ASPECTS REGARDING ROMANIA`S PROGRESS TOWARDS SUSTAINABLE DEVELOPMENT

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Abstract

Romania records significant gaps compared to other EU countries regarding the indicators of sustainable development so that the main objective of the National Strategy for Sustainable Development in 2008, that is reaching the European average level of these indicators in 2020, is a big challenge that it seems to be impossible. The article empirically analyzes the progress made by Romania in the field of sustainable development, based on key indicators of sustainable development formulated and computed by Eurostat. While Romania has to make a lot of catching up to most European countries in terms of economic and social aspects, regarding environmental aspects, the indicators reflect some better performance than the European average, but in the context of less intense economic activities in Romania than in most EU countries.

Keywords: sustainable development, Romania, sustainable development indicators, Eurostat

JEL Classification: 114, 124, 132, J10, O10

1. Introduction

Sustainable development is one of the major problems facing society nowadays, encompassing a variety of economic, social and environmental issues and requiring significant efforts from both public and private sectors. The essence of sustainable development is to ensure increased wealth and improving the quality of people's lives, regardless of time and space they live, thus putting emphasis on inter-generational and intra-generational equity and. Sustainable development is therefore a global problem, so that the stimulus must also be coordinated globally, which requires international cooperation and collaboration of relevant stakeholders.

Sustainable development strategies involve different measures depending on the degree of development of states, so that in developed countries where the standard of living is high, the focus should be on replacing polluting economic growth, with a clean and sustainable one. On the other hand, emerging countries, that are seeking economic development and rising living standards, have the advantage of being able to gradually implement clean and efficient technologies in order to ensure sustainable growth in the future. Underdeveloped countries, which are facing serious problems of poverty and poor quality of life, being trapped in a vicious circle of poverty, foreign aid are expected to promote fairness and equality described by the principles of sustainable development.

In Romania, sustainable development has become a clear goal formulated in the late 1990s, when the first national strategy for sustainable development was drafted (Government of Romania, 2008), and the latest variant of this strategy, adopted in 2008, is based on the European Union Strategy for Sustainable Development, which has as main objectives the protection of the environment (by eliminating the negative impact of economic activity), promoting economic prosperity and a high standard of living, social equity and cohesion, and accomplishing European Union's international duties on sustainable development (European Commission, 2002).

As an emerging country, Romania records significant gaps regarding the three pillars of sustainable development, compared to the developed countries in the European Union, and the differences are often significant compared to other European developing countries. In this context, the National Strategy for Sustainable Development target for 2020 is to reach the EU average in terms of the main indicators of sustainable development (Government of Romania, 2008).

The paper is divided into three sections which empirically analyze developments regarding economic, social and environmental sustainability in Romania, highlighting some comparisons with other European developed or developing countries. The empirical analysis of Romania's progresstowards sustainable development was based on key indicators of sustainable development formulated and computed by Eurostat. Given the complexity of sustainable development and therefore the multitude of indicators that can be used to estimate the relevant issues, the European Commission has developed a set of core indicators that attempt to capture developments in terms of achieving the objectives of the Sustainable Development Strategy of the European Union.

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2. Economic aspects

Romania as a whole has made progress in terms of economic development in recent years, but a thorough analysis and comparison with EU countries reveals, as mentioned before, significant gaps. Although in recent years Romania recorded relatively high growth rates compared to other European countries, it still has many structural problems that seem likely to jeopardize long-term sustainable development. Lack of capital and using of borrowed capital determined a relatively slow investment process, which is reflected in reduced productivity of resources and low levels of added value. Between 1994 - 2014, most companies have replaced equity financing by debt financing, which has led to significant indebtedness, and this is not sustainable (Neagu et al., 2016).

Between 2005 - 2014, real GDP per capita has fluctuated between 5,200 euros and 7,000 euros, with an upward trend in almost every year except the years of crisis 2009 and 2010, when it recorded a slight reduction. GDP per capita in Romania is far below the values recorded by the developed countries of the European Union, or some developing European countries, such as Poland or the Czech Republic. At EU level, the only country to perform worse than Romania in this respect is Bulgaria (Figure 1).

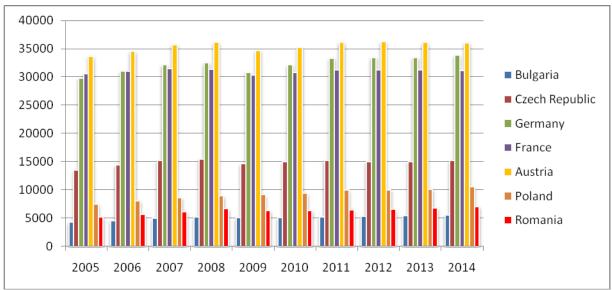


Figure 1 – Real GDP/capital in Romania and other European countries

Thus, Romania has much to catch up with the other EU countries in terms of economic development. The low level of production means lower income and cause a vicious circle, as the quality of human life cannot increase in the absence of investment in efficient and clean production technologies, so that the environment is the least affected by economic activities.

