DOI: https://doi.org/10.26397/RCE206705327

A benchmarking analysis of the economic development in Romania and Czech Republic

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Abstract: A higher economic development is a goal of every country which is interested in assuring a higher living standard to its citizens. Nevertheless the reality reveals big differences between countries even inside the same economic community. Our research starts from such a problem which finds Romania one of the less developed countries in European Union. Aiming at a benchmarking analysis between Romania and Czech Republic we found that the economic development could be related to public policies that should be oriented towards a better spending of money on economic and social purposes.

Keywords: benchmarking analysis, economic development, GDP per capita, living standard, risk of poverty, government expenditure

JEL Code: H51, H52, I38, O11

1. Introduction

A higher level of economic development is one of the most important goals of every nation. Countries are mainly interested in economic growth in order to assure a high prosperity of its population. Thus the economic development is a combination of these two indicators, which are in a mutual relationship. We cannot talk about economic development if the economy grows but the living standard remains the same or decreases. In the same time, a government cannot increase the living standard without a proper economic growth. Our research starts from the above consideration aiming at identifying the success factors that could lead to economic development.

A short analysis of the Romania's economic development shows that in spite of a higher economic growth in the last years, which was the highest from the European Union (EU) members in 2017 compared with 2016 in current prices, the GDP per capita is considerably smaller than the mean of EU countries and other quite new entrants in EU. The analysis of the living standards reveals the same gap, which has to be explained in order to find solutions for a better convergence. The objective of the economic convergence is also one of the most important goals of the EU [12].

Starting from this research problem we tried to find answers to the following research questions: (1) which is the Romania's position against one of the most developed economy in the Central and Eastern European Countries? (2) which are some of the best success factors that could contribute to a better economic development of Romania?

In order to find answers to these questions we conducted a research based on secondary data provided by EUROSTAT in order to make a benchmarking analysis between Romania and Czech Republic concerning to some key indicators that could be considered relevant for economic development. The results show quite big differences between the two countries both regarding the factors that determine economic growth and living standards. In this respect, Romania can learn from the experience of the Czech Republic, one of the most developed economies from the former communist countries, in order to improve its future economic development.

2. Literature review

The issue concerning the economic development is largely debated in literature. It is almost unanimously agreed that economic development is more than economic growth [6, 9, 16, 21]. In this respect the increasing in GDP or GDP per capita should be accompanied by an increasing in living standards of people and inequalities' reducing [21]. In literature it is underlined that high rates of economic growth have been recorded in the last decades but the differences between developed and developing economies still exist [16]. Nevertheless a report of United Nations mentions that significant progresses have been made in reaching the eight Millennium Development Goals. For example, in 2015 the percentage of people living on less than $1.25 per day dropped to 14% from 47% in 1990 [20]. Such results have been obtained through efforts meant to sustain economic growth and poverty decreasing but further efforts are necessary.

The economic development is connection with a large amount of variables that can lead to different evolutions even in the same region of the world. Among these variables, saving and investing are considered strong determinants of economic growth as they contribute to the capital accumulation [6]. An important role is played by governments, which can invest in major projects that can to significant benefits both for economy and society [9]. Investments in education and health, foreign investments, international trade are also considered determinants of economic development [11, 18]. The international investments could be stimulated by a proper development of financial markets by listing companies on local stock exchanges systems [15]. The natural resources (e.g. land and underground resources), human capital and investments in increasing and development of workforce could contribute to the economic development [2].

At the level of European Union (EU) there are also various projects aiming at stimulating economic development, especially for members with developing economies. One of these projects addresses the convergence objectives meant to reduce the gap between the member states [8, 12]. Sectoral development of every economy could be analysed in order to find solutions to the convergence problem and the service sector is gain a higher importance in economic development [4, 7]. Inside this sector, the traditional trade and e-commerce are the most important drivers of progress [14, 17]. On another hand, the living standards could be enhanced by public investments, such in education and health [17] or private investments inside projects of Corporate Social Responsibility [5].

As a conclusion, the economic development should be analysed on two levels: (1) the economic growth on one hand and (2) the living standard on another hand. These two components cannot be considered in to a relation of cause-effect but merely as determinants of economic development.

