

## Summary of PhD project: Enhancing Efficiency and Effectiveness in Education

The PhD research is part of a wider project called EFFEct that is funded by the European Commission. EFFEct brings together a multidisciplinary research team of economists, sociologists, (neuro) psychologists, teacher trainers, education scientists, and mathematicians, from four European research universities, a research institute and an NGO.

High-quality education is a key driver of economic growth and social progress. Despite large investments in education over the past few decades, the quality of education in some EU countries has stagnated or even deteriorated. Marginalised populations are particularly vulnerable to the negative consequences arising from inadequate educational policies. Understanding the efficiency and (cost-)effectiveness of investment in quality education is crucial for allocating resources to where they could have the largest economic and social impact.

For this own PhD project, I will focus on providing evidence-based policy recommendations to improve the quality of education. The recommendations will be grounded in sound academic research, stemming from quasi-experimental methods that I will use to provide causal evidence. In particular, I will focus on the effectiveness of religious schooling and adult education, and the connection between education, family environment, and the labour market, among others.

To address the research question of whether children in religious schools perform better in school and on the labour market than children in public schools, I use unique longitudinal register data collected by Statistics Netherlands. Each child is given a unique personal identification number in the education registers, allowing us to follow children through their entire educational career all the way to the labour. Each year, I observe in which school a child was enrolled and the school's denomination. The outcomes of interest are standardized test scores at the end of primary education, diploma attainment in high school and tertiary education, an indicator for employment, and net earnings. To approximate the causal effect of religious schooling, I will use a quasi-experimental bounding estimator. As such, the endogeneity effects can be characterized, and causal effects can be retrieved.

To assess the effect of adult education on labour market outcomes, I use administrative population data from the Netherlands. The longitudinal nature of the data allows us to follow each individual annually for almost 20 years. I observe whether an individual has enrolled in adult education, when, and whether this individual obtained a qualification. The main outcomes are an indicator for employment and net earnings. As an empirical method, I will use a two-way fixed effects model. Essentially, I exploit variation in labour market outcomes and adult education enrolment within learners. The advantage of the fixed effects model is that it controls for all time-invariant individual unobserved characteristics that are related to labour market outcomes and the decision to enrol into adult education. As such, we can approximate the causal effect of adult education on labour market outcomes.