PONTE

Vol. 75 No. 2, 2019 Florence, Italy
*ISSN:*0032-423X *E-ISSN:*0032-6356 International Journal of Sciences and Research

DOI: https://doi.org/10.5281/zenodo.4707989

INNOVATION, PRODUCTIVITY AND EMPLOYMENT IN CENTRAL AND SOUTH EASTERN EUROPEAN COUNTRIES

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ABSTRACT

Technological development was regarded by Schumpeter (1939) and Solow (1956) as one of the major drives of economic development and productivity. Technical achievements such as electricity and information and communications technologies – now widely referred to as General Purpose Technologies – have reshaped economic processes, spreading from one industry to a number of others and creating potential for further innovative activities. As measured by patent statistics today's leading technology is still information and communications technology, though growth rates in other fields of innovation point to the beginning of a new epoch. The paper investigates how the selected 14 Central and South Eastern European Countries contribute to the world's technological progress with the help of R&D and patent statistics lagging far behind the G7 and even the OECD average. Despite the growing number of new patents, the deceleration of productivity dynamics has been a general phenomenon in both developed and emerging economies since the real economic effects of the 2007-2008 global financial crisis became perceivable. However, despite the moderating pace, productivity and employment growth go hand in hand in the developed countries at the national economy level as was stated by Kaldor (1961) and confirmed by Jones-Romer (2010) and Autor-Salomons (2017). As regards the 14 Central and South Eastern Countries examined we receive contradictory results. The correlation between employment and productivity (measured as real value added per person employed) mostly shows positive values even for growth rates in the majority of the countries in the period between 1995 and 2015. At the same time, panel regressions explaining the growth in employment with productivity dynamics and other control variables reveal a negative relationship between the two key indicators in the case of OLS estimations and the positive effect of productivity on employment can only be confirmed by using the GMM estimation method.

Keywords: Innovation, productivity, employment, patent statistics, emerging European economies.