Given the fact that the transition to a market economy and the slow and difficult process of privatization of the state owned companies have hindered the development of production technologies, one of the main causes of reduced production consists of low resource efficiency. Thus, Romania has big gaps in terms of resource productivity compared to other EU countries, except Bulgaria, whose productivity is slightly lower (Figure 2).

Between 2005 and 2014, Romania recorded values of resource productivity around 0.3 euro/kilogram of used resources, while the developed countries have recorded productivities of 2 euro/kilogram of used resources (Germany), 2.5 euro/kilogram (France) or 3.8 euro/kilogram (Netherlands). The differences are significant not only compared to developed countries, but also to emerging countries of the European Union, such as Poland (0.5 - 0.6 euro/kg) or Czech Republic (0.7 - 1 euro/kilo of used resources) (Figure 2).

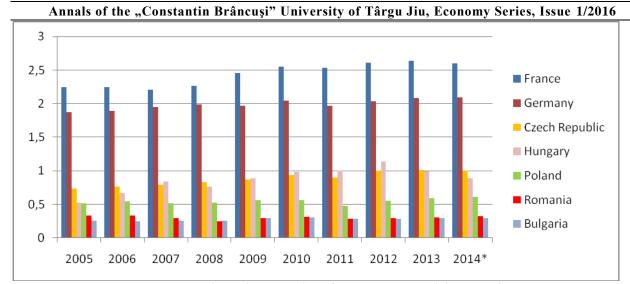


Figure 2 – Evolution of resource productivity (Euro/kg)

3. Social aspects

Social development encompasses issues such as social inclusion, demographic changes and public health. In Romania there are significant problems regarding poverty and social exclusion, given that in 2014, 40% of the population were exposed to these risks. The situation has improved compared to 2007, when the share of the population exposed to the risk of poverty and social exclusion was around 45%, but Romania is, along with Bulgaria, one of the EU countries with the most serious problems regarding poverty, as in developed countries of the EU the share of this disadvantaged category in the total population is less than 20% or oscillates around this level, while in other emerging countries (such as Hungary, Poland) the rate fluctuated between 25% and 30% in the period 2007 - 2014 (Figure 3).

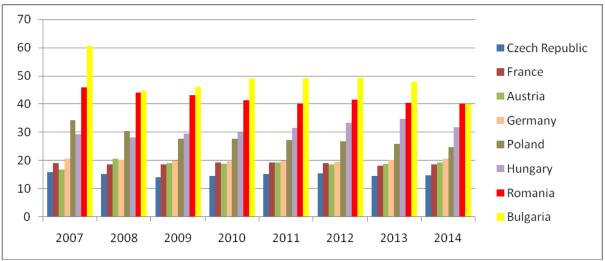


Figure 3 – People at risk of poverty and social exclusion (% of total population)

Poverty is strongly correlated to the poor performance of the education system in Romania. Incoherent policies in education and the lack of consistent funding led to demotivation of teachers, and all these have led to a deteriorating quality of teaching and learning, so that students are increasingly less prepared. Moreover, these problems combined with poverty have led, especially in rural areas, to alarming increase in dropouts. Thus, in 2014, the school dropout rate reached 18%, one of the largest in Europe, up from 17.3% in 2013. Perhaps the most important consequence of these

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^{*} Eurostat estimates

realities is that the future workforce will not have the necessary qualifications for jobs that bring added value to the economy, which will affect Romania's ability to achieve sustainable development.

Regarding demographic change, the indicator used by Eurostat is the employment rate of people aged over 55, which was lower in Romania than the EU average, in the period 2005 - 2014. Thus, the employment rate of the population aged between 55 and 64 years has fluctuated between 39.4% and 43% in Romania, while the European average was between 42% and 52%. In this respect, Romania recorded a weaker performance than Bulgaria, which in 2014 reached an employment rate of the population aged 50%, but slightly better than Poland and Hungary.

