

## **Financial, Public and Regional Economics**

### **Comparative Study on the Competitiveness of Romanian and Bulgarian Tourism Industry**

**Adina Berbeniciuc-Mititiuc<sup>1</sup>**

**Abstract:** Tourism is one of the most important sectors of the global economy, given its contribution as the main generator of jobs and sustainable development path for developing countries. Many experts consider this sector as one of the sectors with the greatest potential to deliver internationally development and economic growth. Thus, tourism can be an important driver of economic growth and prosperity, especially in emerging economies, and a key element in reducing poverty and regional disparities. Despite its potential contribution to economic growth, development of the tourism sector may be hampered by a number of economic and legal barriers that can affect its competitiveness. In this context, the World Economic Forum proposes, through the Tourism Competitiveness Index (TCI), in addition to a methodology for identifying key factors that contribute to increasing the competitiveness of tourism, also tools for analysis and evaluation of these factors. Thus, this study<sup>2</sup> aims at analyzing the determinants underlying TCI in terms of two directly competing states, Romania and Bulgaria, to highlight the positive effects through the benefits of the analyzed markets, in terms of competitiveness in tourism sector. The purpose of this analysis is to provide some answers, especially from the perspective of the necessity of strategies that should be adopted on market competitiveness in the two countries and the exposure of the factors that could explain the different performance of the two national economies in the tourism sector.

**Keywords:** tourism; competitiveness; tourism competitiveness index

**JEL Classification:** L83

#### **Introduction**

Tourism is an industry that benefits from highly optimistic predictions for the future; its importance becomes increasingly larger at the global, regional, national and local levels.

---

<sup>1</sup> PhD Student, "Al. I. Cuza" University of Iasi, Doctoral School of Economics and Business Administration, Department of Research of the Center for European Studies, Address: 11 Carol I Blvd, Iasi 700506, Romania, Tel.:+40 (232) 201000, Corresponding author: adina\_mititiuc@yahoo.com.

<sup>2</sup> Part of a study that will be developed in author's doctoral thesis, coordinated by Professor Gabriela Carmen Pascariu, PhD.

Another aspect to be highlighted concerns that tourism, as a phenomenon, as well as activity, is unique in its own way just by that dependency which manifests the environment, social and cultural aspects and of their values. Because of this dependency, tourism has an undeniable interest in ensuring their sustainability.

Tourism and travel industry represents a sector with its own identity found in a dynamic evolution. At a country level, the upward trend in the sector contribute to increasing employment, increase national income and improve the balance of payments.

The activity of the touristic sector is measured by different indicators and national economies are ranked according to these within international rankings. Also, the travel industry is characterized by a number of specific issues, of which we selected those considered relevant.

### **1. Theoretical Perspectives on Tourism Competitiveness**

At the end of this century and millennium, travel and tourism industry is, worldwide, the most dynamic sector and, at the same time, the most important generator of jobs. From the economically point of view, the tourism also represents the main source of recovery of national economies of those countries with important tourism resources and it exploits them properly. Action occurs on many levels, from stimulating economic development to improve the social structure, from superior capitalization of resources to improve living conditions.

Analyzing the research in the field of tourism, indicate a growing interest to researchers, as it has been highlighted in several recent studies (Hazari & Sgro, 2004; Balaguer & Cantavella-Jorda, 2002; Lanza et al., 2000; Dritsakis, 2004; Durbarry, 2004; Eugenio-Martin, Morales, & Scarpa, 2004; Maloney & Rojas, 2005; Eugenio-Martin, Martin-Morales & Sinclair, 2008; Croes & Vanegas, 2008; Sequeira & Nunes, 2008), and numerous empirical studies on current development indicates that tourism will play an increasingly important direction for future research.

Competitiveness has been identified in the literature in the field of tourism as a key to the success of tourism destinations (Kozak & Rimmington, 1999; Crouch & Ritchie, 1999; Mihalic, 2002; Buhalis, 2000; Dwyer & Kim, 2003; Gooroochurn & Sugiyarto, 2005; Mazanec, Wöber & Zins, 2007), competitive development of tourism products indicating a direct effect - in the sphere of production and distribution of tourism services - and indirectly through the multiplier effect on related industries.

Tourism competitiveness has become a central topic of interest, and in the last ten years, there were three prominent magazines have dedicated obvious importance of

this topic, namely “Tourism” (1999), “Tourism Management” (2000), and “Tourism Economy” (2005), and also a series of indicators of competitiveness. These indices include The Global Competitiveness Report of the World Economic Forum (WEF), The World Competitiveness Report prepared by the International Institute for Management Development (IMD) and the World Travel and Tourism Council Competitiveness Report.

Competitiveness was defined as the ratio of reference with which is measured success (Porter, 1990; Dollar & Wolff, 1993; Krugman, 1996), but, however, currently the definition focuses mainly on key elements such as technology and innovation (Fagenberg, 1996; Lall, 2001; Wignaraja, 2004).

The studies seem to suggest that the destinations which enjoy a greater number of tourist arrivals and expenditures, or enjoyed a larger market share in relation to the world market than the others, are considered to be competitive (Hassan, 2000; Sahli, 2006; Craigwell, 2007). Some researchers link the term competitiveness by improving the quality of the citizens life and sustainable development of destinations (Crouch & Ritchie, 1999; 2006; Dwyer et al., 2004), a similar position being found in the definition of Hong (2008) “...the competitive position (with high profits and constant growth) of the tourism industry of a nation relative to the global market of tourist industries in other nations, whether developed or developing countries, which therefore increases the real income and standard of living of its citizens.”

## **2. Tourism Competitiveness Index - Meaning and Calculation Methodology**

Tourism competitiveness analysis is based on a series of eight indicators, such as price competitiveness index, Human Tourism index, infrastructure, environment index, the technology index, human resources index, index of openness, social index, whose value on a scale from 0-100 shows the performance of each country compared to other countries. A value of 0 represents the lowest index value and the highest value is 100. Data sources for these indicators are represented mainly by development indicators developed by the World Bank, ONU and the WTTC (World Travel and Tourism Council) reports.

Global analysis of competitiveness in tourism involves comparing values in terms of the eight indices of all countries analyzed. The competitiveness index is obtained by taking a simple average of the values of the eight indexes, after the previous one, it has given the same degree of importance to each of them.

International Economic Forum introduced Tourism and Travel Competitiveness Index (TTCI) in order to measure the factors and policies that make attractive travel and tourism sector in different countries. TTCI is based on three categories

of variables that facilitate or drive travel and tourism industry's competitiveness by: subindex framework, business environment and infrastructure subindex, human, cultural and natural resources subindex, Subindex framework encompasses political issues and in general elements controlled by central authorities. It is divided into five pillars: legislation, sustainable development, safety and security, health and hygiene, prioritization of travel and tourism. Each pillar is composed by several variables. Government legislation reveals the influence of attractiveness in the development sector, either for or against its development.

The sustainable development of the environment measures the stringent of environmental legislation in each country. It includes variables such as the rate of carbon dioxide emissions, the percentage of endangered species. Safety and security take into account the degree of crime and violence, as well as terrorism and the car accidents. Pillar "health and hygiene" is essential for the competitiveness of tourism and travel. Variable components of this pillar are: access to drinking water, the number of doctors per capita, number of beds in the hotel. Government may channel funds needed for the essential development projects clarifying that the tourism and travel sector is a primary concern and reflecting this in budgetary priorities.

Given parts of TCI, it is noted that at least most of them cannot be measured directly by means of standardized statistical indicators, the elements is determined on the basis of surveys conducted among specialists, either among customers . So TCI is largely the result of perceptions formed concerning the tourism performance of a region or country, and these perceptions are influenced by the messages conveyed through communication. In this context, TCI not only shows tourism competitiveness in the strict sense, but also the effects that communication processes, techniques of message transmission have had on specific tourism activities.

The analysis of the TCI structure shows that while countries with advanced economies are more efficient in terms of the legal, business and human resources, they are clearly lagging behind the emerging countries in terms of price competitiveness. So, one of the safest ways to enhance the competitiveness of international tourism market consists of obtaining better price-value ratio than the competition. Moreover, favorable price-value ratio must be signaled on the market through communication and promotion strategies that ensures clues and signals to a wider and diverse audience.

So, comparing the competitiveness level of tourism of the two analyzed countries, it is observed that in the classification made using TCI, Romania is in 2011, on 63 place of the 139 countries, evolving from the previous classification, produced in 2010, when the rank was 66. Romania has achieved the best score on safety and security pillar, 5.1 out of 7 possible points; this score is slightly higher than the first

place finisher<sup>1</sup>. In the context of European tourism, Romania ranks 34th out of 42 positions, one of its direct competitors, Bulgaria, is seven places above in 27th place.

Between 2009-2011, Romania managed to climb three places in the ranking of TCI, which may, among other things, evidence of increased effectiveness of communication in tourism. In terms of its direct competitors, neighboring or in the same region countries, we can see that Romania occupies a very bad position, and is clearly surpassed both its western neighbor, Hungary, as well as its direct competitor on all tourist markets, Bulgaria. The result is particularly interesting as it can be noted that some of the countries ahead of Romania (Czech Republic, Hungary, Poland, Slovakia) can't benefit, for example, the opportunities offered by a coastline that can be exploited for tourists.

Romania and Bulgaria has a relatively good picture regarding the legal due, especially, to their position as members of the European Union. According to WEF, Romania is above Bulgaria on the top six specific chapters for the pillar of laws and specific rules, being surpassed only of two of the nine chapters. It is noted that Romania was able to get a better picture than its direct competitor to what is the legal affairs, and is, apparently, a more attractive destination for foreign direct investment, including in the tourism sector.

On the other hand, the opacity of government decisions and transaction costs required to start a business, affects the image of Romania. The image that a country manages to create on its legislative framework in business is reflected in the yearbook published by the World Bank, "Doing Business" reached the 2011 edition. According to this paper, Romania is ranked 56th (down by two places from 2010), while Bulgaria is situated five positions above, on 51 place (similar to the previous year).<sup>2</sup> From the legal point of view, Bulgaria also notes the speed with which a business can be started, there are four procedures that have to be accomplished and average number of days required to meet the legal requirements for starting a business is 18 days.<sup>3</sup>

Research in the area of tourism focused more and more on issues regarding sustainable development, and the concept of sustainable tourism became current vocabulary research. In this context, "sustainable tourism develops the idea of serving the needs of present tourists and the tourism industry and at the same time protecting the environment and opportunities for the future." It aims to meet all the needs of economic, social, aesthetic, etc. of the "actors" of tourism while maintaining cultural and environmental integrity, biological diversity and all systems that support life.

---

<sup>1</sup>The Travel and Tourism Competitiveness Report 2011. *World Economic Forum*, 2010, p. 318.

<sup>2</sup> Doing Business in 2011, p. 12.

<sup>3</sup> Doing Business in 2011, p. 152.

Although there is a quasi-general view that the natural environment through attractive tourism locations that provide is the essential element in tourism development, it becomes increasingly clear that policies and environmental sustainability factors are crucial for improving the way in which a country can be assured that it will continue to be an attractive destination in the future. So through the pillar on environmental sustainability should be assessed rigorous government regulations on environment in each country, and the extent to which they are actually implemented and respected.

According to the WEF report, Romania managed to create a better image than Bulgaria under pillar “environmental sustainability” getting better scores on five of the seven indicators calculated by the WEF in this chapter. It seems that Romania has managed to ensure greater sustainability of tourism development and at the same time, benefit from better environmental conditions, which are more strictly protected than in Bulgaria. At the same time, Romania has to recover from Bulgaria in terms of protecting endangered species and involvement in international treaties on the environment.

In Romania, the strategies proposed and promoted through various communication campaigns want to place sustainable tourism through following fundamental principles:

- environment itself, has an intrinsic and irreproducible value that is very important for tourism activities. This value should not be altered because it should benefit future generations;
- sustainable development of tourism requires a balance between the demands of tourists and specific destination;
- tourism activities should benefit not only for tourists and the local community, but also the environment.

Communion tourism - environment must be maintained on two axes so that, once, touristic activity must be sustained by long-term opportunities in the environment and tourism, in turn, must not cause environmental degradation; tourism development sector must be carried out in accordance with the specific environmental, social, cultural and economic planning that takes place.

Among the methods for analyzing the competitiveness of the tourism industry, we chose the competitiveness index calculation, analysis at NUTS II regions, calculating descriptive statistics and using Box-Plot charts to highlight the differences in competitiveness between Romania and Bulgaria.

**Table 1**

Country	Price competitiveness Index	Inx on Human Tourism	Infrastructu re Index	Enviro nment index	Techno logy index	Human resources Index	Opennes s Index	Social Index	Competit iveness environm ent Index*
Bulgaria	58,46	80,04	64,05	67,86	69,23	71,60	76,42	60,89	68,57
Romania	66,28	24,61	42,77	71,22	58,8	63,01	72,79	71,79	58,91

Source: World Travel and Tourism Council (WTTC), 2011.

