

Marko Glažar

Calculation of Potential GDP Growth: Production Function Methodology

Working Paper 1/2014, Vol. XXIII

The contents of the papers may be reproduced in whole or in part provided that the source is acknowledged. Copyright belongs to the authors and not to IMAD, as the opinions, findings and conclusions expressed are entirely those of the authors and do not represent IMAD's official views.

Summary

European Commission has used the production function approach to compute potential output since 2002. The methodology was endorsed by the ECOFIN Council and is updated periodically by the Output Gap Working Group.

This study describes the production function approach that is used by IMAD. The methodology follows closely the EC methodology; however some additional IMAD research is incorporated as well. Minor differences in the methodology and different data sets used result in some deviation in the IMAD results compared with the results published by the EC.

The study describes the processes of eliminating the cyclical components at production factors. The recent calculations indicate a substantial weakening of potential GDP growth in the upcoming period. The calculations using the PF approach show that after starting to drop strongly in 2008 from around 4% before the crisis, potential GDP growth will fall to as low as -1.7% in 2013 and is expected to turn positive only after 2016. Among individual components of the calculated potential GDP growth, the contribution of labour will decline most relative to the pre-crisis period in the coming years. Partly, this also reflects the current methodology for calculation of the NAWRU.

The results in the recent years depend strongly on the vintage of data and forecasts used. In part, this is a consequence of revisions in the national accounts data by SURS, but the main reasons are changes in the economic forecasts used in the calculations, and intrinsic characteristics of the methodology that includes filtering of series.

The whole text is available in Slovenian language on
http://www.umar.gov.si/avtorski_prispevki/