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A fast-forward look at tertiary education attainment in Europe 2020

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Abstract

This paper strives to answer the question whether Europe will reach its tertiary education attainment target by 2020. We model the dynamics behind education decisions as a balance between investment and consumption motivations. We use a panel approach and a wide range of statistical tests to insure that model specifications are stable and robust. Insights into the dynamics of future education attainment and remaining policy challenges are highlighted. While Europe is likely to achieve its target, there is a growing divide between best and low performing countries that raises doubts with respect to real economic convergence prospects.

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1. Introduction

In Europe, the share of highly-educated individuals has steadily increased over the past decade. However, most European Union (EU) countries fall short of having figures comparable to the U.S. or other high-income countries. This unsatisfactory outcome has led the European Commission

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(EC), within the strategic framework for European cooperation in education and training, to put forward a political agenda emphasizing the need to increase tertiary education attainment. Specifically, EC is committed to increase the proportion of 30–34 year-olds in Europe having completed tertiary education to at least 40% in 2020. This overall goal is then translated into national targets by taking into account country-specific situations. In 2012, for example, the share of tertiary graduates (henceforth the benchmark) remains below the EU target, namely at 35.9%, with some countries such as Italy, Malta and Romania scoring as low as 22%, far below their national targets.

This paper poses the question whether the Europe 2020 target on tertiary education can be achieved. To provide an answer, we estimate a model of education attainment based on a standard theoretical framework (Acemoglu & Pischke, 2001; Becker, 1964; Becker & Tomes, 1986; Behrman & Rosenzweig, 2002), which considers family background characteristics and expected returns to schooling.

To see how tertiary education attainment might look like by 2020, some possible approaches would be to build a utility-maximizing dynamic model (see amongst others, Keane & Wolpin, 1997; Todd & Wolpin, 2006) or to estimate a statistical model of schooling attainment using microdata (as in Cameron & Heckman, 1998; Kaufmann, 2010). This paper adopts a different approach. It presents estimates of schooling attainment derived using time-series/cross-section data for 27 European countries. The estimated model is then used to construct long-term forecasts for Europe as well as for individual countries. The major advantage of our approach is the use of very few realistic assumptions that make the determinants of the model become exogenous with respect to schooling decision. Our forecasting exercise shows that Europe as a whole is likely to reach its target of 40% on tertiary education attainment by 2020, but the pace of improvement will be slower than in the past. In addition, we expose a diverging pattern among Member States, with some countries improving faster than others. Given the complex causality links between economic dynamics and education attainment, the different trajectories of best and worst performers point to important policy challenges with respect to real economic convergence prospects within the EU.

This paper contributes to the relevant empirical literature in at least three aspects. First, using a panel regression analysis, we investigate the dynamics of tertiary education attainment over time, disregarding any constant country-specific factors such as those related to traditions, cultural identity or institutional arrangements. Instead, we focus on the *within* changes in tertiary education attainment, which might be triggered by the changing attitude towards (higher) education of young cohorts. Second, under theoretically grounded assumptions, we offer an econometric model capable of delivering long-term forecasts on tertiary education attainment in the presence of limited data availability. We show that the empirical model is consistent with existing theoretical and empirical evidence, while having a parsimonious specification and stable coefficients over time. Third, by decomposing the expected increase in tertiary education until 2020 into its main determinants—that is labour productivity and adults' education, we point to policy areas that might have longer-term consequences on education attainment.

The analysis ramps up the debate on tertiary education attainment in Europe by offering a baseline scenario on which policy interventions might be advanced. We discuss two main areas of policy intervention. The first area addresses family background and intergenerational mobility, with possible actions directed towards broadening access to education and reducing financial constraints. The second refers to labour market functioning, with a focus on the formation process of wage expectations and the consequences of technological progress on wage distribution and skill premium. With regard to policy effectiveness, the year 2020 might be too tight of a deadline

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