**Note:** \* Average index was calculated by the arithmetic average of indices for which data are available.

The competitiveness index represent the average of all index values assuming that all of them have the same importance.

According to it, Romania in tourism competitiveness is exceeded by Bulgaria (68.57%), but is more competitive against its competitors in terms of price (as illustrated in hotel room prices, the taxation in tourism, power parity index purchase), openness to trade and tourism, the environment (carbon dioxide emissions are lower than in Bulgaria, but the population density is higher) and in the social sector.

Analysis was performed only on data provided by the World Travel and Tourism Council (WTTC) in the “Gazette of competitiveness”, which is actually an analytical framework that restores indicators of policy and the developments that have impact in travel and tourism industry, compare national statistics and government policies, indicate the effectiveness of national policies to attract foreign direct investment and tourists spending a competitive market, show the importance of strategic planning and the need for tourism to be included in government policies and decisions.

### 3. Descriptive Elements and BOX-PLOT: Romania vs. Bulgaria

In the present study, for the statistical analysis, we chose SPSS analysis of certain indicators that help me in setting preferences hierarchy of one of the two countries analyzed, namely, Romania or Bulgaria, by tourists. We considered regions in the whole country, called NUTS II.

**Table 2. Regions NUTS2 – Bulgaria (6 regions)**

Severozapaden	North-West
Severoiztochen	North Central
Yugozapaden	North-East
Severen_tsentralen	South-East
Yugoiztochen	South-West
Yuzhen_tsentralen	South Central

*Data source: EUROSTAT Database - Regional statistics by NUTS classification, 2011*

**Table 3. Regions NUTS2 – Romania (8 regions)**

Nord-Vest	North-West
Centru	Center
Nord-Est	North-East
Sud-Est	South-East
Sud-Muntenia	South-Muntenia
Bucuresti-Ilfov	Bucharest-Ilfov
Sud-Vest_Oltenia	South-West-Oltenia
Vest	West

*Data source: EUROSTAT Database - Regional statistics by NUTS classification, 2011*

**SPSS results** - Thus, we calculated descriptive statistics indicators, as mean, standard deviation, interquartile range, minimum value, maximum value, they clearly indicating preference for holidays in Bulgaria against Romania. The average number of arrivals of residents is higher in Romania than in Bulgaria, while the average number of arrivals of non-residents is higher in Bulgaria than in Romania. There is a greater regional variation in Bulgaria than in Romania for the number of arrivals of non-residents, number of beds, number of nights spent by non-residents.

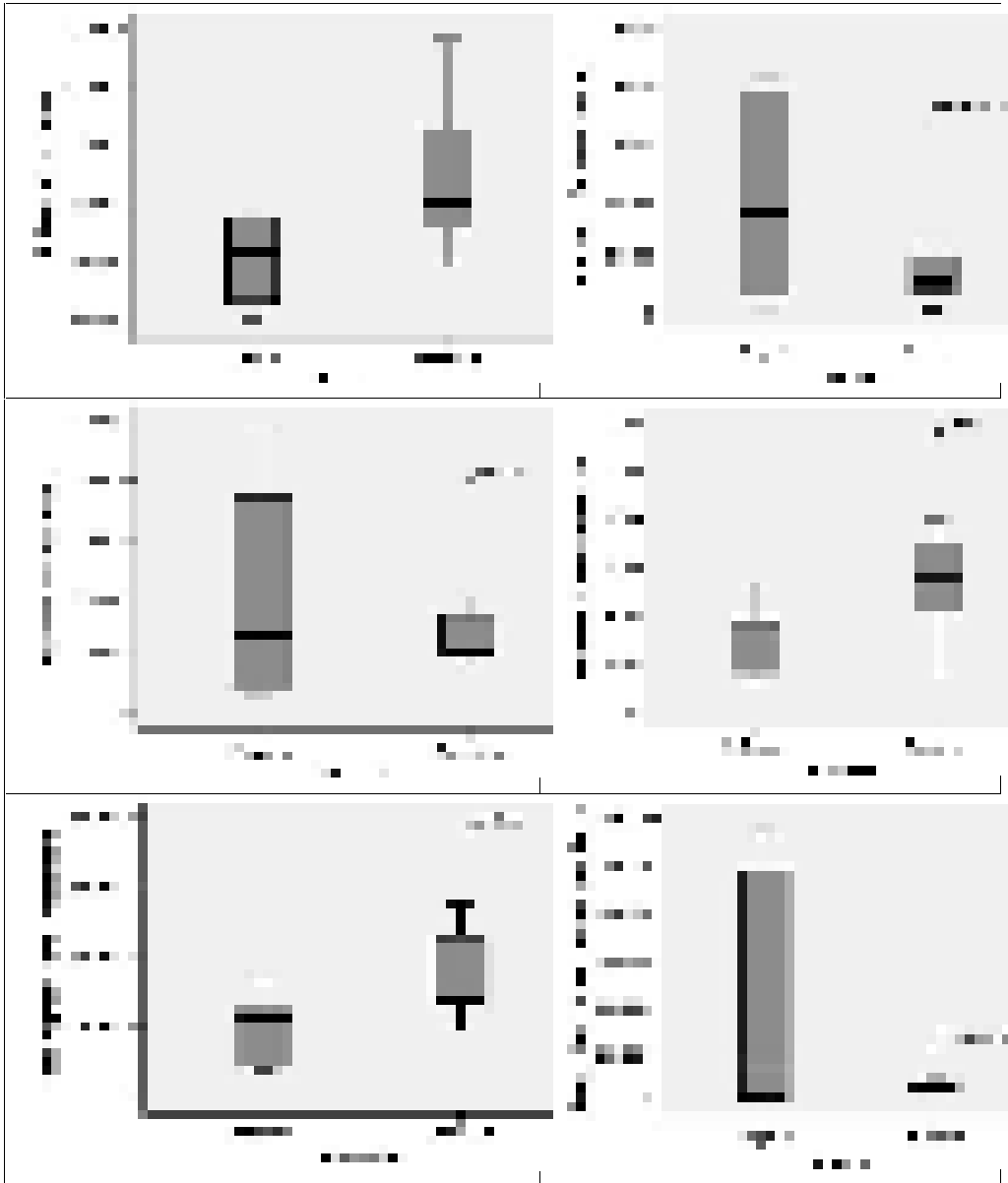


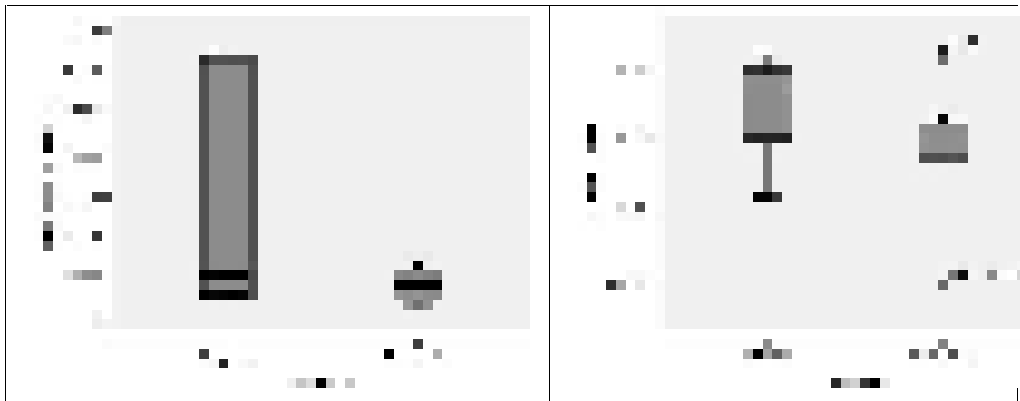
**Table 4. Descriptive elements**

		Mean	Median	Std. Deviation	Interquartile Range	Min.	Max.
<b>Arrivals of residents</b>	Bulgaria	421283.00	438934.50	151135.083	307359	214665	597416
	Romania	689363.38	606270.50	270317.827	434620	399309	1166422
<b>Arrivals of non-residents</b>	Bulgaria	401544.83	361029.00	372388.698	739830	23328	820090
	Romania	188222.13	111624.50	211328.954	151230	16614	679507
<b>Number of bed-places</b>	Bulgaria	40277.50	27325.50	37271.574	72183	6644	97109
	Romania	31074.00	21846.00	20929.146	16789	17021	79691
<b>Number of establishments</b>	Bulgaria	310.33	335.00	150.552	275	122	527
	Romania	576.50	542.00	302.196	367	139	1153
<b>Total nights spent by residents</b>	Bulgaria	1038223.00	1182578.00	517368.284	996697	379627	1686665
	Romania	1864069.63	1409461.00	939358.512	1143838	975935	3784474
<b>Total nights spent by non-residents</b>	Bulgaria	2071120.50	816380.50	2569491.185	5024298	52559	5735723
	Romania	379324.25	282941.00	342664.575	281613	39981	1153691
<b>Tourism intensity</b>	Bulgaria	2705.00	1089.00	2940.115	5830	479	6648
	Romania	856.63	823.00	369.619	689	420	1445
<b>Growth rate</b>	Bulgaria	14.9333	17.7500	7.47895	12.03	2.20	22.10
	Romania	8.8000	9.5500	9.09411	5.65	-10.50	21.80

*Data source: calculated in SPSS by author*

Next I showed through box plot diagram for the distribution of the number of arrivals of residents, at the regional level, in Bulgaria and Romania, in 2011 and box-plot diagram for distribution for number of arrivals of nonresidents, at regional level, in Bulgaria and Romania, in 2011, which is the country dominated by a larger number of foreign tourists, thereby establishing the hierarchy of preferences between the two countries.