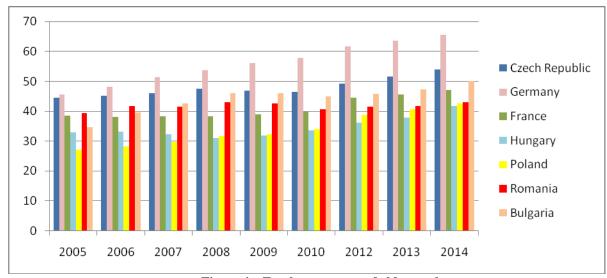


Figure 4 – Employment rate of older workers

In Romania, the average life expectancy for both male and female population is lower than in developed countries, and also it is below the EU average, and below the levels recorded in emerging countries like Poland or Czech Republic. However, the average life expectancy, both for male and female population, has registered an upward trend between 2005 - 2013 (Figures 5 and 6).

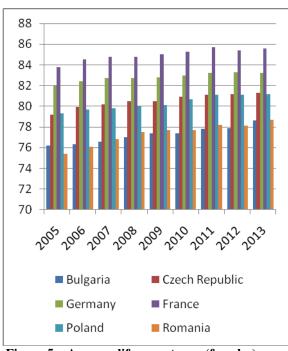


Figure 5 – Average life expectancy (females)

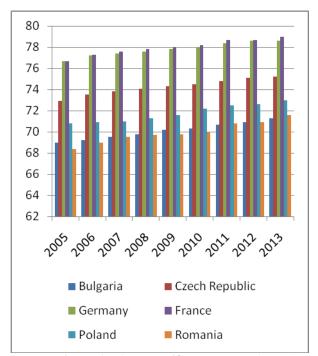


Figure 6 – Average life expectancy (males)

The health system records significant deficiencies, so that Romania reports one of the highest rates of mortality due to chronic diseases in the European Union. In this context, data on the number of years of healthy life reveal, both for men and women, lower values compared to most European countries (Figures 7 and 8).

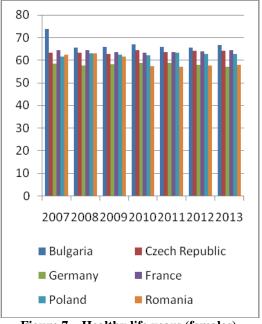


Figure 7 – Healthy life years (females)

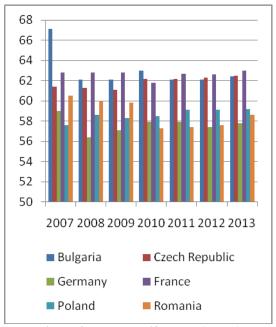


Figure 8 - Healthy life years (males)

4. Ecological aspects

Regarding the environmental aspects, positive developments were recorded, and the indicators analyzed show that in this regard Romania has recorded above average performance, even surpassing some developed countries. However, it is required to be mentioned some extremely important nuances of these apparent performance.

Emissions of greenhouse gas emissions fell by more than 50% from 1990 to 2013 so that Romania recorded the best performance in the European Union in this regard, while the European average of this indicator recorded a reduction of approximately 20% in the same period. In 2013, the index of greenhouse gas emissions in Romania stood at almost 44%, while Germany, Poland and Bulgaria have recorded larger values of this index, 77.5%, 83.5% and 51.18%, respectively (Figure 9).

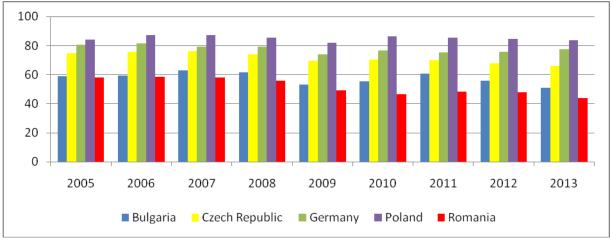


Figure 9 – Greenhouse gas emissions (indexed to 1990)

While this is a positive aspect, it should be noted that the reduction of greenhouse gase emissions was slightly due to the implementation of clean technologies, but rather to the massive decrease of industrial activity, while the inefficient management of the privatization process after 1990 determined the closing of several production facilities, and poor management of state owned companies has led to significant reduction of production (Moldovan, 2015). Romania's situation is therefore different from the ones of developed countries, which pay great attention to environmental protection, given that in Romania the authorities do not act with promptitude in order to reduce pollution or other actions harmful to the environment, such as deforestation or inefficient waste collection.

Given the fact that the volume of production activities is lower in Romania than in other developed or emerging countries, primary energy consumption is also lower. Thus, during 2005 and 2014, energy consumption in Romania was 8-10 times lower than in developing countries such as France or Germany, and about three times lower than in Poland (Figure 10).