3. Methods

This research is meant to identify some of the success factors that could lead to the economic development and to make a benchmarking analysis in two of the EU members. Benchmarking is a technique used by companies in order to compare key processes with other organisations. The aim of such analyses is to improve the company's performance by learning from other experience [10]. Benchmarking help companies to identify their weaknesses and to find solutions to remove these ones [1]. New tendencies in using benchmarking show its applicability for various sectors, not only for business, including the public sector [13].

Having in mind the applied characteristic of benchmarking, which consists in comparing an entity (public or private) with another one (usually the best in class) we considered useful to compare the Romania's economic development with the Csech Republic's one. We chose this country because it has had in the last years the highest GDP per capita in PPS from the former communist countries that are now EU members [4]. The research starts from a comparison between the evolutions of the indicators regarding to GDP per capita (in EURO and PPS) recorded in the named countries and the mean values recorded in EU-28 and Euro area-19. This analysis is meant to map the relative positions of the analysed countries both one from another and inside the EU as regards the GDP per capita, one of the most important indicators of economic development. Further some other indicators have been compared at the level of the analysed countries: people with risk of poverty; people unable to face unexpected expenses; labour productivity and general government expenditure by some functions.

Secondary data provided by EUROSTAT [23] has been used in this research. Data has been computed for the period 2007-2018 in order to reveal the evolution in time of the named indicators. For certain indicators data are not available for the year 2007 or 2017. For this reason, the computed charts contain only available data so that the mentioned years could be absent from analysis.

4. Results and discussions

The GDP per capita increased in the European Union during the last decade, with a certain decreasing after the crisis period, in 2009. Starting with 2010 this indicator has increased both in EU-28, Euro area, Romania and Czech Republic but with different rates. The average of GDP per capita at the EU level recovered the decreasing in 2011 as far as this process has taken a longer time in Czech Republic and Romania (see Fig. 1). Looking at the absolute values in Euro of the GDP per capita, Romania is far behind the average of EU members. Czech Republic has also recorded values that are almost double than the Romanian ones in the last 4 years after a certain reducing of the gap between the two economies after the year 2013.

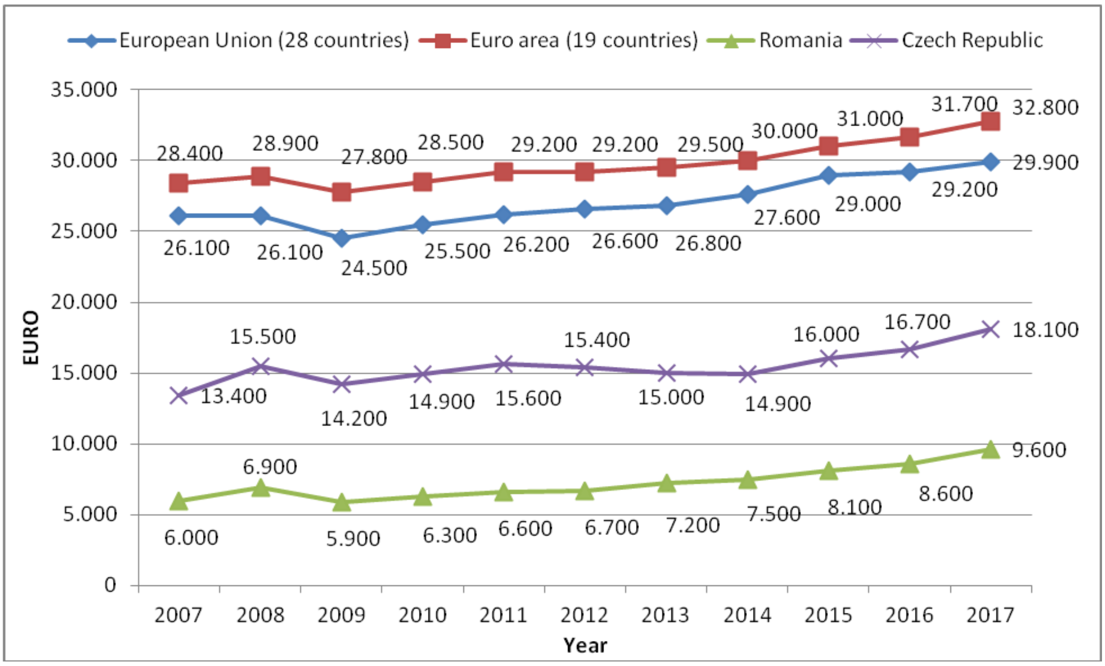

Fig. 1. The evolution of GDP per capita in EU between 2007 and 2017 (EURO)
(Data source: http://ec.europa.eu/eurostat/data/database)