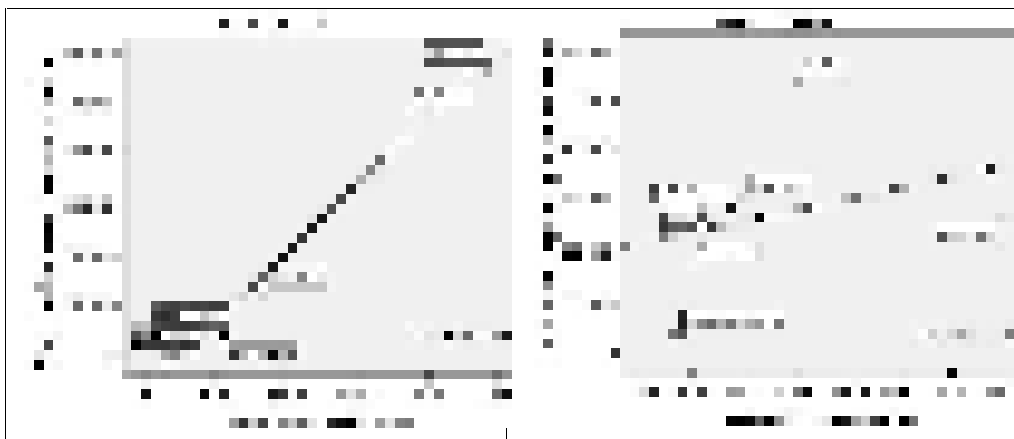


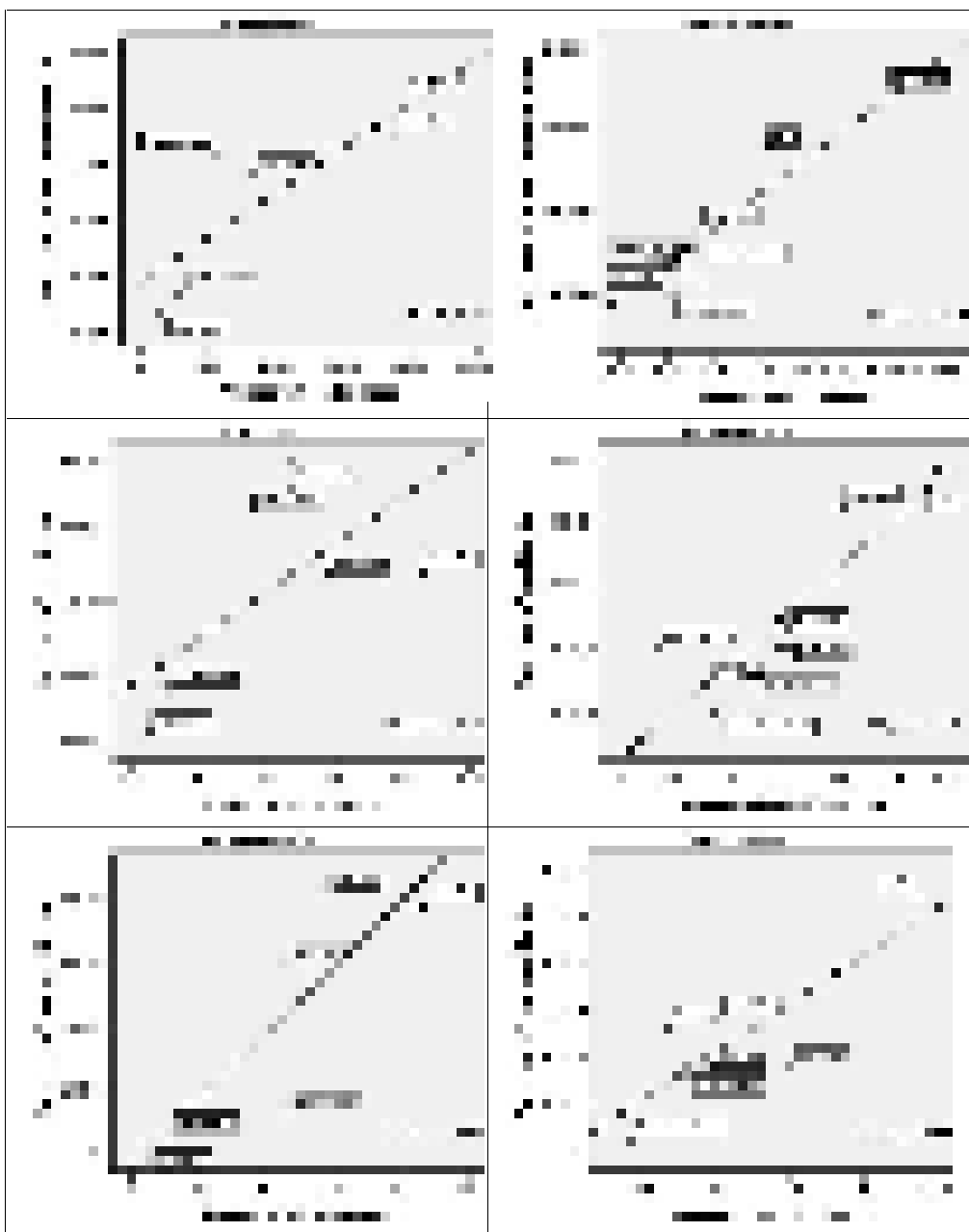


**Figure 1. Box-plot for Romania and Bulgaria**

*Source: Author's interpretation of Eurostat data in field*

Number of nights spent by residents and non-residents depends on the number of places of accommodation. Regions of South-East and North-East of Bulgaria are characterized by the highest values for these two indicators. In Romania, South-East region recorded the highest number of overnight stays by residents, while the Bucharest region recorded the highest number of nights spent by non-residents.





**Figure 2. Total nights spent by residents/non-residents and the arrivals of residents/non-residents of Bulgaria and Romania**

*Source: author's interpretation of Eurostat data in field.*

#### 4. Conclusions

The analysis performed in the study described above, although brief, is able to provide some answers to the reasons for the low competitiveness of Romania compared to Bulgaria. First, it notes that, while making serious efforts to improve the institutional environment to foster investment in tourism, Romania hadn't a strategy for reporting these opportunities very well put together. In this context, Romania could not effectively enjoy favorable the geographical position, natural and cultural resources and either of high quality human capital. Second, although tourism developments strategies take into account, at least in words, the fundamental principles of sustainable growth, these principles are not only implemented, but are not even sent to the target audience through methods and diverse communication techniques. For this reason, the Romanian public, both as a provider and as a beneficiary of tourism services is not educated in the spirit of environmental protection and sustainable development. Third, the economic crisis has given new impetus to Bulgaria which proved, once again, more determined to capitalize on the competitive advantages available in the international tourism market. In this context, Bulgaria, unlike Romania, is an example of good practice concerning the adoption of viable strategies and also effectively communication of strategies.

#### 5. Bibliography

- Balaguer, J. & Cantavella-Jorda, M. (2002). Tourism as a Long-run Economic Growth Factor: the Spanish Case. *Applied Economics*, 34 (7), 877-884.
- Blanke, J., Chiesa, Th. (eds.) (2011). The Travel and Tourism Competitiveness Report 2011. *World Economic Forum*.
- Buhalis, D. (2000). Marketing the Competitive Destinations of the Future. *Tourism Management*, 21(1), 97-116.
- Craigwell, R. (2007). Tourism Competitiveness in Small Island Developing States. *World Institute for Development Economics Research*, Research Paper No. 2007/19.
- Croes, R. & Vanegas, Sr.M. (2008). Co-integration and Causality between Tourism and Poverty Reduction. *Journal of Travel Research*, 47(1), 94-103.
- Crouch G.I. & Ritchie, J.R.B. (1999). Tourism, Competitiveness, and Societal Prosperity. *Journal of Business Research*, 44 (3), 137-152.
- Crouch, G.I. and Ritchie, J.R.B. (2006). Destination Competitiveness. In *International Handbook on the Economics of Tourism*, In Dwyer, L. and Forsyth, P. Northampton, MA: Edward Elgar Publishing.
- Dollar, D. & Wolff, E. N. (1993). *Competitiveness, Convergence, and International Specialization*. MIT Press, Cambridge, MA.
- Dritsakis, N. (2004). Tourism as a Long-run Economic Growth Factor: an Empirical Investigation for Greece Using Causality Analysis. *Tourism Economics*, 10 (3), 305-316.
- Durbary, R. (2004). Tourism and Economic Growth: the Case of Mauritius. *Tourism Economics*, 10 (4), 389-401.

- Dwyer, L. & Kim, C. (2003). Destination Competitiveness: Determinants and Indicators. *Current Issues in Tourism*, 6 (5), 369-414.
- Dwyer, L. & Forsyth, P. (1998). Estimating the Employment Impacts of Tourism to a Nation. *Tourism Recreation Research*, 23(2), 3-12.
- Eugenio-Martin, J.L., Martin-Morales, N. & Sinclair, M.T. (2008). The Role of Economic Development in Tourism Demand. *Tourism Economics*, 14 (4), 673-690.
- EUROSTAT Database, (2011). *Regional statistics by NUTS classification*.
- Fagerberg J. (1996). Technology and Competitiveness. *Oxford Review of Economic Policy*, 12 (3), 39-51.
- Gooroochurn, N. & Sugiyarto, G. (2005). Competitiveness Indicators in the Travel and Tourism Industry. *Tourism Economics*, 11 (1), 25-43.
- Hassan, S. (2000). Determinants of Market Competitiveness in an Environmentally Sustainable Tourism Industry. *Journal of Travel Research*, 38(3), 239-245.
- Hazari, B. and Sgro, M. (2004). *Tourism, Trade and National Welfare*. Elsevier: Amsterdam.
- Hawkins, D. and Mann, S. (2007). The World Bank's Role in Tourism Development. *Annals of Tourism Research*, 34(2), 348-363.
- Hong, W. (2008). *Competitiveness in the Tourism Sector*. Springer: Heidelberg, Germany.
- Kozak, M. & Rimmington, M. (1999). Measuring Tourist Destination Competitiveness: Conceptual Considerations and Empirical Findings. *International Journal of Hospitality Management*, 18 (3), 273-283.
- Lall, S. (2001). Competitiveness Indices and Developing Countries: An Economic Evaluation of the Global Competitiveness Report. *World Development*, 29 (9), 1501-1525.
- Lanza, A. and Pigliaru, F. (2000). Why are Tourism Countries Small and Fast Growing? In Fossati, A. and Panella, G. *Tourism and Sustainable Economic Development*. Dordrecht, the Neth.: Kluwer, 57-69.
- Maloney, W. & Montes Rojas, G. (2005). How Elastic are Sea, Sand and Sun? Dynamic Panel Estimates of the Demand for Tourism. *Applied Economics Letters*, 12 (5), 277-280.
- Mazanec, J. A., Wober, K. & Zins, A. H. (2007). Tourism Destination Competitiveness: From Definition to Explanation. *Journal of Travel Research*, 46 (1), 86-95.
- Mihalic, T. (2002). Tourism and Economic Development Issues. In Sharpley, R. and Telfer, D. (eds). *Tourism and Development, Concepts and Issues*. Clevedon: Channel View Publications.
- Porter, M.E. (1990). *The Competitive Advantage of Nations*. New York: Free Press.
- Sahli, M. (2006). Tourism Destination Specialization. *International Handbook on the Economics of Tourism*. Edited by Dwyer L. and Forsyth P. Edward Elgar Edition, pp. 434-463.
- United Nations World Tourism Organization (UNWTO). (2010). *World Tourism Barometer* (Madrid).
- Wignaraja, Lezama & Joiner (2004). *Small States in Transition, From Vulnerability to Competitiveness*. London: The Commonwealth Secretariat.
- World Bank. (2010). *World development indicators* (Washington DC), available at: <http://data.worldbank.org>.
- World Travel and Tourism Council (WTTC), (2011). *Economic Impact Data and Forecasts*, [http://www.wttc.org/eng/Tourism\\_Research/Tourism\\_Economic\\_Research/](http://www.wttc.org/eng/Tourism_Research/Tourism_Economic_Research/).

## **Economic Growth and European Funds Absorption in Central and Eastern European Countries**

**Mihaela Neculita<sup>1</sup>, Daniela Ancuta Sarpe<sup>2</sup>, Liliana Mihaela Moga<sup>3</sup>, Valentin Neculita<sup>4</sup>**

**Abstract:** Integration of Central and Eastern countries in European Union assumes obtaining certain benefits. Upon joining the European Union internal market and free movement of labour, absorption of European funds could help the convergence go on and reduce disparities between countries. This study aims to provide insights in regionalization, absorption of European funds and economic growth. There are various ways of defining the regional growth. The most common refer to the increase of the total output of a region, output increase per employed person, output increase per capita. In turn, the output can be assessed by the gross production of a region, the region's gross domestic product or net domestic product of that region. The paper proposes an integrated analysis of European situation by means of data and statistics provided by European and national statistics institutions. A better absorption of European funds can lead to growth and economic development and thus reduce regional economic disparities. One of the main objectives should be the absorption as much financial support as possible by continuous efforts from the Central and Eastern European Countries and also regional and local government involved in every stage of the process.

**Keywords:** economic growth; regional development; funds; integration; budget

**JEL Classification:** E61; F02; F15; P47

### **1. Introduction**

The United Nations Organization defined the term Central and Eastern Europe as a region composed of: Albania, Bosnia and Herzegovina, Bulgaria, Croatia, Czech Republic, Greece, Hungary, Poland, Romania, Serbia, Slovakia, Slovenia, Republic of Macedonia, and Ukraine. During the 90s, after the fall of the Berlin Wall and the democratization of Central and Eastern Europe countries, the enlargement has become a fundamental priority of the European Union. So far, six steps of

---

<sup>1</sup> Dunarea de Jos University of Galati, Romania, 47 Domneasca Str., 800008 Galati, Romania, Fax: +40 236 46.13.53, e-mail: neculitam@yahoo.fr.

<sup>2</sup> Dunarea de Jos University of Galati, Romania, 47 Domneasca Str., 800008 Galati, Romania, Fax: +40 236 46.13.53, e-mail: d\_sarpe2000@yahoo.fr.

<sup>3</sup> Dunarea de Jos University of Galati, Romania, 47 Domneasca Str., 800008 Galati, Romania, Fax: +40 236 46.13.53, Corresponding author: liliana.moga@gmail.com.

<sup>4</sup> Dunarea de Jos University of Galati, Romania, 47 Domneasca Str., 800008 Galati, Romania, Fax: +40 236 46.13.53, e-mail: vali\_neculita@yahoo.com.

extending the Community which initially consisted of six Member States (Belgium, Germany, France, Italy, Luxembourg, and Netherlands).

Currently, Croatia, the former Yugoslav Republic of Macedonia and Montenegro are candidate countries for EU membership. The European Council also offered all Western Balkan countries - Albania, Bosnia and Herzegovina, Serbia and Kosovo – the EU accession perspective in a more or less distant future.<sup>1</sup>

Among all the EU extensions, the eastward enlargement in 2004 was the most challenging in the history of European integration, both due to the number of member states that joined the European Union - EU increasing number of people around the 380 to 485 million, but also due to the gross national product (GNP) difference between the old and new EU members. A comparison of GDP per capita shows that the richest new member states did not exceed 40% of the EU-15, the differences being even larger if we relate to the wealthiest member states of the old union.

Considering the regional disparities (Constantin, 2010) in economic growth could be various ways of defining the regional growth. The most common definition of economic growth refers to the increase of the total output of a region, per employed person, and per capita. In turn, the output can be assessed by the total (gross) production of a region, the region's gross domestic product or net domestic product of that region. For example, a region may show, at the same time, a small increase of total output and a rapid increase in output per capita if the process of emigration from those particular region records significant levels during the period the study is conducted. (Timbergen, 1965)

According to the neoclassical model, which emphasizes the role of the supply, the regional economic growth leads to convergence in economic and social development of regions. On the other hand, in the vision based on the models of post-Keynesian approach of demand (model based on export potential, the cumulative causes model), the regional economic growth emphasizes the divergence.

