Chapter 3

Education Policy and Intergenerational Income Mobility

Public investment in human capital may be beneficial for two reasons: on the one hand they promote equal opportunity, on the other hand they may have a redistributive effect. In addition, besides private human capital investment, education policy may affect intergenerational income mobility.

This chapter addresses the issue of whether and how education policy influences the degree of intergenerational income mobility within a society. Initially, the main assumptions and findings of Weizsäcker (1999), including the effect of two different education policy measures on the intergenerational income correlation, are briefly summarized in Section 3.1. In Section 3.2 the effect of education policy on mobility is analyzed for varying education policy measures. Here the effects of both public education and private human capital investment on mobility is explicitly investigated. Hence, the individual’s response to public education is determined, taking into account the various interactions of public and private human capital investment. The impact of public and private human capital investments on intergenerational income mobility is then analyzed for the different kinds of interactions. Finally, in Section 3.3 the results are discussed and compared.

3.1 Public Education and Equality of Opportunity

A brief summary of Weizsäcker (1999) is done in this section enabling us to compare his results with the findings achieved in the subsequent sections. Weizsäcker first addresses the influence of income taxation on intergenerational mobility. Secondly, he investigates the impact of public education on economic mobility and income distribution within a society.
Figure 3.1: Intergenerational Relations Presented in Weizsäcker (1999)

3.1.1 Intergenerational Correlation of Lifetime Incomes

Weizsäcker (1999) determines the intergenerational correlation of lifetime income on the basis of the intergenerational relations presented in Figure 3.1. These relationships demonstrate empirically the best-supported interactions of the most important determinants of economic success. Herein $G$ is the genetic basic endowment; $A$ stands for abilities (e.g., the measured IQ); $S$ denotes education (e.g., qualification); and $Y$ describes economic success, which can be interpreted as gross lifetime income. In the basic version of the model the governmental role is restricted to pure redistributive taxation. The tax rate is stated by $\tau$ and the governmental lump-sum transfer payment by $L$. The available income is denoted by $X$ and the stochastic noise by $u$. In addition to luck, $u$ also comprises all determinants which are not explicitly modeled. The index $t$ identifies the generation considered and $i$ marks a representative dynasty. Assuming that the government invests in education of the children within society, $B$ stands for public education expenditure per capita.

According to the theoretical and empirical insights, economic success of an individual mainly depends on family background, his or her abilities, and his or her qualifications. The direct effects on economic success are thus described