A better analysis of the GDP per capita should take into consideration the Purchasing Power Standard (PPS), which is a common currency that eliminates the differences in price levels between countries and is calculated by Eurostat in relation to the European Union (EU28) average set to equal 100 [19].

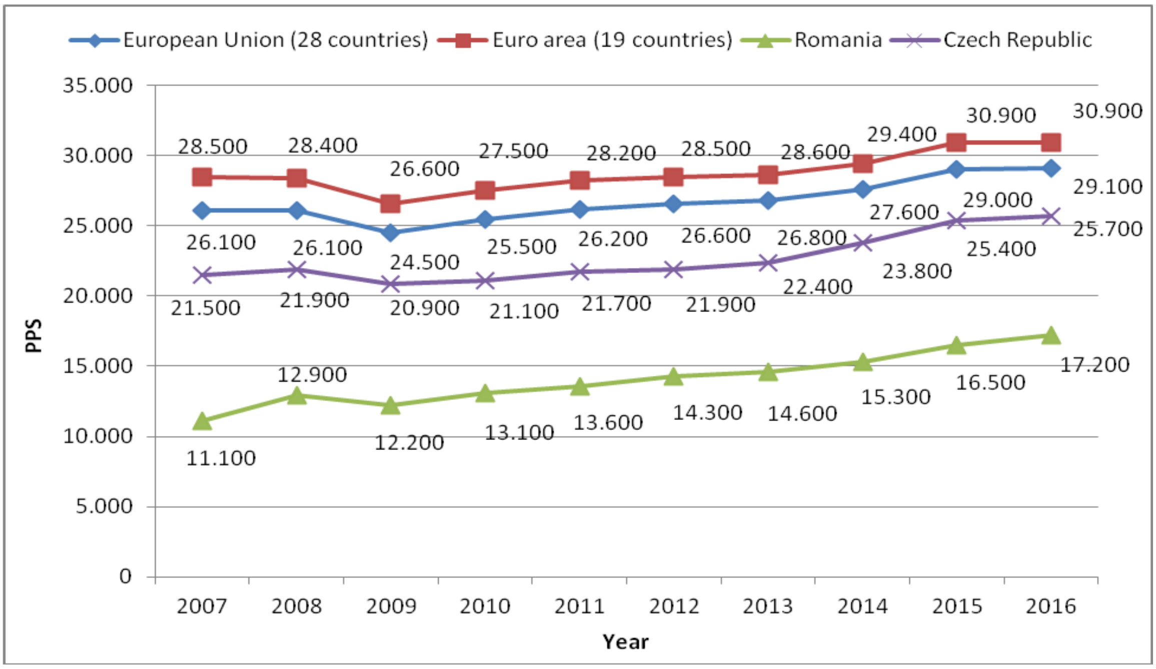

Fig. 2. The evolution of GDP per capita in EU between 2007 and 2016 (PPS)
(Data source: http://ec.europa.eu/eurostat/data/database)

As we can see in Fig. 2, the gap between the values of GDP per capita in PPS recorded in Romania and the other benchmarks is smaller, but as far as the Czech Republic has a better convergence with the EU average, the gap which has to be recovered by Romania is still very huge.

Looking at the evolution of GDP per capita we can notice a significant progress in economic development both for Romania and Czech Republic but the indicators regarding living standard should be also analysed [21]. In this respect, the people risk of poverty at the level of EU, Romania and Czech Republic has been computed in Fig. 3. The people with risk of poverty have equivalent incomes lower than the 60% of the national median income after social transfer [22].