Regional growth-related theories have evolved gradually, marked at the beginning by the opinion according to which regions had been regarded as non-spatial elements of the national economy, later on space was taken into consideration explicitly. In the first category the following models are included: the neoclassical model (based on the principles issued by Marshall), the model of cumulative causation, (Myrdal, 1957) the model based on export potential, (Aghion & Bolton, 1987, pp. 388-401) econometric models, (Czamanski, 1964, pp. 177-200; Klein &

---

<sup>1</sup> [http://ec.europa.eu/economy\\_finance/international/enlargement/index\\_ro.htm](http://ec.europa.eu/economy_finance/international/enlargement/index_ro.htm).

[http://europa.eu/legislation\\_summaries/enlargement/2004\\_and\\_2007\\_enlargement/index\\_ro.htm](http://europa.eu/legislation_summaries/enlargement/2004_and_2007_enlargement/index_ro.htm).



Goldberger, 1955; Harris & Todaro, 1970, pp. 126-146), input-output models (Leontief, 1966, pp. 223-257; Richardson, 1972)

As an alternative perspective to the traditional models, recognizing the spatial component importance can be seen in theories and models such as: the center peripheral model and that of the development corridors (Friedmann, 1966); spatial variants of the growth poles theory (Boudeville, 1966); analysis of the influence of congestion and the “hinterland” effects on the size and distance of urban areas (von Böventer, 1963, pp. 163-187); discussing the role of transport and polarizing forces in regional growth (Siebert, 1969); development axes theory (Pottier, 1963, pp. 63-95); analysis of the spatial diffusion of innovations. (Hägerstrand, 1967)

As a consequence of the comparative approach of the two major trends, a widely-discussed theory resulted, and it refers to the competitive or generative character of the regional growth. Competitive growth models imply that the possible rate of the national economic growth is to known and that it examines the forces that determine the way in which the given rate of the economic growth between regions of the system will be distributed. In these models the growth of a region will always take place at the expense of the other. Many of the traditional theories on regional growth (cumulative causality, neoclassical theory, etc.) belong to the category according to which regional growth is regarded as a competitive growth. The national growth rate is determined exogenously and regional economic analysis function is only to distribute this growth between regions. The need to include these spatial variable models is very low since every region is treated as if it were an economic sector.

According to the generative growth models, the regional dimension is much more emphasized. This type of models considers that the national economic growth rate is a result of the growth rates of the regions. In this view the entire increase is spatially oriented, i.e. the increase in any part of the national economy is based on a particular location. The growth performance of a region can be improved without inducing any adverse effects on the growth rates of neighboring regions. Thus the increase induced by the innovation process can be included in this context: congestion and spatial proximity of activities in certain cities or regions may induce innovation rates higher than the one that would be recorded in the absence of congestion. Similarly, changes that may occur in intra-regional distribution of production factors, facility, for instance, by an efficient intra-regional transport system, can also increase production efficiency and regional growth rates.

The importance of this spatial impact on regional growth is overlooked when dealing with models that are focusing on competitive growth. This particular phenomenon, in which intra-regional spatial efficiency of a region can have a feedback effect upon the rate of aggregate economic growth, is called generative growth. The competitive growth models think that if the production factors are

distributed efficiently across regions the economic growth rate should be maximum; the generative models reinforce the need for commitment to stimulate favorable conditions for economic growth within each region, rather than to divert the resources from other uses which are possibly even more productive, in other regions.

## **2. Methodology**

The use of models in economic fields is influenced by numerous conditions and factors. Only parts of these are registered in the statistic data. These models are influenced by a great variety of local, national and European decisions. In order to reach the objective of the present paper, numerous sources and materials have been appealed to, focusing on data regarding economic growth and European funds. All things considered, this paper aims to conduct and develop an objective analysis of the current state of regionalization, absorption of European funds and economic growth in Central and Eastern European Countries using data and statistics provided by European and national statistics institutions.

## **3. Economic Growth in Central and Eastern European Countries**

On the background of the current financial crisis started in 2007, have been analyzed the performances of European growth models applied in the Central and Eastern Europe, attempting to identify the causes and effects that led to an economic growth or, on the contrary, to a contraction.

Three types of growth models have been highlighted.

Model of a sturdy, sustainable (Poland) growth characterized by: large domestic market, which minimizes the economy dependence on exports and allows Polish companies to maintain the high level of local sales compared to those on foreign markets; a diversified economy; an youthful human capital that is based on young professionals who came back to Poland after finishing their studies abroad; an important number of “regional clusters”, which differentiates Poland from other Eastern-Central European countries that have economic and commercial centers in their capitals; the 1990 shock therapy helped the country to manage the economy.

The measures of macroeconomic stabilization and extensive liberalization (broadening the economic freedoms by removing the various limitations imposed by the State) have triggered major institutional reforms (both at legislation and enterprise levels) that climaxed with the growth of private companies and investors attracting – an element essential to supporting the sustainable economic growth

Model of moderate growth countries (Czech Republic, Slovakia, Slovenia, and Romania) characterized by: moderate rates of economic growth; slowdown in disinflationary process; maintaining the current account deficit at a high level in the context of a high volume of direct foreign investments; implementation of the inflation direct targeting strategy in the context of continuing the capital account liberalization; loosening up the revenues policy and advancing a pro-cyclical fiscal policy; a sustained decline in inflation rate is necessary for boosting the investment process as foundation for a sustainable economic growth.

Model of countries with an economic contraction (Bulgaria, Hungary, Baltic States)

Hungary was distinguished by a lack of diversity, its development model mainly emphasizing the exports. Being faced with a current account deficit Bulgaria became vulnerable in front of crisis while the Baltic countries passed from boom to a sudden drop. However, the countries of Central and Eastern Europe enjoy a competitive advantage over the other emerging markets, being located in a central area and benefitting both from structural and cohesion funds with a view to modernization, development and from attracting Western investors due to the human capital held. Thus, for the purpose of economic recovery, the East - European countries have to improve their models either by looking on the Polish model or by finding the variables that must be pursued depending on their economic profile.

**Table 1. EU10 Growth**

	<b>2010</b>	<b>2011</b>	<b>2012</b>
<b>EU 10</b>	2.1	3	2.1
<b>Bulgaria</b>	0.2	2	2
<b>Czech Republic</b>	2.2	2.1	1
<b>Estonia</b>	3.1	7.6	3.5
<b>Latvia</b>	-0.3	4	2.8
<b>Lithuania</b>	1.3	5.8	3.5
<b>Hungary</b>	1.2	1.7	0.5
<b>Poland</b>	3.8	4	2.9
<b>Romania</b>	-1.3	1.5	2
<b>Slovenia</b>	1.4	1.3	1.4
<b>Slovak Republic</b>	4	3	1.5

*Source: The World Bank Report 2012*

Regarding economic growth, with global prospects worsening and financial markets stalling, private demand has not been able to pick up the slack from public demand. As a result, with the exception of Estonia, Latvia, Lithuania and Poland, domestic demand remains weak. Furthermore, as domestic demand has failed to take off, unemployment persists at elevated levels. Only Estonia, Lithuania and Latvia have made some headway in reducing unemployment rates from the peaks

during the crisis, and even there they are still more than three times the pre-crisis levels.

There is an obvious connection between the cohesion policy and economic growth in the EU. Studies have shown that the GDP in EU-25 as a whole was 0.7% higher in 2009 due to the cohesion policy investments throughout 2000-2006. This is estimated to increase to 4% by 2020. In the EU-15 was estimated a cumulative net effect on GDP of 3.3% until 2020. The cohesion policy during 2000-2006 has led to a refund of € 2.1 for each invested euro. By 2020, the refund is estimated at € 4.2 per invested euro. Also, the cohesion policy contributed to the raise of employment.

#### 4. European Funds Absorption in Central and Eastern European Countries

In the period 2007-2013 EUR 209.1 billion, including national public contribution could be spent on the improvement of economic and social policy. The budgets have been set according to different considerations among Member States through their National Strategic Regional Framework Programmes.

Table 2. Population, GDP and available budget for 2007-2013

Intervention type	Bulgaria	Czech Republic	Hungary	Poland	Romania	Slovakia	Slovenia
Population (million)	7.4	10.5	10	38.2	21.4	5.4	2.1
Annual GDP(EUR)	38.8	154.7	95.5	363.6	119	67.5	36.2
GDP per capita(EUR)	5,225	14,684	9,564	9,518	5,555	12,410	17,644
Available budget (%)	4%	15%	14%	40%	11%	6%	2%

Source: EUROSTAT

Out of the total allocation, the beneficiaries in the 10 CEE have been committed EUR 139.9 billion, which is the two-thirds of the total available budget.

Regarding payments, by the end of 2011 more than 43% of the contracted grants 60.8 billion EUR were distributed to the beneficiaries. Between these countries, top performers are Estonia, Latvia, above average performers are Bulgaria, Lithuania, Czech Republic and below average performers are Slovakia, Slovenia, Hungary, Poland and Romania.

The problems in using the funds in general and the funds for infrastructural, environmental, e-administration and R&D may result from poor feasibility study development, limited knowledge's about how these funds may be used and poor project management skills and poor practice.

**Table 3. Contraction ratio for 2007-2011 based on the budget for 2007-2013**

Intervention type	Bulgaria	Czech Republic	Hungary	Poland	Romania	Slovakia	Slovenia	Total CEE progress
Environment	59%	25%	57%	67%	81%	67%	20%	61%
Transport	124%	94%	74%	59%	50%	50%	33%	67%
Healthcare	N/A	N/A	66%	84%	N/A	100%	N/A	81%
Human resource development	65%	79%	72%	72%	82%	86%	75%	76%
Energy	N/A	54%	58%	34%	14%	79%	34%	48%
Economic development	62%	74%	74%	70%	53%	53%	65%	70%
Public sector	59%	74%	44%	56%	46%	42%	N/A	55%
TA	59%	59%	79%	47%	24%	84%	97%	56%
Innovation R&D	N/A	82%	36%	68%	69%	62%	N/A	70%
Settlement	76%	79%	60%	66%	58%	77%	N/A	70%
Total progress	79%	72%	64%	63%	63%	64%	59%	67%

*Source: KPMG Report 2012*

During 2007-2013, 139.9 billion EUR worth of grants have been granted by the 10 Central and Eastern European Countries. This amount is 67% of the total available budget allocated for 2007-2013. The majority of grants, 102.24 billion EUR, 73% of total contracted grants, have been contracted by transport, human resources, economic development and environment related projects.<sup>1</sup> Regarding payment ratio, Bulgaria has 16%, Czech Republic 39%, Hungary 29%, Poland 28%, Romania 14%, Slovakia 28% and Slovenia 38%.

## 5. Conclusions

The Central and Eastern Europe integration in the EU should bring them significant benefits. Along with joining the EU internal market and free movement of labor the absorption of EU funds could help the process of convergence and

<sup>1</sup> KPMG Report 2012.

diminish the disparities between countries.

The EU integration needs to advance radical reforms in the economic and social areas, to extend the modern technology transfers through trade and direct foreign investment, to increase the workforce mobility, including the highly skilled, the administrative and institutional reform.

An efficient use of the structural funds is generally conditioned by the quality of governance and, in particular, by the public administration institutions. One of the reasons slowing down the disparities decrease and convergence achievement is the inefficient use of structural funds by the beneficiary countries, through using untrained staff within the directly involved public institutions, EU funding in areas with low economic impact, using inadequate government policies.

The regional integration has the purpose to enhance the income in the region, which may be achieved through getting higher economic results by using the production factors more efficiently, increasing their mobility and benefiting from the access to a comprehensive knowledge base. This income increase leads to higher savings and a larger productivity of marginal capital, which further induces the capital increase.

All the countries in the Central and Eastern Europe which joined and will join the EU had and will have to take reform measures having the objective of: adaptation towards the accomplishment of intended purpose - establishing a leadership based on law, a market economy, participation in the European integration process and the actual contribution to these objectives. With a view to reaching these objectives, each country should have taken regulations and compensatory measures for reducing the economic and social problems caused by the process of transformation.

The impression that a market economy development and foreign capital attraction can be achieved by simply promulgating certain law packages has always been false. The reality proved otherwise. The actual risk today is that while the legislation provides the necessary essential conditions, in practice its enforcement may not work satisfactorily.

## 6. Bibliography

Aghion, P., & Bolton, P. (1987). Contracts as a barrier to entry. *The American Economic Review*, Vol. 77, no. 3, 388-401.

Boudeville, J. (1966). *Problems of Regional Economic Planning*. Edinburgh: University Press.

Constantin, D.-L. (2010). *Economie Regională. Teorii, modele, politici/Regional Economics. Theories, models, policies*. Bucharest: ASE.

