

Previous Studies

2.1 The Hansen-Weisbrod-Pechman Debate on the Distributional Effect of Education Subsidies in the US

The first empirical research on the distributional impact was carried out by Hansen and Weisbrod (1969a). In their article, they showed that worse-off households in California gain less from higher-education subsidies than better-off households even after allowing for the fact that they also contribute less in taxes to support public colleges and universities. Therefore, they reasoned that the Californian system of subsidizing higher education out of public funds redistributes income from the poor to the rich. Although they confirm a widespread thesis, they provoked a large debate on the distributional effect, called the “Hansen-Weisbrod-Pechman” debate, which lasted nearly ten years (see Hansen and Weisbrod (1969a,b, 1971, 1978), Pechman (1970); Hartmann (1970); McGuire (1976); Conlisk (1977); Cohn et al. (1970)).

Pechman was the first to oppose Hansen and Weisbrod’s thesis. He argued, “At no point do Hansen and Weisbrod compare the benefits and costs of public higher education at different levels, as they seem to suggest. Their comparison is between benefits and taxes paid on the average by families with and without children enrolled in the California system.” (Pechman, 1970, p. 361). Furthermore, he demonstrates that Hansen and Weisbrod’s data can be re-worked to turn their results upside down, so that the distributional effect becomes clearly progressive. A similar procedure, based on Hansen and Weisbrod’s data (updated to 1971-72), was used by McGuire (1976). Additionally, he argued that the family group of which the head is between the ages of 35 and 60 years is the most appropriate universe with which to compare the income of student’s parents, and that student financial aid must be added to tuition subsidies to obtain the total subsidy given to students in California public higher education. Taking into account these adjustments, McGuire concluded that the subsidy granted to students in each segment of public higher education in California was, both on the average and in the aggregate,

larger for students from below-average-income families than for students from above-average-income families.

2.2 Several Studies for Various Countries: A Brief Review

Machlis (1973) for New York, Fields (1975) for Kenya, Crean (1975) for Canada, Merz (1981) for Switzerland, James and Benjamin (1987) for Japan and Lemelin (1992) for Quebec provided more empirical results. All of them used a net-transfer calculation. Except for Fields, Lemelin, and Merz, all authors found that the distributional impact is progressive. Merz concluded in favor of a proportional incidence, Fields determined the middle-income groups as the net gainers, and Lemelin found a regressive impact when parents' education is used to define the social position of families. Inadequate data might be the reason why none of these authors considered equivalence scales to define in a common way which households are wealthy and which are poor.

More recent studies use equivalence scales. Tsakloglou and Antoninis (1999) used equivalence-consumption expenditures for each household as an indicator for the household's welfare level. In order to judge to what degree inequality was reduced through public education on various levels, they used some inequality indices. Unfortunately, they did not consider the incidence of the tax burden to financing the subsidization, and they neglected some problems of statistical inference. These methodological problems aside, they hint at regressive effects for tertiary education. The first research using equivalence incomes and a net-transfer calculation was done by Sturn and Wohlfahrt (1999) for Austria in 1994. They concluded that public subsidization had a clearly progressive effect.

Regardless of the fact that empirical evidence is at least inconclusive, international research initiatives and textbooks often refer to the thesis of a regressive distributional impact, and many models take it for granted. Blaug (1982) was certainly right to ask in surprise: "How is it possible that so many commentators keep repeating the Hansen-Weisbrod results as if they were gospel truths?"

Next, we present and assess several previous studies on the distributional effect of public higher education in Germany. These studies are of special interest because we will provide new empirical evidence from Germany in Chapter 3.

2.3 Grüske's Cross-Section Study

The cross-sectional view in this and other similar papers is concerned with distributional impacts that are related to a particular year. In the following suggested approach, families should be classified by their gross household