit transfer, schooling for up to 13 years is free of charge and, if education is continued at a university, the cost of living is covered by federal aid for students from low-income families. But, does this general concern translate into a society in which one’s economic success is independent of the family into which one was born? And if so, to what degree?

The intergenerational elasticity β_y is an indicator of the openness of the labor market as one important part of society which we would like to investigate here. It measures the (expected) percentage change in the offspring’s economic status associated with a one percent change in their parents’ success. In principle, β_y can take any value but most studies find a value between zero and one. A positive value indicates generational persistence of permanent earnings in which a higher parental long-run status favors the economic success of the offspring; a negative figure indicates generational reversal of economic status. A value of zero for the intergenerational elasticity β_y (child’s and parents’ economic success are unrelated) corresponds to complete intergenerational mobility, while a value of unity (the child’s economic success is completely determined by the parents’ achievement) is associated with complete immobility. $(1 - \beta_y)$ provides a measure of the degree to which economic status regresses to the mean. If it takes the value one ($\beta_y = 0$), a child of parents who attain below average long-run status can expect average status just like the offspring of high-status parents.

Although there is agreement about the existence of an intergenerational link in economic status and the labor market, a number of recent studies debate its varying magnitude across countries. While many features of the human skill formation process are universal, there may, however, be unique features in German data. In an international perspective, low tuition fees and federal student aid might ease the impact of borrowing constraints on the level of human capital investment in children from low-income families. This may enhance mobility in Germany compared to other countries.

Our goal is to estimate the intergenerational elasticity β_y for labor market earnings in Germany between fathers and sons. Based upon the empirical and theoretical analysis of human capital, the association between short- and long-run economic status is assessed, together with potential biases. Deviations of current from permanent economic status arise due to transitory fluctuations and a time-varying association between the two. To take both into account, a novel sampling procedure is introduced that allows father-son pairs to be observed at a fairly similar stage in their lifecycles. The relationship is empirically assessed for Germany using samples drawn from the German Socio-Economic Panel (SOEP) 1984–2006.

The results suggest that the best conservative point estimate of intergenerational earnings persistence among western German workers is $\frac{1}{3}$. This indicates a lower degree of mobility (and a higher degree of persistence) in Germany compared to that found in previous studies. In an international perspective, the intergenerational earnings persistence seems to be lower compared to the United States $\beta_y^{US} = 0.4$, and higher compared to Sweden $\beta_y^S = 0.2$. To sum up, there still seems to be substantial intergenerational earnings mobility among western German workers, but more persistence than previous research suggested.

Hence, if in the period of investigation a father's permanent labor market earnings increased by 10 percent (€ 231 at the mean of our father sample), the son's long-run economic status grew by 3.33 percent. Evaluated at the mean of our sample of sons (€ 1,937), this implies a monthly step up of € 63 for the son. The intergenerational elasticity β_y translates intragenerational inequality in parental long-run labor market status into the economic advantage which a child of parents with a higher economic status can hope for compared to a child of lower-status parents. For Germany, a 90/10-percentile earnings ratio of 2.5 is a reasonable estimate for a cross-section sample of prime-age dependent male workers. Then, taking our advocated value for an intergenerational elasticity in Germany of $\beta_y^{GER} = \frac{1}{3}$, the expected earnings advantage amounts to 35 %. If β_y^{GER} were be 0.5, the advantage would increase to 59 %.

According to our interpretation of these findings, the labor market in Germany in the last two decades can be regarded as fairly open. Fathers' earnings play a role in sons' earnings, but other factors associated with openness and competition in the labor market are important as well.