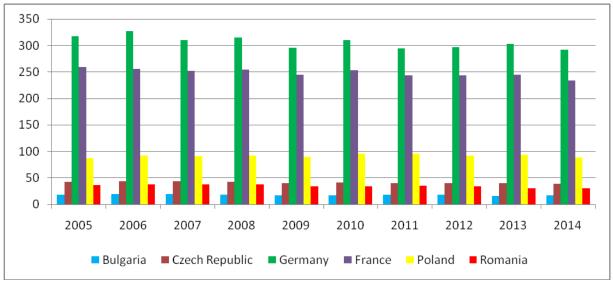


Figure 10 – Primary energy consumption (Million tonnes of oil equivalent)

However, a positive aspect is related to the share of renewable energy consumption in total energy consumption, which in Romania is above the European average, and also above the values recorded by some developed countries, such as Germany or France. The consumption share of renewable energy in total energy consumption in Romania has grown from 17% in 2004 to almost 25% in 2014, exceeding developed countries such as Germany and France, whose share of renewable energy consumption in total energy consumption stands around 14%. However, it must be noted that energy consumption in these countries is much higher than in Romania, even ten times higher, in some years. At the European level, Iceland, Norway and Sweden recorded the best performance in this respect, with shares of 77%, 69% and 52% recorded in 2014 (Figure 11).

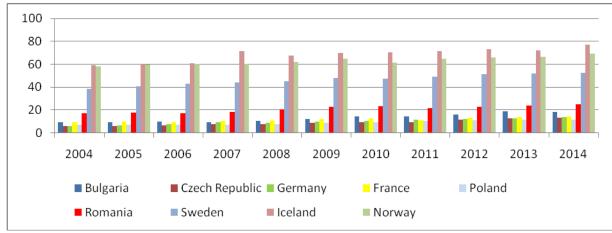


Figure 11 - Share of renewable energy consumption in total energy consumption

Regarding the energy consumption of transport, Romania has recorded low oscillations of the index that expresses its evolution compared to 2000, which means that Romania has made no progress in this regard, and the main cause for this is the poor quality of road infrastructure. In recent years, development of road infrastructure has been hampered by a number of factors such as inefficiency of public management and corruption. For example, in 2013, the energy consumption of transport index was 96.7%, which means that it decreased by only 3.3% compared to 2000, while in the European Union, energy consumption of transport decreased over the same period by 13%. In developed countries like Germany or France, the index ranged 81% and 85% respectively, while Poland has exceeded consumption since 2000, registering an index of 103.4% in 2013 (Figure 12).

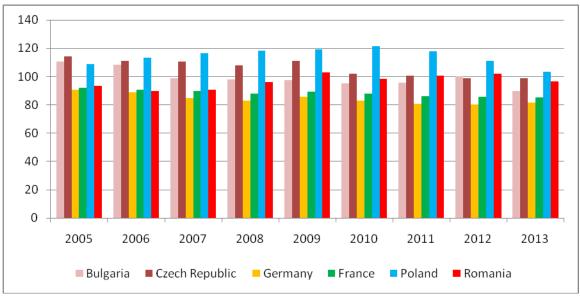


Figure 12 – Energy consumption of transport relative to GDP (Index 2000=100)

5. Conclusions

The difficult process of transition to a market economy, coupled with poor management of economic policy and external economic influences, has inhibited in recent decades Romania's way to sustainable development, so that it has to make great strides in this regard.

According to the National Strategy for Sustainable Development (2008) Romania has aimed to reach the European average in terms of the main sustainable development indicators by 2020. Given the fact that Romania's situation is, in some respects, dramatic, as it records significant gaps compared to the European average, this target seems to be impossible to achieve in the time remaining.

A key issue about of Romania's sustainable development relates to the awareness of its importance, which is closely related to several factors, among which the most important are education and culture, two components strongly influenced by poverty. In Romania, 40% of the population is at risk of poverty or social exclusion, and in this context, especially in rural areas, dropout has reached alarming levels. In such circumstances it is difficult for people to be interested in and understand the importance of sustainable development. Moreover, poor training and qualification of the population will be reflected in a reduced capacity to bring high added value in economic processes, in the future.

Sustainable growth requires increasing resource productivity based on technological innovations, but in Romania the R&D sector is underfunded and underdeveloped. Under these circumstances, it was found that the contribution of companies in the high-tech and medium high tech sectors to gross value added in the economy was lower in 2014 than in 1994 (Neagu et al., 2016). Thus, the need for investments in the R&D sector is evident, in order for Romania to be able to produce innovations designed to increase resource productivity and produce high added value. At the same time, some structural and fiscal adjustments are needed in order to allow the development of the economy by increasing the number of start-ups (Neagu et al., 2016).

Given that sustainable development contributes to raising living standards and improving the quality of people's life, it is imperative for the authorities to work towards achieving progress on the three pillars of sustainable development, economic, social and environmental, by implementing coherent long-term policies.

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