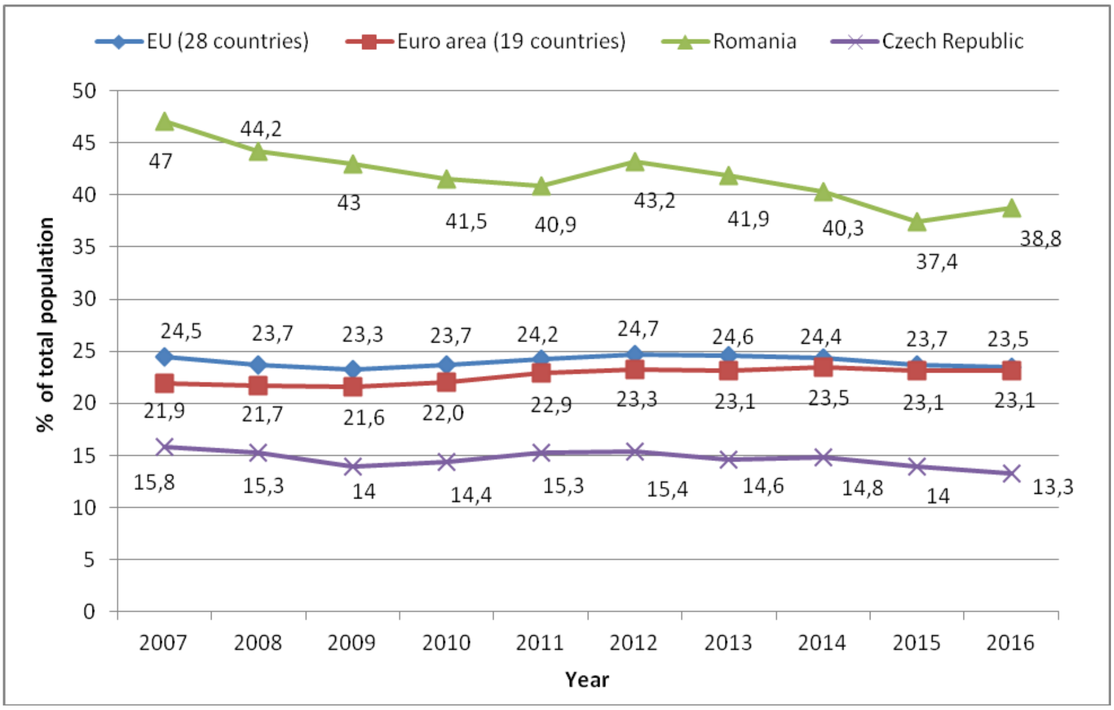

Fig. 3. The evolution of people with risk of poverty in EU between 2007 and 2016 (%)
(Data source: http://ec.europa.eu/eurostat/data/database)

As regards this indicator the position of Czech Republic is considerably better than the Romanian one. This risk is significantly smaller in Czech Republic than the EU average and almost 3 times smaller than in Romania, in spite of the progresses recorded by this country in the last years.

