SWEDISH ECONOMIC POLICY REVIEW 10 (2003) 137-142

Comment on Anders Björklund, Mikael Lindahl and Krister Sund: Family background and school performance during a turbulent era of school reforms

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The question of inequality of opportunity has been at the core of sociological study for a long time. The basis is a classical liberal goal that one's chances in life should not depend on circumstances at birth, be it socio-economic background, cultural origin, sex, or ethnicity. The paper by Björklund, Lindahl, and Sund (henceforth, BLS) follows in that tradition, and I think it is very good that also economists engage in this field. BLS ask whether childhood circumstances in general—measured by sibling correlations—and parental earnings in particular have become more important for children's educational attainment during the 1990s in Sweden, indicated by grade point averages (GPA). Although they are careful not to make unwarranted causal inferences, they study the change with explicit reference to changes in the Swedish educational system: is it possible that budget cuts, decentralisation and increased private schooling have increased educational inequality? In a study of long-term trends in educational inequality, reported as part of a Governmental commission, Robert Erikson and I expressed similar concerns for the (then) ongoing changes in the educational system (Erikson and Jonsson, 1993, Ch. 11), so I find the study by BLS a timely undertaking.

The analyses are done with great skill and have several strengths. One, which must be considered a unique strength, is that (using large-scale register data) BLS have been able to calculate repeated sibling correlations for the whole period 1988-2000, using closely spaced siblings (maximum three years apart) as a point of departure. These correlations are around 0.5 for the whole period. A previous study of sibling correlations on the Swedish Level-of-Living data arrived at a very similar estimate for education and a slightly lower one for occupational prestige (Erikson, 1987); the classical result from the US is also comparable (Jencks et al., 1979, p. 62), though different data sets

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seem to generate slightly different results in the US case. The fact that as much as half of the variation in common stratification variables is accounted for by characteristics and resources shared by siblings is not surprising, given that the sibling correlation is a lump sum of genetics, early socialisation, housing, neighbourhood characteristics and school environment (closely spaced siblings are even likely to have many teachers and friends in common). The drawback of the measure is that it also picks up siblings' influence on each other (cf. Hauser and Wong, 1989) and that it is difficult to interpret changes in it; however, it works well for descriptive purposes and I think the result of constant sibling correlations during the 1990s is an important one: It ought to be a standard reference for anyone studying recent changes in inequality of opportunity in Sweden.

The second indicator of inequality of opportunity used by BLS is the effect of parental earnings on GPA. There are advantages in using earnings: they have some immediate relevance for our understanding of inequality because people can relate to them, and they are—if one can make a causal claim—policy relevant because money is possible to redistribute (as opposed to, e.g., cultural capital or social status). While a description of the effect of earnings on GPA is legitimate and interesting (showing that the relative earnings position has the same impact throughout the period studied), it is, however, less convincing when it comes to accounting for the *processes* behind differences in GPA.

1. Why would parents' income influence GPA?

In the literature, a limited number of factors are mentioned as plausible links between social origin and educational achievement (e.g., Erikson and Jonsson, 1996).

- Genetics;
- early environment (nutrition etc.);
- differences in resources in the family of origin:
  socialisation, practical help with school work, strategic distribution of effort (often measured by parental education);
  working conditions (social class origin);
  investment in a learning environment, tuition, residential area, good school (income/education/class);
- social class and cultural bias in schools (direct and indirect discrimination); and

- anticipatory adjustment of effort in view of future educational plans.

There is a role for income, or rather economic resources, here, but it is probably small. True, it is possible to buy a home in a nice middle-class area and equip children with various costly items (such as own room, travelling abroad, computers) but their impact on grades is still debatable. In the light of previous findings, and theory, we would rather believe that the important mechanism is the way socialisation patterns (affecting verbal and cognitive development, among other things) and practical help with school work (including strategic behaviour at school) vary with non-monetary resources. These are often indicated by parental education. Social class may also be of some importance, particularly as one can expect that social status has an effect on educational aspirations (because these are adjusted to primarily meeting the demands of intergenerationally avoiding social demotion; see Boudon, 1974; Jonsson and Erikson, 2000). Other resources, such as housing, may influence the possibility of studying at home and may also indicate the socio-economic status of the neighbourhood.