- Czamanski, S. (1964). A model of urban growth. *Papers of the Regional Science Association* 13, 177-200.
- Friedmann, J. (1966). *Regional Development Policy*. Boston: MIT Press.
- Hägerstrand, T. (1967). *Innovation diffusion as a spatial process. Translation and postscript by Allan Pred*. Chicago: University of Chicago Press.
- Harris, J., & Todaro, M. (1970). Migration, unemployment and development: a two-sector analysis. *The American Economic Review* 60, 126-146.
- Klein, L. R., & Goldberger, A. (1955). *An Econometric Model of the United States, 1920 - 1952*. Amsterdam: North-Holland Publishing Co.
- Leontief, W. W. (1966). *Input-Output Economics*. New York: Oxford University Press.
- Myrdal, G. (1957). *Economic Theory and Under-developed Regions*. London: Methuen & Co Ltd.
- Pottier, P. (1963). Axes de communication et développement économique/Axis of economic communication and development. *Revue économique/Economic Review, Vol. 14, No. 1*, 63-95.
- Richardson, H. W. (1972). *Input-Output and Regional Economics*. New York: Halsted Press.
- Siebert, H. (1969). *Regional Economic Growth: Theory and Policy*. Scranton, Pennsylvania: International Textbook Company.
- Timbergen, J. (1965). *International Economic Integration*. Amsterdam: Elsevier Publishing.
- von Böventer, E. (1963). Towards a united theory of spatial economic structure. *Regional Science Association; Papers, X, Zürich Congress, 1962*, 163-187.
- KPMG Report 2012.

**Online Sources**

[www.ec.europa.eu](http://www.ec.europa.eu)

[http://ec.europa.eu/economy\\_finance/international/enlargement/index\\_ro.htm](http://ec.europa.eu/economy_finance/international/enlargement/index_ro.htm).

[http://europa.eu/legislation\\_summaries/enlargement/2004\\_and\\_2007\\_enlargement/index\\_ro.htm](http://europa.eu/legislation_summaries/enlargement/2004_and_2007_enlargement/index_ro.htm).

## Estimated Impact of the Regional Operational Programme 2007-2013 in Romania

Daniela Antonescu<sup>1</sup>

**Abstract:** The evaluation process is a basic element of modern public sector management practice. If this process is well conducted, it can contribute to improved public interventions, increased transparency, accountability and cost-effectiveness. In the European Union, old Member States have a relatively long record of conducting evaluations and acting on their results, especially regarding Structural Funds. For Romania and other new Member States, this process is being introduced increasingly, in particular, after integration. The study analyses the estimated impact of Regional Operational Programme 2007-2013 in Romania.

**Keywords:** regional policy; impact evaluation; public intervention; regions NUTS 2; Operational Regional Programme

**JEL Classification:** R11; R12; F02

### 1. Introduction

Evaluation of public programmes and policies is a long-standing activity within the European Union, but also at world level many countries resorting to this control form for public funds spending.

Within the EU, after 1996, evaluation turns into the key-element at the basis of improving management culture, being compulsory for all programmes financed by Structural Funds, irrespective of the reference field (regional, environment, transport, etc.) and their implementation moment (ex-ante, interim and ex-post).

According to the European Commission, evaluation is regarded as a process of “*judging the value of public intervention based on explicit criteria and standards* (for instance, relevance, efficiency, sustainability, equity, etc.)”<sup>2</sup>. Evaluation contributes to the achievement of responsible governance through the feedback

---

<sup>1</sup> PhD, Institute of National Economy – Romanian Academy, Romania, Address: 6 Piața Romana Bucharest 010374, Romania, Tel.: +40213191900, Corresponding author: daniela.antonescu25@gmail.com.

<sup>2</sup> European Commission –DG Regio webpage:

[http://ec.europa.eu/regional\\_policy/sources/docgener/evaluation/evalsed/index\\_en.htm](http://ec.europa.eu/regional_policy/sources/docgener/evaluation/evalsed/index_en.htm).



provided about efficiency, effectiveness, and performances of public policies, organizations, or programmes<sup>1</sup>.

Taking into account the above mentioned, the paper intends to provide a synthetic, theoretical and practical image of the evaluation process of public intervention with reference to the Regional Operational Programme (ROP). Also, it shall contain estimates of the ROP impact on regional development in the current programming period.

## **2. Estimated Impact of the Regional Operational Programme 2007-2013 in Romania**

For Romania, EU integration represents a significant opportunity, especially for regional development, severely affected after the nineties' industrial restructuring, chaotic privatizations and wind-ups of large state-owned economic units that supported intensively populated areas. These phenomena led to the emergence of economic disparities in terms of performance (GDP/inhabitant) and of more marked development differences between urban and rural areas, and intra-regional as well.

### **2.1. Allocations and Context Indicators**

Regional development should represent a priority for Romania both from the viewpoint of pursued objectives and from the one of involved resources (human, financial, etc.).

The basic elements of this process – regional policy and Regional Operational Programme – are the pillars of *balanced development of all regions, by capitalizing the regional and local development potential, focusing on urban growth poles, and improving the infrastructural, and the business environment conditions*.

The enforcement basis of the regional policy is formed out of the eight development regions (NUTS II), the institution managing and coordinating the implementation being the Ministry of Development, Public Works and Housing (set-up in the year 2007) by the Management Authority for ROP (Gov. Res. no. 361/2007).

The effects of the regional policy and the impact of financial allocations from structural and national funds are found, especially, in creating jobs and developing infrastructure (transport, social, etc.), but are also visible in a wider context, on some fields such as: tourism (actions for promoting the country brand, tourism

---

<sup>1</sup> Public Management Service (PUMA) within OECD “Public Policy Brief no. 5 – Best Practice Guidelines for Evaluation” <http://www.oecd.org/dataoecd/11/56/1902965.pdf>.

promotion centers, etc.), urban development (Integrated Development Plans), the business sector (supporting micro-enterprises).

In the following we intend to estimate the ROP impact on the previously presented fields.

### **2.1.1. Allocations**

The sums allotted to regional development by ROP are amounting to about 4.38 billion Euros, from which 3.72 billion Euros (85%) represent the allocations from structural funds of the European Union (ERDF), the main supported fields being: urban development and regional infrastructure development (transport, social, education, health, business, tourism).

Financial allocations for the current programming period were realized differentiated on fields and development regions:

*1. Allocation on regions* was realized based on the general development level evaluated with the help of GDP/capita corrected with the population density; significant allocation differences between the regions North-East (16.32% from total) and Bucharest-Ilfov (8.86%), the remaining regions being financed relatively balanced (with allocation differences of maximum 3,5% between them);

*2. Allocation on priority fields* was also done differentiated (urban development-30%, transport infrastructure-20%, social infrastructure-15%, business environment-17- 15%), without any clearly defined criteria.

### **2.1.2. Context Indicators**

ROP contains the presentation of the current situation and the profile of the regions, the analysis of the disparities between regions and within regions, the implementation strategy, the financial plan, the SWOT analysis, the environmental analysis and the partnership process.

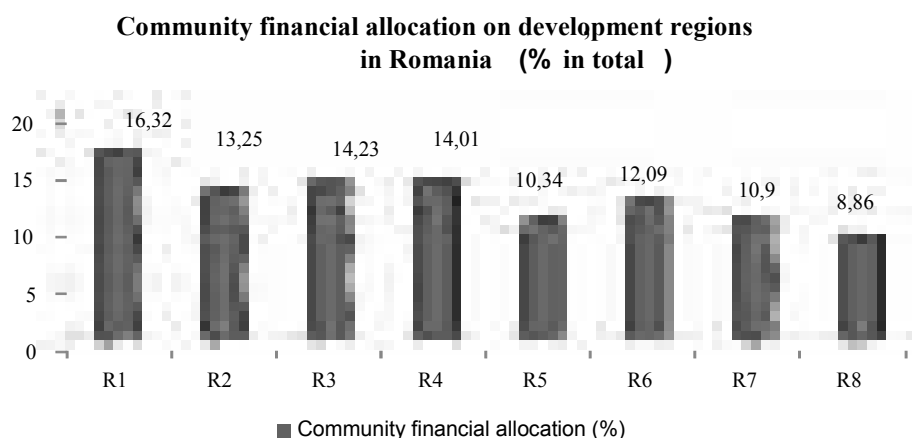
At the time of realizing the ROP (year 2007), the analysis of the economic and social situation was made difficult, in particular, by the lack of information and data at the level of the eight created development regions, many of them being estimates. Thus, the data on which was built and substantiated the current ROP are at the level of the year 2005 (for GDP/capita, the reference year was 2004), and many basic information could not be found within the official statistics (for instance, temporary migration). It should be noticed that for some indicators, the values were recomputed by the European Commission (Eurostat), especially for GDP/capita, which was corrected by PPC<sup>1</sup> (or PPS), a conversion factor used for

---

<sup>1</sup> PPC measures the purchasing power of a coin, in an international measuring unit (as a rule, dollars), because goods and services have different prices in some countries as compared to others. Whenever comparisons are made between different countries, indicators such as GDP/capita are adjusted so that these differences are eliminated, and the comparison basis is unitary.

calculating an alternative exchange rate between the coins of two countries or in a common artificial coin.

Even though there are differences about the economic and social situation, infrastructure, business environment, etc and the needs of each region, structural (and national) funds allocation by the Regional Operational Programme was realized only based on the GDP/capita value (adjusted with the number of inhabitants), the sums allotted to all fields complying with the shares presented in the table hereunder (Figure 1).



**Figure 1. Community financial allocation, on development regions by ROP 2007-2013**

Source: [http://www.mdpl.ro/\\_documente/POR/anexa\\_comunicat\\_alocare\\_regiuni.pdf](http://www.mdpl.ro/_documente/POR/anexa_comunicat_alocare_regiuni.pdf)

Most funds were allotted to the less developed region – the North-East region, based on GDP/hab. value in 2005 year, the main indicator for evaluation of regional economic disparities in state member of European Union.

## 2.2. Estimating Impact at Regional Level

In Romania, regional imbalances are, actually, major differences regarding the development level: urban, infrastructure (transport, social, and health), entrepreneurship and tourism infrastructure.

### 2.2.1. Urban Development

Considered as regional growth drivers, urban areas are supported by ROP with the help of structural funds, the allocations reaching up to 30% from their total (from the viewpoint of ROP importance given by the value of the financial allocation, this field takes the first place).

The foreseen impact of implementing the measures established initially by ROP is to increase the economic and social role and importance of urban centres having in view a poly-centric approach, the final stated purpose being to stimulate the balanced development of the territorial profile.

The financial allocation from structural funds was differentiated realized, the potential beneficiaries having the possibility of realizing and submitting projects that aim to solving some local development needs. Thus, there are three large categories of beneficiaries (direct beneficiaries of Community funds), that can submit Integrated Development Plans (IDP):

- *Growth poles* - Iasi, Constanta, Ploiesti, Craiova, Timisoara, Cluj-Napoca and Brasov and their areas of influence;
- *Urban development poles* - Arad, Baia Mare, Bacau, Braila, Galati, Deva, Oradea, Pitesti, Ramnicu-Valcea, Satu Mare, Sibiu, Suceava, Targu Mures;
- *Urban centres* - towns and municipalities with over 10.000 inhabitants, category in which was included also the Bucharest Municipality.

The sums attributed to urban development amount to the value of 117.8 million Euros (30% from total) as they are allotted for realizing 30 *Integrated Development Plans* in the eight development regions. *The unitary average value of realizing a IDP is of 37.26 million Euros.* Still, the average number of IDP realized in one region differs, as most should be realized in the North-East.

An Integrated Development Plan should contain three categories of projects:

- (1) for improving the urban infrastructure and urban services, including urban transport (18 projects),
- (2) sustainable development of the business environment (five projects) and
- (3) for social infrastructure (seven projects).

Individual projects, included in IDP aim to the following eligible categories of operations and activities:

- a) rehabilitation of the urban infrastructure and improving urban services, including urban transport: (public urban infrastructure, and population mobility), world cultural patrimony (national and local from the urban environment UNESCO)
- b) sustainable development of the business environment;
- c) rehabilitation of social infrastructure.

An Integrated Development Plan comprises minimum two projects from the operation categories mentioned above, from which one compulsory must consider

the rehabilitation of the urban infrastructure and improving urban services, including urban transport.

From the Integrated Plans and the corresponding projects can benefit a population of about 400.000 inhabitants, the average amount allotted per inhabitant being of 2794 Euro/inhabitant.

### **2.2.2. Transport Infrastructure Development**

As result of implementing ROP there will be modernized about 2137 km. of county and town roads. Relating the total value of the allotment corresponding to the transport infrastructure field, it results that one km. of road built/rehabilitated/modernized amounts to about 0.3548 million Euros/km.

On categories of roads, the highest value of one km. is found for county roads and is of 1.156 mill. Euros/km. Compared with the cost norms approved by the Ministry of Transports of 0.332 mill. Euros/km. and it is much over-evaluated<sup>1</sup>.

With respect to the impact at regional level, each region shall benefit of structural funds, but to different shares, fact that will affect also the length of the town and county roads built or modernized. Thus, in the North-East region shall be built/rehabilitated about 348.76 km. of roads (first place), and at the opposite end is placed the region Bucharest-Ilfov, with a lengths of roads of only 189.35 km.

