## Comparative development analysis of Serbia and European countries using multivariate statistical methods

ALEKSANDRA MARCIKIC (*University of Novi Sad, Faculty of Economics, Serbia, amarcikic@eccf.su.ac.yu)*
BORIS RADOVANOV *(University of Novi Sad, Faculty of Economics, Serbia, radovanovb@eccf.su.ac.yu)*

In this paper the actual position of Serbia is presented by detailed quantitative analysis of employment, together with the level of gross domestic product and investments that are the major factors affecting economic development. The comprehensive study on a current situation in the state is followed by comparative analysis of development factors in surrounding countries, which are still not members of the European Union. Separate analysis is done to compare trends in Serbia with development in neighbor countries that recently joined the European Union (Hungary, Romania and Bulgaria). Moreover, indices of Serbia's level of development are compared to the European Union average in order to imply the real position of the country.
Furthermore, index of development, for Serbia and European countries, is calculated using statistical methods of multivariate analysis. Factor analysis is used to create the index of development, as an integral indicator, that represents influences of ten variables: gross domestic product per capita, labor productivity, unemployment rate, average monthly wage, length of motorways, research and development expenditure per capita, number of students, number of patent applications, level of internet access by households and enterprises.
Finally, countries are ranged by the index of development and the position of Serbia is compared with other European countries.

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