To empirically illustrate these arguments I fitted a multivariate OLS regression of GPA in grade 9 on parents' income, education, social class, and housing for those with at least one Swedish-born parent. The data-set (described in Erikson and Jonsson, 1993, Ch. 4) is based on register information (25 per cent sample of cohorts born 1972-76) and is fairly similar to the one used by BLS. Table 1 shows the standardised beta-coefficients and the t-values (large, of course). Income is the sum of the mother's and father's total income per household unit (in the equivalence scale, the first adult has a weight of one, the second .75 and each child .5). The zero order correlations with grades are: income (.28), occupational prestige (.35), parental education (.39), housing (.20).

As can be seen, there is an effect of income—it explains almost eight percent of the variation in GPA.[1] However, this is mainly because income correlates with other, more plausible, variables that can be assumed to have a causal effect on GPA—particularly, as one

[1] It is not obvious why my model explains so much more variation than the one by BLS. Partly it is because they use log income (it is not theoretically clear why; it is even possible that it is only really high incomes that will have an effect on GPA). The dependent variable is also different, but the transformation made by BLS would hardly make a big difference.

would expect, parental education. When introducing the other variables in Models 2 and 3, the net effect of income declines considerably.

Table 1. OLS Regression of GPA in grade 9 on family background for children born 1972-76 by at least one Swedish-born parent (n=101893)

Family background indicator	Model 1	Model 2	Model 3
Parental income	.28	.10	.09
	(93)	(32)	(28)
Parents' education		.25	.25
		(69)	(67)
Parents' social class		.14	.13
		(39)	(35)
Housing			.07
			(24)
R^2	.078	.178	.182

Notes: Standardised Beta-coefficients; t-values in parenthesis.

Parents' income may be an important factor for educational attainment, but if so, for educational choice rather than for GPA. Coming from a more wealthy background probably affects the way the risks of beginning higher education are perceived, and economic support beyond the study loan is likely to make the choice of studying more attractive compared to the alternative (this argument is further developed in Erikson and Jonsson, 1994, 1996). Due to lack of data, this has not yet been studied in Sweden.

2. Why would educational reform change the origin-GPA association?

If the impact of family of origin on grades is deeply rooted in early socialisation and the continuous support during schooling, primarily related to the parents' educational resources, it is doubtful whether educational reforms of the kind undertaken in the 1990s could have an impact on children's GPA.[2] While there was an equalisation in

[2] An exception is increased segregation because we know that there is a positive effect of going to a school where there are many pupils with high socio-economic background on GPA (but a negative effect on educational choice). However, these contextual effects are very weak in Sweden compared with family background ef-

educational attainment during the 20th century (especially in the period 1930-1970) (Erikson and Jonsson, 1996), this is probably accounted for by changes in educational choice and not in GPA.

The more plausible effect of the school reforms, however, is that a more intimate knowledge of the school system, and how to navigate that, is needed to make the right choices. When subsidised private schooling opens up more educational opportunities for those who have high aspirations and the resources to make informed choices, pupils with well educated (but not necessarily wealthy) parents are more likely to profit. Therefore, such school reforms may increase the origin effects on final educational attainment (qualifications, highest level), although there is no effect on GPA.[3] As BLS note, we have to wait some years before this can be investigated. An interesting study by Gustafsson et al. (2000) shows, however, that there appears to have been a decrease in the importance of the family of origin on the transition to secondary education during the 1990s, which they interpret (not unreasonably) as a "parking effect"—due to the poor labour market opportunities since 1992, young people in general (hence, more from the more disadvantaged backgrounds in particular) had no choice but to stay on in school.

3. Conclusion

Björklund, Lindahl, and Sund have produced a very important analysis of change—or, rather, stability—in educational inequality in Sweden during the 1990s, as measured by grades in grade 9. It is nicely complemented with an analysis of the relation between parental income and GPA, showing basically the same result. While that is an important description of the development, my main comments have been that (i) GPA is not the ideal outcome variable when addressing the possible effects of changes in the educational system on inequality of educational opportunity; (ii) income is not an ideal indicator of family background because the mechanisms producing similarity between siblings are only weakly or indirectly related to parental income. At least on the first point, BLS agree and point out that they lack bet-

fects (Erikson, 1994). Another possibility is that the schools to which richer kids go increased their relative GPA for a given ability level.

[3] Differences in educational choice (at given levels of GPA) stand for approximately half of the relation between family background and educational attainment, differences in GPA for the other half (Erikson and Jonsson, 1993).

ter outcome measures. It is only to hope that they will eventually get educational transition data for their cohorts because these will provide them with a great opportunity of making an even more important contribution to the field.

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