New Perspectives for Learning - Briefing Paper 29

Public funding and returns on education

Context of the Research

National education systems across Europe initially appear to be fairly similar and are mainly financed by government, but clear differences start to emerge when comparisons are made between student tuition charges, grants and loans, and fiscal compensation allowed to parents. In fact, in many countries the share of costs borne by students and/or their parents has shifted over the last decades.

Simultaneously there is a political debate on the most desirable system of financing. This debate shifts between the need to reduce government deficits by budget cuts and the need to increase the knowledge base of the population in order to maintain a European competitive edge.

This project has studied the impact of different systems of public financial support for the education of individuals and other factors affecting their uptake of educational opportunities. In particular the study looked at individual "returns on education" i.e. the economic gains an individual may make by investment in their education. Investment of money may come from the individual, the public or private sector or a combination of both. Gains can be measured in terms of increased job opportunities and higher wages.

Drawing upon national data, the project has attempted to make a number of Europeanwide observations of trends concerning returns on education and their impact on the labour market in terms of the levels and dispersion of inequality in earnings.

The project involving 15 European countries (Austria, Denmark, Finland, France, Germany, Greece, Ireland, Italy, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the UK) has examined broad national data sets containing extensive individual-level information on wages and education. It has also linked the observed patterns and trends to national educational systems and policies.

Key Conclusions

The following conclusions were reached: -

- 1. The estimated individual returns on education differ considerably across Europe. They can be classified into three groups of countries:
 - a) Those with a low average return on education (Scandinavian countries and the Netherlands).
 - b) Those with a high return on education (Ireland and the UK).
 - c) Those in-between these two extremes.
- There are no signs of a convergence of returns on education across the European countries. Some countries show a downward trend in rates of return, others are characterised by an upward trend, while still others display no time trend whatsoever. The trend can differ for men and women within a single country.
- 3. In the future this may result in higher mobility across national borders, particularly of highly educated people trying to exploit these cross-country differences in the rewarding of individual investment in education. The rapid expansion of the use of information technologies could be expected to boost such a development, since the possibility of working and living in separate places becomes a reality.
- 4. Separate analysis of the wage differentials between college-educated and high school educated employees, the so-called "college wage gap", also displays considerable variation across the countries studied.
- 5. The evidence suggests that investing in the education of individuals raises their productivity in working life, and thus contributes to productivity and output growth in the economy. This strengthening of the national economy justifies governmental involvement in the production and financing of education.
- 6. Throughout Europe there is a potentially higher than average return on education from socially deprived groups of people who have acquired little education. This points to substantial individual and social gains to be obtained from policies aimed at lowering the number of early school-leavers.
- 7. Since education still contributes substantially to the wage differences, as observed in European labour markets, improving the educational attainment level of the less educated is likely to reduce wage inequality.
- 8. It is nearly always beneficial for individuals to educate themselves more, rather than less as they can secure a higher entry wage and better wages throughout their working life.

- 9. However, there are wage-inequality-related factors that potentially may work in the opposite direction like the supply of educated individuals exceeding the demand for an educated workforce.
- 10. Across Europe there are also wage inequalities amongst individuals who have attained the same education. These inequalities tend to increase with the level of education taken thus creating a "wage risk" for those taking further education. This within-educational-level inequality may seriously mitigate or even outweigh the decline in overall wage inequality that is commonly expected to arise from increased education.
- 11. European labour markets are characterised by considerable uncertainty with regard to the actual return that individuals can get from their investment in higher education. Returns are riskier the higher the country's average return on education.
- 12. Employment prospects (the risk of becoming unemployed) and unemployment benefits are likely to influence individual education decisions. Some generalisations can be made: -
 - a) What matters is the difference in unemployment rates between educational levels rather than the absolute unemployment rate for differently educated employees.
 - b) Employment expectations affect incentives to invest in further education more at the lower end than higher up the educational scale.
- 13. The enormous expansion in public funding of higher education, particularly in the 1990s, resulted in a substantial growth in the supply of highly educated employees.
- 14. The real value of public expenditure on higher education grew by more than 80% between 1980 and 1996 in the countries studied.
- 15. Over the same time period the supply of employees with a higher (tertiary) education relative to those with a secondary or lower education roughly doubled.
- 16. However, the relative wages of highly educated employees have shown an increasing rather than a decreasing trend due to the demand for highly educated labour expanding at an even faster rate.
- 17. There is also a variation in the level and the growth rate of public expenditure on higher education, with countries having started from a lower level showing higher growth rates.

- 18. Increased public expenditure on higher education does have a strong positive impact on the supply of highly educated labour.
- 19. But, entry exams in the high-school system and tuition fees are also found to influence enrolment.
- 20. In contrast, at the time of the study, returns on education and unemployment rates for younger age groups do not appear to affect enrolment into higher education.
- 21. However, this is in line with the other results the project obtained. There is no significant effect of relative wages on relative supply when contrasting tertiary education against secondary and lower education. Also, employment expectations are found to play a less important role in steps from medium to high levels of education than from compulsory to non-compulsory education.
- 22. In countries with an extremely low return on education, there is an obvious risk that a growing number of young people will decide not to invest in higher education.
- 23. It was confirmed that government ideology especially and also the type of government has played an important role in differences in public expenditure across and within countries over time.

Key Recommendations

The following recommendations were made: -

- 1. As socially deprived groups provide a higher return on education considerable importance should be attached to identifying individuals within this group in order to provide them with incentives to continue in education.
- 2. Further research is needed into the interrelation between within- and between educational-level wage inequalities.
- 3. Increased efforts are needed to produce and make accessible data that can be more easily compared across Europe.

Further Information

Full title of study - "Public Funding and Private Returns To Education. A Cross-Country Policy-Oriented Perspective on Private Benefits of Education" with the final report "Public Funding and Private Returns to Education" completed in January 2001

Full report, Abstract, Summary, Partner details

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