If we relate the physical impact obtained with structural funds to the already existing situation, it can be found that the share of the length of built roads in total regional roads is relatively low at general level (2.6% in total and 8.5% in total modernized roads), the situation on regions being as follows:

1. With respect to the share of roads financed from European funds in total existing roads, the lowest values are held by the West region (the smallest region from the viewpoint of the number of counties and of the used surface) and the North-West region with only 2.1% from total, followed by the region Centre (2.2%) and South (2.4%); the highest share – 21.3% - is registered in the region Bucharest-Ilfov;
2. Roads modernized with structural funds in total existing roads represent 8.5% from total, the highest share being held by the region Bucharest-Ilfov (26.1%), followed at a great distance by the South-East region (11.2%), North-East (9.3%), North-West (8.5%).

Allocations from structural funds intended for modernizing the road infrastructure cover to a very small extent the actual needs existing at regional level.

---

<sup>1</sup> RESOLUTION No. 717 from 14 July 2010 for changing and amending the Governmental Resolution no. 363/2010 on approving cost standards for the investment objectives financed from public funds. DEED ISSUED BY THE GOVERNMENT OF ROMANIA, published in the Official Bulletin No. 537/2 August 2010.

### **2.2.3. Social Infrastructure Development**

The social field consisting of the corresponding infrastructure and specific services represents an important component both of the national/regional system and of the Community one, the support of which contributes to increasing the quality of life and to promoting social inclusion.

The structural funds allocated by ROP have as final destination the rehabilitation, modernization and endowment of the health services' infrastructure, of social services and ensuring the endowment of the operational bases for emergency situations, and of the education infrastructure.

In the following we present the impact for each of the above-mentioned infrastructures, impact which consists, mainly, from modernizing works, rehabilitation, endowment, as these are the main issues (difficulties) faced by these fields.

#### **A. Health Services' Infrastructure**

The impact of ROP on the regional development process from this perspective is rendered concrete in the construction of a number of 15 hospitals in the counties: Botosani and Vaslui (North-East), Buzau, Tulcea and Vrancea (South-East), Dambovita, Ialomita and Teleorman (South Muntenia), Gorj and Valcea (South-West), Maramures (North-West), Satu Mare, Salaj (North-West), Covasna (Centre) and Ilfov (Bucharest Ilfov).

The effective impact consists in a number of 50 rehabilitated, modernized and endowed medical units, the allotted funds amounting to 173.58 million Euros (ERDF allocation), which presupposes an average expenditure of 3.471 million Euros/medical unit.

On regions, the impact is as follows: eight medical centers in the North-East region, seven centers in South-East, South and South-West, five centers in West and Centre, six in North-West and four in Bucharest-Ilfov. The minimum value of an infrastructure project is of 0.2 million Euros, while the maximum value is of 25 million.

The hospitals modernized by ROP represent 10% from total number of hospitals existing at national level (year 2010). Also, the investments realized in these hospitals contribute to increasing by 10% the access of the inhabitants to rehabilitated/modernized/endowed medical units.

#### **B. Social Infrastructure**

Another field supported by ROP is improving the *quality of the infrastructure for social services*, by the support granted in a balanced manner for the entire territory of the country for ensuring equal access of the citizens to such services. Thus, by ROP is considered co-financing some projects in the following category:

- *social centers* with multi-functional destination (with services for admittance to the centre and up to solving some specific and temporary issues, including by organizing some workshops for developing independent living habits and professional competences);
- *investments in residential centers* ensuring long-term accommodation for persons in vulnerable situations (difficulty).

Total allocations for supporting social infrastructure amount to the value of 99.52 million Euros, from which ERDF 84.58 million Euros.

The estimated impact of structural funds consists in rehabilitating/modernizing 270 social centers, the average value for one social centre being of 0.3685 million Euros.

The allotted funds allow for rehabilitating/modernizing a limited number of centers at the level of each region, most being localized in the North-East region (44 centers), followed by the region South and South-West (38 centers).

### **C. Infrastructure for Interventions in Emergency Situations**

The final outcome of these allocations by ROP consists in improvement works for the endowment with equipment of the operational bases for interventions in emergency situations. The specific objective is the diminishment of the intervention time for granting qualified first aid and for interventions in emergency situations.

The total value of allotments is of 99.506 million Euros, intended for purchasing specific vehicles and equipment for 510 mobile units, for regional and county operational bases, for interventions in emergency situations. These mobile units shall contribute, finally, to diminishing the average time of intervention, from 30' – 45' in rural areas and up to 20' in urban areas (the year 2005) to 12' in rural areas and 8' in urban areas (in the year 2015).

The distribution on regions and the effective impact of structural funds' allocation was realised taking into account the value of GDP/capita and not the actual needs of each region. Thus, most mobile units shall be equipped/modernized in the North-East region (83 units), followed by the South region (73 emergency units), and South-West (71 units). The average value allotted from structural funds per emergency mobile unit is of 195.137 Euros/unit.

### **D. Educational Infrastructure (Pre-University, University and Continuing Vocational Training)**

The funds allotted are intended for improving the quality of the education infrastructure, of schools' endowment, of the accommodation structures for students and of the vocational training centres for ensuring an educational process at European standards and increasing the participation of school population and adults

to the educational process. The value of allocations reaches 284.91 million Euros, distributed on regions depending on the evaluated development level with the help of GDP/capita.

The average value of an educational centre is of 1.3567 million Euros, the distribution on regions being as follows: most rehabilitated educational centres shall be in the North-East region (34 units), followed by the region South (30 units), South-West (29 units), South-East (28 units).

#### **2.2.4. Business Environment**

One of the ROP objectives is to support the business environment by establishing support structures for business, by sustaining micro-enterprises, rehabilitation of polluted and unused industrial sites and preparing for new activities. For supporting the business environment by Axis 4 are allotted 795.65 million Euros, from which 633.42 mill. Euros co-financing by ERDF (16% from total ROP allocation).

Structural funds' impact can be evaluated according to the following directions:

1. Setting-up support infrastructure for businesses;
2. Polluted sites;
3. Support for micro-enterprises.

#### **Setting-up Support Infrastructure for Businesses**

The first evaluation direction of the impact at regional level consists in creating of two business structures in each region (in the region Bucharest-Ilfov only a single structure), the average value on business structure being of 18.29 mill. Euros. In these business structures about 3000 jobs shall be created, while the employment rate shall increase by 50% (after two years from the time of finalizing the project).

#### **Polluted Sites Rehabilitation**

With respect to the funds intended for rehabilitating polluted and unused industrial sites and their preparation for new activities, these were redistributed to other fields financed by ROP, their impact being equal to zero. The decision of reallocating the funds was triggered by a relatively low demand of financing for rehabilitation and reconversion of polluted industrial sites. Thus, from the 200.09 million Euros initially allotted by ERDF for rehabilitation and reconversion of polluted industrial sites, about 172.85 million Euros were redistributed to other major fields of intervention.

These amounts shall be used for:

1. rehabilitation, modernization, endowment of the infrastructure for health services (26.65 million Euros),



2. sustainable development of business support structures of regional and local importance (13.31 million Euros),
3. supporting the development of micro-enterprises (28.47 million Euros), restoration and sustainable capitalization of the cultural patrimony, as well as creation/modernization of related infrastructures (39.84 million Euros).
4. drawing up some projects for the creation, development, and modernization of the tourism infrastructure, for capitalizing natural resources and increasing the quality of tourism services (64.58 million Euros).

### **Support for Micro-Enterprises**

Another important investment objective within ROP is the support of productive and service delivery micro-enterprises<sup>1</sup> development that uses the endogenous potential of the regions (natural resources, raw materials, human resources, etc.). These are supported in using new technologies, IT equipment, contributing thus to increasing competitiveness and productivity. The financing of micro-enterprises has as purpose supporting the continuation of the restructuring and economic turnaround process for areas in decline, in particular for small- and medium-sized towns, because these create jobs and have the necessary flexibility to adjust to the requirements of a dynamic market economy.

The impact of structural funds consists in supporting 1500 micro-enterprises and creating 3000 new permanent jobs. The total value of projects financed for supporting micro-enterprises (sum of eligible and non-eligible expenditures) must be comprised between 100.000 Lei and 3.000.000 Lei. Financial allocation for the period 2007-2013 for supporting the development of micro-enterprises is of 200.09 million Euros (ERDF).

The impact of allocations differs from one region to another, the basic stated criterion being GDP/capita. Thus, most companies shall be created in the North-East region (245 companies), followed by the region South (213 companies), and South-West (210 companies). Two jobs shall be created per micro-enterprise. The impact triggers the increase of the productive capacity of microenterprises benefitting of structural funds.

A micro-enterprise shall benefit of about 133.393 Euros from European funds, while the sums intended for creating one job are of 66.608 Euros. The main issue of these micro-enterprises is the one related to supporting the financing of the project up to the time of effectively obtaining the funds. As a rule, the banks do not

---

<sup>1</sup> Micro-enterprises are enterprises that have up to 9 employees and have a net yearly turnover or have total assets that amount to up to 2 million Euros, Lei equivalent, in accordance with Law 346/2004 regarding the stimulation of setting-up and developing SMEs, with subsequent changes and amendments.

grant credits to small companies which, therefore, find themselves in the impossibility of implementing the project.

### **2.2.5. Tourism Sector**

Tourism is one of the important fields with actual economic potential that contributes to regional development. The impact of this field on the development level of a region consists, mainly, in creating new jobs by capitalizing the cultural and natural patrimony, specific to each area.

Tourism is supported by the Regional Operational Programme, the allotted funds amounting to about 616.77 mill. Euros (15% from total allocation) from which 558.90 mill. Euros ERDF contribution, and 57.87 mill. Euros national contribution.

Financing by ROP for tourism is rendered concrete, mainly, in restoration and sustainable capitalization projects of the cultural patrimony, creating-modernizing related infrastructures, and of the tourism infrastructure with the purpose of capitalizing natural resources, and increasing the quality of tourism services provided, and promoting the tourism potential for increasing Romania's attractiveness as tourism destination.

#### **Restoration of the Cultural Patrimony**

The financing of this sub-field is realized within ROP from structural funds to which is added the national financing and the private one. The objectives with tourism potential are included in the UNESCO<sup>1</sup> patrimony, and can be localized both in the urban and rural area and can constitute the national and local (urban and rural) cultural patrimony.

The impact of structural funds consists in the 100 restoration projects of the patrimony infrastructure with tourism potential and creating 200 jobs, concomitantly with increasing by 5% the number of tourists. The total value of a project is comprised between a minimum value of 1.700.000 Lei (0.04 mill. Euros/project) and a maximum one of 85.000.000 Lei (2.02 mill. Euro/project) depending on the size and complexity of the projects.

The average value of a restoration project for the cultural patrimony is of about 2.354 million Euros, the average number of created jobs per project is two.

On regions, the distribution of structural funds allocation intended for this sub-field was realized taking into account the value of GDP/capita, most restoration projects being located in the North-East region (16 projects), followed by the regions South and South-West (14 projects), South-East (13 projects).

---

<sup>1</sup> The list of the UNESCO world patrimony in Romania, according to the Resolution no. 493/2004 on approving the Methodology regarding monitoring of historical monuments registered with the List of world patrimony, annex A with subsequent changes and amendments.

### **Modernization of the Tourism Infrastructure**

The projects financed by ROP and intended to support tourism cover a wide range of activities that can be circumscribed to the following categories:

- projects regarding the capitalization of natural resources for tourism purposes;
- projects regarding the diversification of tourism services;
- projects having as main objective the creation/expansion of tourism leisure structures in view of increasing the number of tourists and duration of the sojourn.

The projects presented above are realized in areas with tourism potential from the urban area, in rural localities where projects are implemented with a value higher than 6.400.000 Lei and in spas, and balneal-climatic spas (irrespective if these are localized in the rural or urban area).

Financial allocations intended for this sub-field are of 330.019 mill. Euros from which 231.013 mill. Euros from ERDF and 99 mill. Euros national co-financing (from private sources).

The impact of the funds allotted is given by the creation of a number of 300 companies, 350 projects and about 800 jobs (about 2 jobs/project).

The amplitude of the impact differs from one region to another, and most projects are proposed for the region North East (57 projects), followed by the region South (50 projects) and South West (49 projects). The average value of a project is of 0.66 million Euros.

### **Promoting the Tourism Potential and Creating the Required Infrastructure with the Purpose of Increasing Romania's Attractiveness as Tourism Destination**

Promoting Romania as tourism destination presupposes a series of activities that would attract an as large as possible number of tourists (from country and abroad) and contribute to the sustainable development of tourism products. Thus, a set of objectives is established, from among which we mention:

1. Creating a positive image of Romania as tourism destination, by defining and promoting the national tourism brand;
2. Developing and strengthening domestic tourism by supporting the promotion of tourism products and specific marketing activities;
3. Creating National Centers of Tourism Information and Promotion (NCTIP) and endowment thereof.

