

## **Early school leaving in Europe in a time of recession**

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Early school leaving is an issue of policy concern across Europe, with EU countries committing to reducing it to less than 10% as part of the EU 2020 strategy. Defined as being aged 18-24 and not in education or training, having not achieved at least upper secondary level qualifications, early school leaving is associated with a number of adverse outcomes such as labour market disadvantage, social exclusion and poor well-being.

This paper uses data from the EU-SILC to explore the personal, household and neighbourhood factors that make early leaving more likely. It seeks to establish whether the impact of these factors varies between the 24 countries in the analysis, and whether there are also macro-level correlates of early school leaving. It also asks what effect the recession has had on these associations.

Previous research has tended to look at the issue of early leaving either from a country-level perspective, or if taking a micro perspective has used data from the OECD's Programme for International Student Assessment (PISA). The PISA data has a number of advantages over EU-SILC, such as its ability to measure attainment and capture detailed school-level factors. However it covers a more limited and younger age group than the one of interest in this paper, which seeks to look at the outcomes of young adults.

The literature on educational inequalities was used to identify likely personal, household, neighbourhood and country-level factors that could be associated with early school leaving. Personal factors included sex, health, migration status, household deprivation and subjective neighbourhood ratings. Country-level factors included GDP per capita and growth, expenditure on education, youth unemployment and poverty, plus aspects of the education system such as school leaving age, teacher compensation, and class sizes. The analysis also considered the potential role of a country's orientation towards science and technology, measured by factors such as expenditure on research and development, employment in high technology occupations, and proportion of science graduates.

The analysis used the EU-SILC cross-sectional microdata from the years 2005 to 2012, on all 24 countries for which data was available across all years. Data on country-level factors was obtained from Eurostat and the OECD. Logistic regression modelling was used to predict the probability of early leaving, and the marginal impact of the explanatory variables on this. The analysis also used multilevel modelling to incorporate the impact of the macro-level factors. Time comparisons were made by estimating separate models for different years, and then testing to establish the significance of the difference between the coefficients on the explanatory variables.

Early leaving was found to be associated with a number of well-established personal disadvantages, such as material deprivation, migration, and poor health, and a gender gap was also identified, with males more adversely affected. The results of the multilevel modelling suggested the presence of country-level differences, and a possible clustering of countries around the key macro-level variables, although few of the macro-level variables were themselves found to have a significant impact. The recession was found to affect the prevalence of early school leaving, although not in a consistent pattern across the countries studied.

The results suggest that structural inequalities play a considerable role in early school leaving, and that tackling it will require addressing the wider set of opportunities available to disadvantaged young people, and offering additional support to participate to those who face the greatest barriers.