European Expert Network on Economics of Education (EENEE)



EENEE POLICY BRIEF 1/2014

APRIL 2014

Early School Leaving in Europe: What Does it Cost Individuals and Society?

Giorgio Brunello [University of Padova – giorgio.brunello@unipd.it] **Maria De Paola** [University of Calabria – m.depaola@unical.it]

Reducing early school leaving to less than 10 percent by 2020 is a headline target in the Europe 2020 strategy. But designing adequate policies to combat early school leaving is a difficult task that requires both identifying causal links and measuring costs and benefits.

According to the definition used by Eurostat and the European Commission, early school leaving occurs when an individual aged 18 to 24 has attained at most

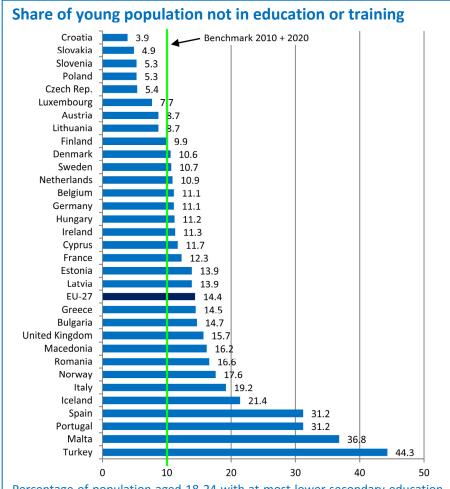
country differences and the fact that some measures are less inclusive than others.

The effects of education on individual and social

lower secondary education and is not engaged in education and training. In 2009, 14.4% of the EU-27 population was in this condition (see Figure). The problem is especially serious in the Iberian peninsula, where early school leavers are above 30% of the relevant population, but relevant also in some Northern European countries such as Norway and the UK.

MEASURING THE COSTS OF EARLY SCHOOL LEAVING

What are the costs to individuals and societies of early school leaving? Available estimates cover only a few countries of the European Union, and tend to differ widely. The estimated lifetime costs per youth to society range from 33,000 Euro in Ireland to about 56,000 Pounds in the UK, from 120,000 Euro in Norway to 157,000 Euro in Estonia. These numbers are sizeable but significantly smaller than the 756,000 Dollars estimated for the United States. These differences reflect both genuine



Percentage of population aged 18-24 with at most lower secondary education and not in education or training, 2009. Source: Eurostat (Labour Force Survey).

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wellbeing are far reaching. For individuals, education generates benefits not only because it improves occupational prospects, wages and job satisfaction, but also because it leads to more informed decisions affecting health, marriage, parenting and retirement. Moreover, schooling affects individual non-cognitive skills and attitudes such as risk aversion, patience and motivation that influence economic choices. Individual decisions to undertake further education have social consequences and affect both state finances — by raising tax revenues and reducing welfare benefit payments — and social welfare, because of their effects on crime, attitudes toward minorities and immigrants and political participation.

Evaluating these (net) benefits is a complex task that requires the comparison of outcomes for a treatment and a control group. It is customary to identify the former with early school leavers and the latter with high school graduates. Ideally, individuals in these two groups should differ only in their educational attainment. In practice, however, they differ also in observable and unobservable characteristics. Failure to address these differences may lead to biased results.

To illustrate the difficulties at hand, a key component of the cost of early school leaving is the discounted sum of the loss in expected earnings (and pensions). In the calculation, the typical assumption is that earnings at age 50 in 2030 — which are not observable — are equal to observed earnings at age 50 in 2013, properly inflated by estimated productivity growth. But modern labour markets are becoming increasingly polarized, with a reduction of "middle class" routinized jobs. The income premium from completing high school might thus fall in the future, leading to an over-estimation of the costs of early school leaving.

POLICIES TO REDUCE EARLY SCHOOL LEAVING

Several policies have been pursued in Europe to reduce early school leaving, and the debate on policy effectiveness is still very animate among both academics and politicians. While some policies – such as conditional cash transfers – are targeted at at-risk or disadvantaged students, other policies affect the entire school system. Unfortunately, policies in this

area are rarely evaluated using cost-benefit analysis. The scarcity of evaluation studies is partly due to the lack of adequate data on individual, social and fiscal outcomes. Most existing studies originate from North European countries with a tradition of collecting and releasing to academic researchers rich individual data.

Policies that adopt an experimental design - that randomly allocates subjects to treatment – to identify causal policy effects are still rare in Europe. However, some interesting interventions have been realized. An example is the mentoring program recently introduced in France that targets secondary school students. The evaluation of this program reports a remarkable reduction in dropout rates and in grade repetition. Credible policy evaluation can also rely on the variation provided by administrative rules. An example is the evaluation of a policy allocating additional resources to schools with disadvantaged students in the Netherlands, which relies on the comparison of schools above and below a threshold value, and finds that the policy has failed to increase performance in nationwide tests and have even reduced school attainment.

Results are more encouraging for "Excellence in Cities" (EiC), a program targeted at disadvantaged students in England. The evaluation of this program compares changes in outcomes of schools where the EiC policy has been in place with appropriate comparison schools. The policy appears to have contributed both to better learning and to higher student attendance. The cost-benefit analysis suggests that the expected benefits are close to the costs of the policy.

Comparing different policies – some addressing all students and some targeted at disadvantaged students – is a very difficult task. Success in this exercise requires not only accurate data on outcomes and costs, but also that the same outcomes are considered, that individuals with similar characteristics are targeted and that similar evaluation methods are applied. These requirements should guide the design of policies to combat early school leaving. It is unfortunate that in the European policy debate they are often overlooked or receive limited attention.

For more details see: Giorgio Brunello, Maria De Paola, *The Costs of Early School Leaving in Europe*. EENEE Analytical Report No. 17, November 2013, http://www.eenee.de/dms/EENEE/Analytical_Reports/EENEE_AR17.pdf.

European Expert Network on Economics of Education (EENEE) Funded by the European Commission, DG Education and Culture



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