The approximate financial allocation for this field ("Promoting the tourism potential and creating the required infrastructure with the purpose of increasing Romania's attractiveness as tourism destination") is of 150.356 million Euros, from

which 127.803 million Euros from ERDF and 22.553 mill. Euros from the state budget.

For creating the country brand are allotted about 75 mill. Euros, and for creating the *National Centers of Tourism Information/Promotion, including endowment* the financial allocation is of about 20 million Euros (from which 700.000 Euros for creating an integrated and computerized system of the Romanian tourism offer).

The estimated impact consists in realizing a number of ten campaigns of promoting the tourism brand at national and international level, as well as ten National Centres for Information. The effect of these actions should lead to increasing the number of tourists that visit Romania, to approximately one million tourists. The average value of a Promotion Centre is of about 1.93 million Euros, while for the country brand promotion campaign about 7.5 million Euros are allotted. For all presented indicators a reference value is not given, one that could contribute to a comparative analysis during the implementation of the regional programme.

### 3. Conclusions

Undergoing an increasing importance in time, regional development constitutes a basic element of the economic and social integration and cohesion process. The regional policy through the Regional Operational Programme can contribute to diminishing discrepancies between regions and within them, provided that there is a better substantiation of the decisions regarding the allotment of structural funds where they are indeed necessary. The current programming exercise of the regional policy and of the financial resources showed that because of the low level of general development, the majority of funds allotted were oriented towards the North-East region, without taking into account the fact that this region does not have the financial capacity to support such an investment process. The main difficulties occurred in the implementation of the current ROP are determined, especially, by the fact that specific regional needs were not identified in an actual manner and due to the weak capacity of the regions to absorb effectively received funds (the capacity that was not taken account of at the time of realizing ROP). For the following programming period it is necessary that for all future economic-social analyses to take into consideration all elements contributing to the development of a region. This fact implies a complex analysis of all needs and, possibly, the realization of a list of priority projects before launching the programme. Also, a positive aspect can be had by improving the relationships between local and central authorities and adjusting the instruments with the purpose of maximum use of the regional potential. Last, but not least, it can be acted by concentrating resources in regions lest developed, but only by ensuring some important co-financing sources.

#### 4. Acknowledgements

This paper has been developed within the project „Economic scientific research, support of the welfare and human development in the European context”, funded by the European Union and the Government of Romania from the European Social Fund through the Operational Programme Human Resources Development 2007-2013, the grant agreement no. POSDRU/89/1.5/S/62988.

#### 5. References

\*\*\*(2003). *Manualul pentru evaluarea dezvoltării socio-economice/ Handbook for the assessment of socio-economic development*. Tavistock Institute in collaboration with GHK & IRS, [http://www.evaluare-structurale.ro/images/stories/Documente/resurse/evalsed\\_ro.pdf](http://www.evaluare-structurale.ro/images/stories/Documente/resurse/evalsed_ro.pdf).

Antonescu, D. (2012). Identificarea disparităților și convergenței economice regionale în Uniunea Europeană și în România/ Identifying disparities and regional economic convergence in the European Union and Romania. *Working Papers of National Institute of Economic Research*. [www.ince.ro](http://www.ince.ro).

Antonescu, D. (2012). Identifying regional disparities in Romania: a convergence process perspective in relation to European Union's territorial structures. *Procedia Economics and Finance* (2012), pp. 1148-1155.

Antonescu, Daniela (2011). *Dezvoltarea regională – tendințe, mecanisme, instituții/Regional development - trends, mechanisms, institutions*. Bucharest: Top Form.

Bachtler, J. & Michie, R. (1993). The Restructuring of Regional Policy in the European Community. *Regional Studies*, 27 (8), pp. 719-725.

Bachtler, J. & Michie, R. (1995). A New Era in EU Regional Policy Evaluation? The Appraisal of the Structural Funds. *Regional Studies*, 29 (8), pp. 745-751.

Bachtler, J. & Taylor, S. (1999). Objective 2: Experience, Lessons and Policy Implications. *Report to the Commission of the European Communities* (DG XVI), EPRC, University of Strathclyde.

Eskelinen, H., Kokkonen, M. & Virkkala, S. (1997). Appraisal of the Finnish Objective 2 Programme: Reflections on the EU Approach to Regional Policy. *Regional Studies*, 31 (2), pp. 167-172.

*Regional Operational Program 2007-2013*. [www.fonduri-structurale.ro](http://www.fonduri-structurale.ro).

## Regional Determinants of Small Business Survival during the Crisis in Romania

Anca Dachin<sup>1</sup>, Alexandru Rusei<sup>2</sup>

**Abstract:** The economic crisis in Romania has increased the business vulnerability since 2009. The recessionary gap and the high uncertainty of the economic environment have determined many companies to leave the market. The regional differences in the entrepreneurial performance suggest that the regional dimension should be included in the firm demography analysis. Most studies refer to the favorable conditions which stimulate the entry of new firms. However, during the crisis, for many small businesses the main problem has been the survival. The paper focuses on the analysis of adjustment processes within the SME's sector in terms of changes in number of enterprises and turnover. The regional differences in the three-year survival rate (2008-2011) show the structural particularities of the economic activity. The paper aims at identifying the empirical relationship between economic determinants and entrepreneurial performance at regional NUTS2 level in Romania.

**Keywords:** business vulnerability; survival rate of enterprises; firm size; regional competitiveness

**JEL Classification:** R12; D22; M13

### 1. Introduction

Small and medium-sized enterprises (SMEs) are economically and socially important for the economy. The debate about the impact of large firms compared to that of SMEs started in the inter-war period, as a result of the capital market development and the awareness of the advantages of economies of scale. The influential economist J. Schumpeter wrote in 1943 that the large-scale establishment became the most powerful engine in progress, while an important argument was its capacity to innovate. The changes that occurred in the late 1960s in the capacity of SMEs to innovate and to take the advantage from the globalization process renewed the interest of scientists and policy-makers in small firms. However, the survival ability of SMEs and the capacity of a new business to employ more than 100 people in the medium term are still in discussion. For these

---

<sup>1</sup> Professor, PhD, Bucharest University of Economic Studies, Address: 6, Piata Romana, 010374 Bucharest, Romania, Tel.: +4.021.319.19.00, Fax: +4.021.319.18.99, Corresponding author: [ancadachin@yahoo.com](mailto:ancadachin@yahoo.com).

<sup>2</sup> PhD candidate, Bucharest University of Economic Studies, Address: 6, Piata Romana, 010374 Bucharest, Romania, Tel.: +4.021.319.19.00, Fax: +4.021.319.18.99, e-mail: [alexrusei@yahoo.com](mailto:alexrusei@yahoo.com).

reasons the net advantages of small firms may be less than it is commonly supposed. (Griffith & Wall, 2012, pp. 77)

The importance of SMEs to the EU economy indicates the need to assess their performance both in stable macroeconomic environment and in recession. The development of an enterprise is related to its opportunities and risks. The long-term existence of an enterprise depends on its ability to be efficient and create profit. The ability of the enterprise to function in a coordinated and systemic manner, without losing capacity of performance in indefinite future is connected to sustainable development (Ciemleja & Lace, 2011)

The economic crisis has increased the business vulnerability. The recessionary gap and the high uncertainty of the economic environment have determined many companies to leave the market. The concept of vulnerability has a multidimensional character and provides a useful framework for the analysis of consequences of these changes on human societies (Brauch, 2011, pp. 70-71). One aspect is the economic vulnerability which has various definitions and interpretations. In the simplest sense this term is associated with a disturbance affecting any form of economic activity as a result of exposure to different factors which occur as external shocks.

The downturn of the economy which started in 2009 was a shock for most companies in the EU, as well as in Romania. As the demand decreases and it becomes unpredictable it is leading to vulnerabilities determined by the customer behavior. Therefore, the business has fewer opportunities to react to changes in demand. The unpredictable demand requires flexibility and good business planning so that timely actions can be taken to face volatility. Business experience can contribute to the business stability. Previous self-employment experience presents a positive and statistical significant relation to self-employment duration (Millán et. al, 2012), as well as to SMEs survival and development.

The location for starting a new firm in connection with the regional characteristics of economic and social environment influences the decision regarding SMEs. There is a relationship between the factors which shape the attraction of a region and the entry and exit rate of firms (Nyström, 2005).

There is a vast literature which refers to the positive influence of factors such as education, innovation potential and technology transfer intensity which stimulate new firm entry. According to more recent literature, incumbent firms do not fully exploit new ideas and knowledge spills over to the potential entrants (Acs & Sanders, 2011, pp. 143). Therefore the hypothesis that entrepreneurs will localize in regions with high level of R&D and knowledge creation in related industries is reliable for countries with dynamic entrepreneurial activity. It has been also demonstrated that a higher level of general education is important as pre-condition for small business development. (Griffith & Wall, 2012, pp. 77)

The question about the characteristics which make firms more or less vulnerable during a recession is still open. The paper focuses on the empirical relationship between economic determinants and entrepreneurial performance at regional NUTS2 level in Romania, measured in terms of survival behavior.

## 2. Methodology and Data

The definitions and indicators used in the statistical analysis of small business behavior are those recommended by the OECD-Eurostat methodology (OECD-Eurostat, 2008). Active enterprises are all enterprises that had either turnover or employment at any time during the reference period. Employer enterprises are enterprises with at least one employee. In order to analyze the survival behavior of firms, we used several specific indicators for the business demography. The n-year survival rate for a particular year (t) refers to the number of n-year survival enterprises as a percentage of all enterprises with at least one employee for the first time in year (t-n). Enterprise birth rates are newly born enterprises as proportion of all active enterprises, while enterprise death rates are enterprise death as proportion of all active enterprises.

For the enterprise survival analysis we used the public data offered by the National Office of Trade Register – Recom online. We used this database to gather information about the state of operation of the companies and the distribution of active companies by development region (NUTS2).

In order to have a data series for recent years (2007-2011), we estimated the active enterprises registered at the National Office of Trade Register from the database in two steps: a) we selected only those enterprises which declared they are operational; b) we excluded all enterprises which declared a status from the following list: radiant, temporary interruption of work, liquidation, dissolution, is subject to Law no. 85/2006, bankruptcy, insolvency, reorganization, prosecution, partial division, open procedure open for Law no. 64/1995 republished, closing procedure cf. Article 117 of Law no. 64/1995, insolvent, covered law no. 359/2004, criminal conviction, total spin, mother company insolvency, mother company in dissolution, registration rejected. Each company was identified based on the unique tax code.

The number of active SMEs was selected according to the number of employees and turnover (up to 250 employees and up to 50 million turnover) officially declared in the annual balance sheet. We added information on function indicator for each year at the tax code level and we established how many of the companies with the status “running” in 2008 kept the same status in the following years.



### 3. Small Business Demography during the Crisis in Romania

As an emerging economy, Romania had a high dynamic of the small business sector during the economic growth period. After the accession to the European Union in 2007 the birth rates of the SMEs continued to be high, reaching the lowest level in 2009 (table 1). Major changes occurred in the exit of enterprises from the market. The death rate has significantly increased in 2009 and 2010 due to the effects of the crisis. An important factor that contributed to the higher proportion of exits was the introduction of the fixed tax for the micro-enterprises as an alternative to 16% tax on profit during the period 2009-2010. This fiscal measure has worsened the impact of the economic crisis.

**Table 1. Enterprise birth rate and death rate of SMEs, 2007-2011**

%

	2007	2008	2009	2010	2011
Enterprise birth rate	29	26	22	25	28
Enterprise death rate	7	20	34	36	28

\*Enterprise birth rates are newly born SMEs as proportion of all active SMEs; enterprise death rates are SMEs death as proportion of all active SMEs

*Source: Calculation based on data from the National Office of Trade Register – Recom online*

According to the White Charta of the Small and Medium sized Enterprises in Romania, the major challenge for the SMEs in 2011 and 2012 was still the reduction of the internal demand, which was mentioned on the first position by 80% of the respondent firms (White Charta of SMEs, 2012). The next positions in the hierarchy of major difficulties were connected to the non-friendly business environment: bureaucracy, excessive fiscality, inflation, corruption and excessive control. These major difficulties were mentioned by 40-53% of the respondents.

The high enterprise birth and death rates in table 1 reflect an important volatility of the markets. But the immediate recovery of the birth rate in 2010 indicates that small business is an attractive employment alternative.

The vulnerability of SMEs in Romania is also a result of the firms' lack of medium and long-term vision. In 2011 about half of the SMEs had no plans and only about 11.5% of them had a 3-5 years strategy. They rely mostly on self-financing and about 80% of the SMEs did not take any action to use structural EU funds (White Charta of SMEs, 2012). The lack of development vision is a sign of entrepreneurial weakness rather than adaptation to high uncertainty conditions.

#### 4. Regional Determinants of the Differences in the Survival Rate

The total number of enterprises in Romania which were active in the reference year 2008 were abruptly reduced by 28.4% in 2009. In the following years the process continued, but at a smaller rate.