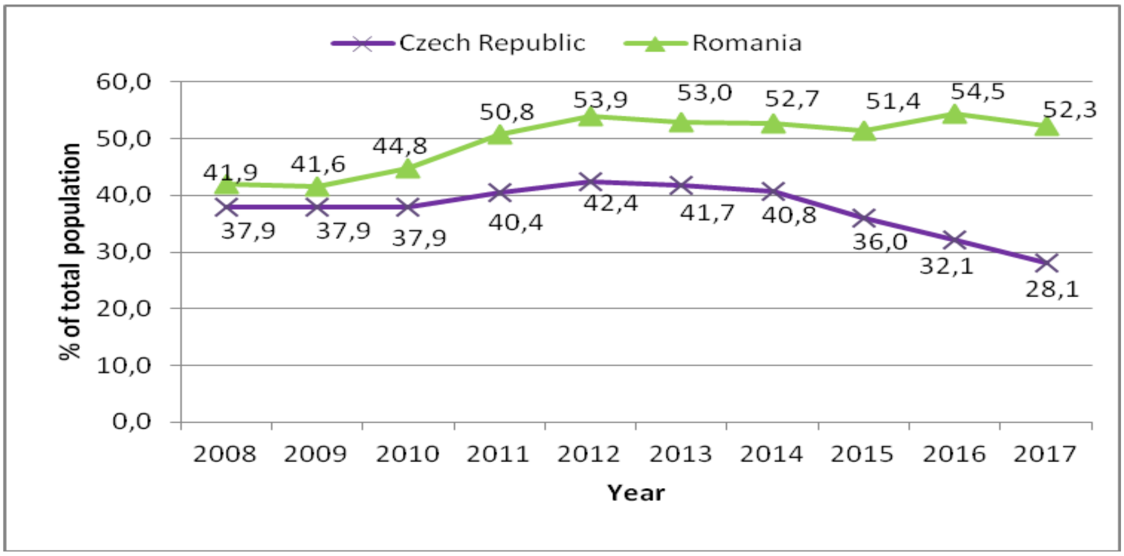

Fig. 4. Percentage of people with inability to face unexpected financial expenses (%)
(Data source: http://ec.europa.eu/eurostat/data/database)

Another indicator regarding the population living standard could be the percentage of people with inability to face unexpected financial expenses. Looking at the evolution of this indicator in the last decade in Czech Republic and Romania we can see a divergent evolution (see Fig. 4). In spite of an evident increasing of GDP and GDP per capita in Romania, the population with inability to face unexpected financial expenses has increased during the last years. It has exceeded 50% of the total population since 2010 whereas the same percentage decreased in Czech Republic from 40.8% in 2014 to 28.1% in 2017.

As the differences between the economic development of analysed countries is evident, certain indicators that could lead to such differences have been analysed: the labour productivity, the government expenditures and the foreign trade balance. All these indicators reveal a better position of Czech Republic in comparisson with Romania.

The ratio of the countries' labour productivity to the average of EU-28 is presented in Fig. 5. We can notice a stationary evolution in the case of Czech Republic whith values of around 73%. In the same period of time, Romania recorded levels of productivity at a half from the EU average with a slight increasing in the last years. The poor productivity can explain the low level of incomes in Romania and the high level of poverty risk.

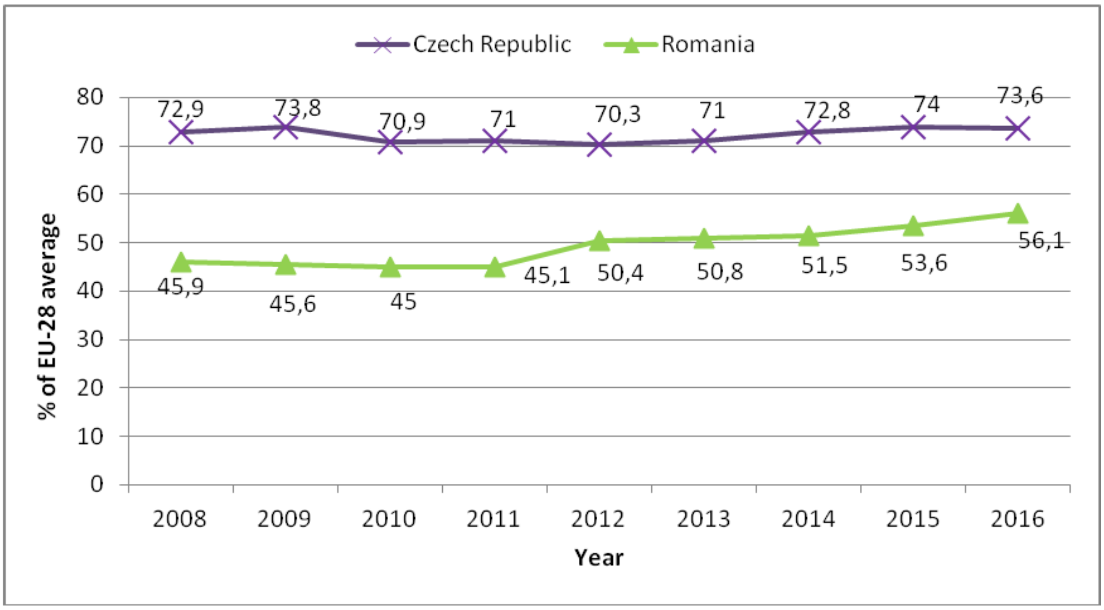

Fig. 5. Labour productivity per person employed and hour worked (EU28=100)
(Data source: http://ec.europa.eu/eurostat/data/database)

Another factor that can stimulate the economic development both from the perspective of economic growth and population's living standard is the way in which the public funds are spent by government. In this respect we analysed the share in GDP of government exependiture for health, social protection, education and economic affaires in the cases of Csech Republic and Romania (see Fig. 6). The expenditures for health and social protection can contribute the a higer living standard while the investments in education and economic affairs can lead to a future economic growth. The benchmarking between the two countries aims at explaining the existing differences between their economic development. We started from the hypotheses that the better orientation of government expenditures towards economic and social projects the better economic development could be obtained. In this respect, the investments in education could be considered a long term asset of the economy, while health and social protection are considered incentives of a better living standard.

