

**Comment on Sohlman:  
Sweden—a learning society? The education system’s  
performance in an international perspective**

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The purpose of Sohlman’s paper is to give an overview of the achievements of the Swedish educational system mainly by providing an international comparison through benchmarking. The comparison groups are 14 old OECD member states and 7 new ones (Korea, Mexico, the Czech Republic, Hungary, Poland and the Russian Federation). The main facts are presented in the “Human capital stocks”, “Human capital formation,” and “Returns to education” sections. Throughout, it is taken for granted that in looking at education, more is better. As will become clear, much of the comparisons are presented as rankings of the countries.

### 1. Main facts

**Human capital stocks.** Sweden has a fairly high rank regarding the proportion of the population that has completed tertiary education. The rank is somewhat higher for non-university than for university tertiary education. Results for women are better than for men. The rank is higher for older cohorts. Due to high labour force participation, the rank is lower for the proportion of the labour force than for the population proportion. Ranks are rather low for younger science graduates.

The rank for researchers and total R&D personnel in the labour force is high. The government R&D sector is relatively small; the business and higher education R&D sectors are rather big.

The functional literacy level is high—by overall *International Adult Literacy Survey* (IALS) standards and by educational level and occupation. Divergence from other countries is least marked in younger cohorts.

**Human capital formation.** The rank is low regarding the proportion of population, ages 5-29 in formal education, especially re-

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garding tertiary education and full-time equivalent students. The picture is the same for expected years of education. But the rank is high for expenditure, despite few teaching hours and low teachers' salaries.

Participation rates before age 7 are low; the rates are high in primary and secondary education age groups, low for early participation in tertiary education and high in older age groups: Only Norway and Denmark have older students at the 50th percentile and only Norway at the 80th. For typical tertiary-level graduates, the median age is about average in Sweden.

The proportion of general programs in upper secondary education seems "normal" in 1995. During the 1980s and early 1990s the proportion in theoretical and general programs tended to fall, but has risen again. At the tertiary level, students seem to be distributed over different fields in more or less the same way as in other countries, although the ranking for law and business students is low. So to the extent that the number of students in science and engineering is "too low", this mainly reflects a relatively modest general enrolment rate in higher education.

Results in international comparisons for students ages 13-14 are good in literacy (1991) and not so good in mathematics (1982/95) and science (1982/95).

Participation in job-related education and training is high, and the differences in participation rates by initial education are small. There is some indication that the length of training spells is on the short side. The rank is high in labour market training for unemployed and employed workers.

Participation, both in popular education and in study circles, is extensive. Recent reforms include: the adult education initiative (AEI) (about 100,000 full-time full-year places), KY program (advanced vocational training, 6000-12,000 slots), 60,000 new university places in 2000 compared to 1995, and the duration of all programs in secondary school has been prolonged to three years.

**Returns to education.** The returns to education may come in (at least) two forms: education may add to earnings, and it may reduce the incidence of unemployment. The relationship between educational level and unemployment incidence is the normal one in Sweden: unemployment incidence goes down with increasing educational level.

Compared to other countries, we find that Sweden ranks fairly low regarding earnings of people at the non-university tertiary level

and university level—relative to people at the upper secondary level. And Swedish teachers' salaries stand out as very low.

Comparing instead rates of return to education, they are generally fairly low, especially for women and at the university level.

My personal reading of the evidence presented by Sohlman can be briefly summarised as follows: The Swedish population (and labour force) seems to be fairly well educated. To the extent that the comparison to other countries has revealed problems, they primarily relate to young persons and possibly to the returns to education.

## 2. Some issues

The general idea behind the benchmarking approach, as I interpret it, is to use conditions in other countries as some kind of measuring rod to identify strong and weak spots in the performance of the Swedish educational system. I think the author has used the approach fruitfully to collect many interesting findings. I do not have much to add in that respect, but I will raise some points relating to the interpretation of the evidence and possible policy conclusions.

To the extent that there is an "education problem" in Sweden, the evidence presented in the paper suggests that it is mainly a youth problem related to the quantity of tertiary education and the quality of primary education. This raises a couple of issues. *First*, according to the results on teachers' salaries, the returns to education are low for teachers. There may be a connection between this and the incentives to become a teacher and also a good teacher. This issue could be worthwhile to follow up. *Second*, given the background presented in the paper, one feels inclined to wonder whether the recent concentration of resources into adult education documented in the paper can be justified. Although this is discussed in the paper, I think this discussion would deserve a more prominent place.

Do the relatively low figures for participation in tertiary education primarily reflect supply or demand factors? On the one hand, the results in Fredrikson (1997) indicate that the demand for higher education is responsive to the returns; on the other hand, we witnessed long queues for most types of higher education during the 1980s, when the returns probably reached an all-time low. Moreover, the sizing of higher education is a policy issue; the wage structure is not to the same extent.

A second dimension of the returns to schooling relates to salary levels inside and outside Sweden. For example, suppose that engineers can earn much more in Germany than in Sweden. Then Swedish taxpayers may end up educating German engineers. So it is important to make a distinction between flows into education and flows of educated people into the labour force. This, of course, is related to the general issue of private versus public returns to education.

### **3. Concluding remarks**

So is Sweden a learning society? Sohlman has collected and presented a vast amount of valuable information on the status of the Swedish educational system. Sometimes I lack a discussion of the policy significance of this evidence and sometimes one may quibble about interpretations. I have given some examples of both in my discussion.

The benchmarking approach has pros and cons. International comparisons are always hard to interpret due to institutional divergences and, abstracting from this, do not provide an absolute measure of failure or success. But absent good estimates of social costs and benefits of different kinds of education, it is not easy to come up with a self-evident alternative if one, for example, wants to discuss the extent to which there is too much or too little higher education going on in a country or whether the returns to a certain kind of education are too high or too low.

Taken at face value, the comparative evidence presented in Sohlman's paper indicates that Sweden definitely has been a learning society and definitely is a learning society with respect to adults. Looking at younger cohorts, Sweden ranks much lower. The main policy question this raises is to what extent this reflects a bad allocation of public resources in the Swedish educational system with too much resources devoted to adult education and too little resources spent on youth education. This is an important issue for further research.

### **References**

- Fredrikson, P., (1997), Economic Incentives and the Demand for Higher Education, *Scandinavian Journal of Economics* 99, 129-142.