By the end of 2011 the 3-years survival rate of active firms in 2008 was 62.7% (table 2). There are some regional differences in this respect. The extreme values in 2011 show a survival rate of 69.6% of the number of enterprises active in 2008 in Bucharest-Ilfov region and 58.5% - 58.8% in South-West Oltenia, North-East and North-West. Actually there are no important differences between the regions other than Bucharest-Ilfov.

**Table 2. The total number of active enterprises with in 2008 and their survival until 2011, by development regions**

Region	Number of active enterprises 2008	Number of survival enterprises 2009	Number of survival enterprises 2010	Number of 3-year survival enterprises in 2011	The 3-year-survival rate in 2011 (%)
North-West	107932	72599	64670	63472	58.8
Center	91261	61884	56266	54586	59.8
North-East	85663	58099	52399	50384	58.8
South-East	87695	61915	55114	53017	60.5
South-Muntenia	81559	58961	54261	52759	64.7
Bucharest-Ilfov	188444	149390	134808	131187	69.6
South-West Oltenia	55630	37825	33830	32537	58.5
West	73645	51916	47275	45710	62.1
Grand Total	771829	552589	498623	483652	62.7

*Source: National Office of Trade Register – Recom online*

In Romania the SMEs represent over 99% of the total number of enterprises. The separate analysis of the SMEs survival (Table 3) shows that the employer SMEs had a higher chance to survive (74,3 % was the 3-years survival rate) compared to enterprises with 0 employees (50 % was the 3-years survival rate). It is remarkable that in three regions the gap between the survival rates of the two categories of firms is below the average: Bucharest-Ilfov, South-Muntenia and West.

**Table 3. Survival of employer SMEs and self-employment in the period 2008- 2011, by development regions**

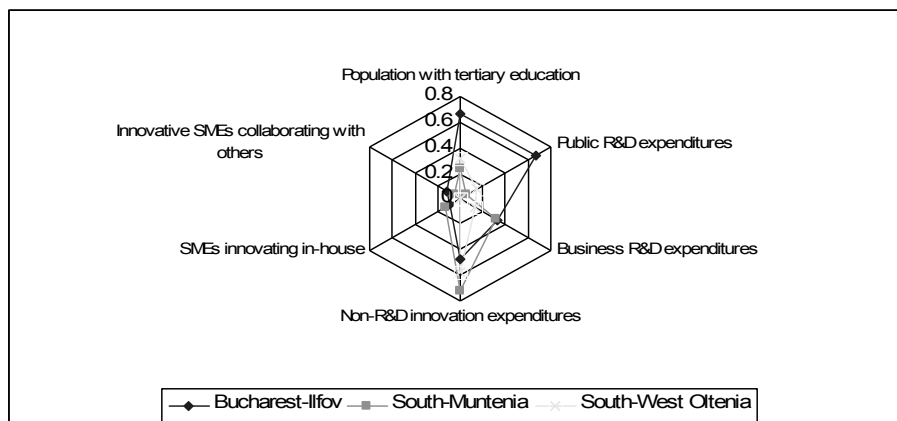
Region	Number of employer SMEs 2008	Number of self-employment (zero employees) 2008	The 3-year-survival rate of employer SMEs in 2011 (%)	The 3-year-survival rate of self-employment in 2011 (%)
North-West	57630	50120	71.5	44.1
Center	50465	40558	72.9	43.4
North-East	42926	42559	72.3	45.1
South-East	46785	40722	72.8	46.1
South-Muntenia	40810	40557	75.0	54.2
Bucharest-Ilfov	93349	94533	79.3	60.0
South-West Oltenia	27766	27741	73.1	43.7
West	39666	33802	72.2	50.1
Grand Total	399397	370592	74.3	50.0

*Source: National Office of Trade Register – Recom online and own calculations*

The analysis reveals the special position of three regions:

- Bucharest-Ilfov region, with a leading position in Romania, dominating both number of enterprises and survival rates;
- South-Muntenia, the next best region in survival performance;
- South-West Oltenia, with the lowest number of active enterprises and the lowest 3-years survival rate.

We assume that the survival capacity is strongly connected to the economic performance. Fig.1 presents several regional characteristics which are supposed to enable the small business performance. The scale indicates 0 for the lowest performing region and 1 the maximum value for the best performing region in the EU.



**Figure 1. Regional performance characteristics in 2011**

*Source: Graph based on data from the Regional Innovation Scoreboard 2012*

It is obvious that we find the three regions mentioned above with a well defined profile from the point of view of the performance enablers.

- Bucharest-Ilfov region benefits of the high concentration of population with tertiary education and of R&D expenditures, while high public R&D expenditures are mainly justified by the concentration of research institutes in the capital city. This region has also a high concentration of industrial activities and therefore also consistent business R&D expenditures.
- South-Muntenia includes many companies which activate in connection with the business around the manufacture of motor vehicles (Automobile Dacia Group Renault, Argeş County) and around oil extraction and manufacturing and tourism (Prahova county). With the business R&D ranking comparable with Bucharest-Ilfov region, South-Muntenia has a better position regarding non-R&D innovation expenditures.
- South-West Oltenia is a region where mining and quarrying, energy industry and chemical industry are the main industrial activities which faced constant decline in the last years and did not stimulate the business development. With the new vehicle production plant in Craiova the Ford Motor Company gives a new chance for industrial development.

As we can see from the three examples, small business is developing systematically around industrial agglomerations, but the existence of large companies is not a sufficient condition (see South-West Oltenia). Small business is stimulated by dynamic industries, which externalize services, spill-over knowledge and contribute to household income increase in the area. Therefore the SMEs

depend highly on development poles and on the purchasing power of the population able to buy consumer goods and services produced locally by the SMEs. The scaling procedure used in the Regional Innovation Scoreboard 2012 allows also the ranking of the regions according to the regional performance characteristics (table 4).

**Table 4. Ranking of regions regarding the survival rate of employer SMEs and the innovation potential (Ranks from 1 to 5, best rank = 1)**

	Survival rate of employer SMEs	Population with tertiary education	Public R&D expenditures	Business R&D expenditures	Non-R&D innovation expenditures	SMEs innovating in-house	Innovative SMEs collaborating with others
North-West	5	3	2	4	3	5	4
Center	3	5	6	6	4	3	1
North-East	4	6	3	6	7	2	1
South-East	3	6	6	3	1	1	2
South-Muntenia	2	7	7	2	2	4	3
Bucharest-Ilfov	1	1	1	1	7	6	1
South-West Oltenia	3	4	5	5	5	8	6
West	4	2	4	4	6	7	5

*Source: Own ranking based on data from table 3 and European Commission – Regional Innovation Scoreboard 2012, p. 64*

The small business development in Romania is lagging behind other EU countries because of several general characteristics:

- low level of entrepreneurial education;
- sporadic innovative activities, of which the most are new products (new to the firm);
- lack of collaboration between innovative SMEs and others. The ranking in table 4 must be completed with information about the EU regional ranking: the three best positions in Romania (Bucharest-Ilfov, North-East and Center) have only 0.11 from the maximum level of 1 in the EU best region.

## 5. Conclusions

The high enterprise birth and death rates reflect business vulnerability during the crisis, due to uncertainty of demand fluctuations and to lack of strategic planning. The analysis shows a strong link between the capacity of small enterprises to survive during the economic crisis, on one hand, and the existence of development poles and a favorable business environment generated by the critical mass of higher education and innovation expenditures, on the other hand. However the paper does

not present enough arguments to demonstrate the hypothesis that entrepreneurs will localize in regions with high level of innovation potential. The demand-side shock in 2009 and 2010 with prolonged demand deficit in 2011 and 2012 does not discourage new entries even in less developed regions. There is room for small business development in activities where R&D and innovation are not priorities and where people are not prepared for this stage of development.

## 6. Bibliography

Acs, Z. & Sanders, M. (2011). *A theory of entrepreneurial rents in endogenous growth: implications for regional innovation policies*. Published in Stimson, R., Stough, R., Nijkamp, P. (editors). *Endogenous Regional Development. Perspectives, Measurement and Empirical Investigation*, Edward Elgar, Cheltenham, UK, Northampton, USA.

Brauch, Hans Günter et al. (eds.) (2011). *Coping with Global Environmental Change, Disasters and Security. Hexagon Series on Human and Environmental Security*, Vol. 5, Springer Verlag Berlin, Heidelberg.

Ciemleja, G. & Lace, N. (2011). The Model of Sustainable Performance of Small and Medium-sized Enterprise. *Inzinerine Ekonomika – Engineering Economics*, 22(5), pp. 501-509.

De Groot, H.; Nijkamp, P. & Stough, R. (2004). *Entrepreneurship and Regional Economic Development*. Edward Elgar, Cheltenham, UK, Northampton, USA.

Dijkstra, L.; Annoni P. & Kozovska, K. (2011). A New Regional Competitiveness Index: Theory, Methods and Finding. *Working Paper no. 2/2011*, EU Directorate General for Regional Policy.

European Commission (2012). *Annual report on small and medium-sized enterprises in the EU 2011/2012*.

European Commission (2012). *Regional Innovation Scoreboard 2012*.

Griffiths, Alan & Wall, Stuart (editors). (2011). *Applied Economics*. 12th edition. Harlow: FT Prentice Hall.

Millán, J.M.; Congregado, E. & Román, C. (2012). Determinants of self-employment survival in Europe. *Small Business Economics*, 38, pp. 231-258.

(2012). National Council of Small and Medium-sized Private Enterprises in Romania (CNIPMMR). *White Charta of the Small and Medium sized Enterprises in Romania*.

Nyström, Kristina (2005). Determinants of Regional Entry and Exit in Industrial Sectors. *Working Paper no. 33*, The Royal Institute of Technology, Sweden, Centre of Excellence for Science and Innovation Studies (CESIS).

OECD- Eurostat (2008). *Measuring Entrepreneurship. A digest of indicators. OECD – Eurostat Entrepreneurship Indicators Program*.

## **A Comparative Study on Changes in the Spatial Industry Agglomeration in Eastern EU Developing Countries: Romania vs. Bulgaria**

**Mădălina-Ştefania Dîrzu<sup>1</sup>, Gabriela Carmen Pascariu<sup>2</sup>**

**Abstract:** Taking a closer look at the spatial distribution of industrial sectors, it becomes quite obvious that there is an increasing disposition for industries to concentrate in certain regions in order to benefit of agglomeration assets. In this context, we consider necessary to analyze how industrial agglomerations have evolved over time and to what extent major transformations have affected agglomeration phenomenon in lagging regions of Eastern countries, finally our paper bringing supportive evidence from Romania and Bulgaria. To what extent, have patterns of industrial agglomeration modified during the transition period? Has relocation of economic activities taken place? What are the main determinants of industrial concentration patterns? These are some crucial questions that we try to find a realistic response through the present paper. Eastern economies are notably challenging from this point of view because they experienced several decades long economic development period which was earmarked by socialist industrialization. Under the planned economy, these countries have faced more barriers to an efficient geographical allocation of economic activities across regions than their peers in the Western Europe especially because they faced the legacy of a planned economy system that determined locations for economic activities based on political decisions, not based on economic efficiency. Thus, our effort can be seen as a contribution to knowledge about agglomeration in the non-Western countries in general, and in developing regions in particular. Focusing our study on two-digit industrial sectors of 14 regions at NUTS2 level, this paper aims to identify and explain the changes regarding the evolution of industrial agglomerations in the last years across Romania compared to Bulgaria. In the end, our analysis will be able to conclude in what manner the effects of transition period influenced the patterns of industrial agglomeration in these two neighboring countries.

**Keywords:** industrial agglomeration; Eastern countries; geographic concentration

**JEL Classifications:** R10; R11

---

<sup>1</sup> Alexandru Ioan Cuza University of Iasi, Faculty of Economics and Business Administration, Centre for European Studies, Romania, Address: 11 Carol I Blvd., 700506. Iasi, Romania, Tel.:+40 (232) 201000, Corresponding author: dirzu\_madalina@yahoo.com.

<sup>2</sup> Alexandru Ioan Cuza University of Iasi, Faculty of Economics and Business Administration, Centre for European Studies, Romania, Address: 11 Carol I Blvd., 700506. Iasi, Romania, Tel.:+40 (232) 201000, e-mail: gcpas@uaic.ro.

## 1. Introduction

The history of industrial agglomeration patterns in Eastern Europe has been subject to very inflexible conditions during the socialist period, thus leading to a specific and harmful industrial structure up until the beginning of the transition. Under the socialist system, industrial agglomeration landscape was more or less predetermined and sustained through the accordance of central plans that largely altered the development of dynamic industrial agglomerations rich in positive externalities. Moreover, under the planned economy, Eastern countries have faced more obstructions to an efficient spatial allocation of economic activities across regions than their fellows in the Western Europe especially because they faced the heritage of a planned economy system that determined locations for economic activities based on political beliefs, not based on economic efficiency.

Since 1990, the transition to a market economy in East European countries has resulted in major economic restructuring. