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The impact of crisis on real convergence in EU countries

The aim of this paper is to examine the real convergence in the European Union during the last fifteen years. In particular, we seek to answer the question which factors contributed the most to the slowdown of real convergence observed after the crisis.

We examine the convergence of GDP per capita in 26 EU member states (without Croatia and Luxembourg) in 2000-2014. Apart from traditional growth components we include several other variables: macroeconomic, demographic, institutional, financial as well as those reflecting external conditions. We employ GLS estimation controlling for both panel-specific AR1 and heteroskedastic error structure. To examine which factors contributed the most to the slowdown of real convergence, we perform five-year moving average rolling window analyses and check parameter stability over time.

Our results indicate that absolute and conditional convergence between the EU countries which was observed in 2001-2008 was interrupted in 2009, in the aftermath of the global financial meltdown. Some signs that convergence has re-emerged have been visible since 2012 but the speed of convergence has significantly decreased.

The results confirm the significance of most of the analysed economic factors in the GDP per capita growth. However, the relative importance of particular variables has changed over time. The impact of traditional growth factors – investment rate and labour input – on GDP per capita growth has decreased significantly, whereas innovation (proxied by the business sector R&D expenditure) has gained importance. We have also found a positive impact of the share of workers employed in technology and knowledge-intensive sectors in total employment on GDP per capita growth.

On the other hand, we have found a growing negative impact of some of the previous growth factors, such as demographics and macroeconomic policies. Specifically, our results indicate that increasing old age dependency ratios have become a drag on growth. The estimated value of the related parameter is much higher in the old member states where the problem of population ageing is generally more pronounced than in the new member states. Another factor contributing to the slowdown of growth and convergence is the decrease of macroeconomic stability (especially very high government debt) in some of the EU economies.

As regards policy implications, our results confirm that the growth model prevailing in the CEE based on increasing capital and labour inputs has probably come to an end. Growth supporting policies should therefore concentrate on spurring innovation and tackling the demographic problems.