Looking at the named variables (Fig. 6) we can see that Romania has a worse position than Czech Republic. The percentage of government expenditures for health is almost two times higher in Czech Republic than in Romania and the percentage of expenditures for social protection is also higher. These results reveal a better involvement of Czech government in solving the population's problems and in assuring a high level of health and medical assistance. These efforts are also sustained by a quite good allocation of budgetary resources for education in spite of a certain decreasing of their share in GDP over the last two years of the analysed period. In Romania, the evolution of government expenditures for education has been very fluctuant with significant decreases as percentage in GDP. Nevertheless a small increasing was recorded in 2016, which reveal a differrent trend than the one recorded in Czech Republic.

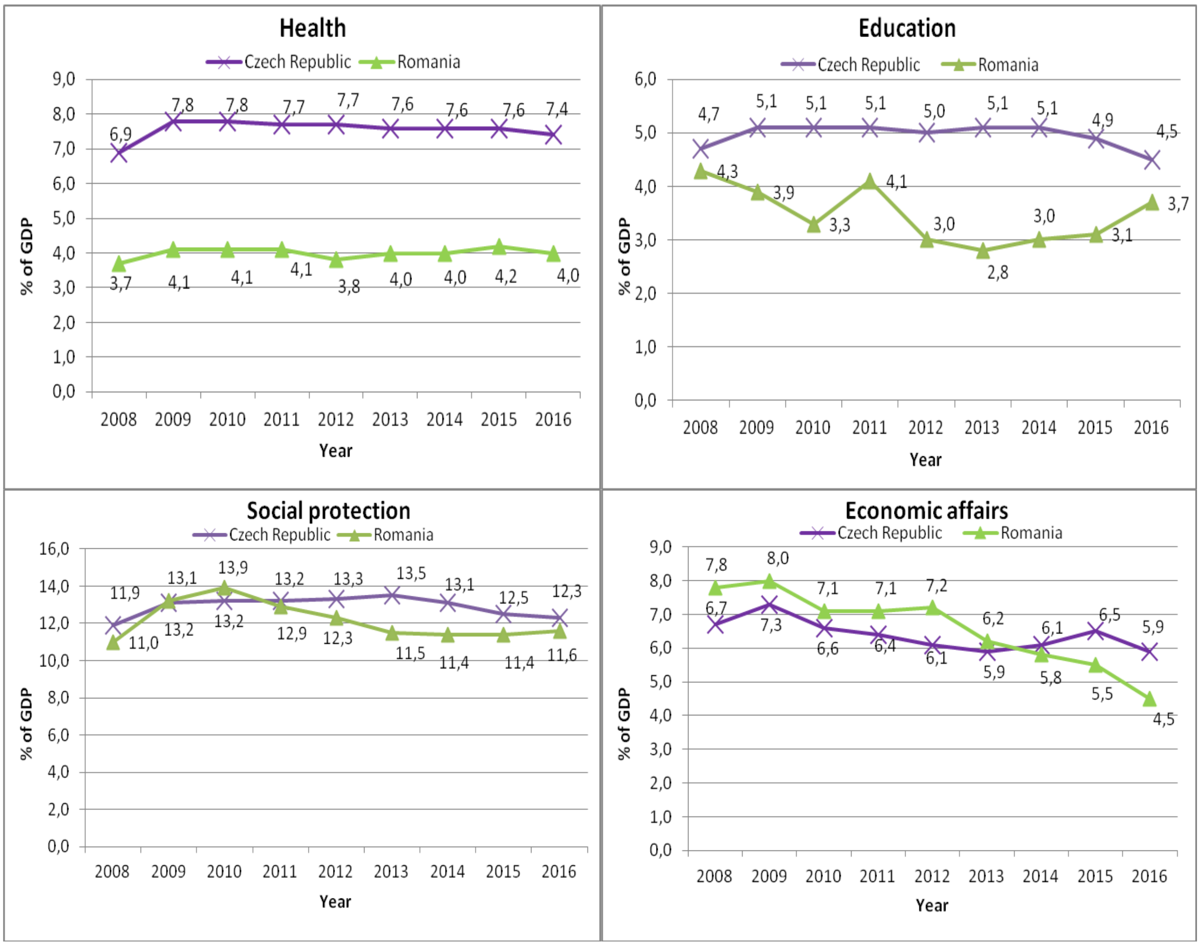

Fig. 6. General government expenditure by some functions
(Data source: http://ec.europa.eu/eurostat/data/database)

The government involvement in economic affairs shows also a divergent evolution of the analysed countries. While the share of these expenditures has decreased constantly in Romania since 2009, after the economic crisis, in Czech Republic the decreasing was very small and the evolution during the time is rather stationery. We can notice that the percentage in GDP of the government's expenditures in economic affairs has been higher in the Czech Republic than in Romania since 2014, which can be considered a determinant factor of economic development (both regarding to economic growth and increasing the living standard). Looking at the evolution of this indicator, a warning signal should be drawn for Romania which has dropped the share of government involvement in economic affairs to almost a half from the value recorded in 2009. The poor level of public investments could not stimulate the economic growth and the population welfare could suffer from this lack of development.

5. Conclusions

Having in mind the economic and social indicators that have been analysed in our research we can notice a bad position of Romania in terms of economic development among the EU members. The evolution of GDP per capita during the last decade has had an ascendent trend but the gap between Romania and EU's average remains almost the same. The nominal values in Euro show that the mean of GDP per capita in EU-28 is almost 3 times higher than in Romania. In spite of a better convergence when we take into consideration the Purchasing Power Parity, the differences still remain high. Such differences also exists in comparison with the benchmarking partner, Czech Republic which faced with similar economic conditions during the communist period before 1990s.

Following the aim of our research we tried to find answers to two research questions. The answers for every question are presented below.

(1) which is the Romania's position against one of the most developed economy in the Central and Eastern European Countries?

After the benchmarking analysis of some economic and social indicators (GDP per capita, people with risk of poverty and with inability to face unexpected expenses) we have found a worse position of Romania both in terms of economic growth and populations' living standard. GDP per capita in PPS is higher in Czech Republic than in Romania with 49.4% and the percent of population with risk of poverty is significantly higher in Romania. We can notice that Czech Republic has even a better position regarding the risk of poverty than the average of EU-28 and Euro area. The Romania's position is worse, with 38.8% of population with risk of poverty in comparison with 13.3% in Czech Republic In the same time, the percentage of people with inability to face unexpected financial expenses has maintained above 50% since 2011 in Romania, while in Czech Republic this indicator has recorded a decreasing down to 28.1% in 2017. In conclusion, Romania is far behind Czech Republic in terms of economic development both from GDP per capita and living standard perspectives.

(2) which are some of the best success factors that could contribute to a better economic development of Romania?

Regarding the success factors we included in the benchmarking analysis the labour productivity and government expenditure for some economic and social purposes. The results reveal again a better position of Czech Republic, which has recorded more than 70% of the EU-28 average during the analysed period concerning the labour productivity. In the same period the productivity has increased in Romania from 45.9% in 2008 to 56.1% of EU-28 average in 2016 but the level is still a low one. On another hand, looking at government expenditures, Czech Republic invested more than Romania in economic affaires but also to assure a better social development (investments in health, education and social protection). One possible answer to the above question is that Romania should concentrate its efforts on these factors that are wellknown as incentives of long term economic development.

As a general conclusion, the results of our research can serve as a basis for future national policies meant to assure economic development of our country. Moreover the follow up of the evolution of the above indicators could validate the assumptions and could also have academic implications, serving for economic theory development.

Acknowledgements

The author would like to acknowledge that this paper has benefitted from documentation material and feedback from teachers and students during the Erasmus+ teaching mobility at Faculty of Economics and administration, University of Pardubice, Czech Republik, 16-20 April 2018.

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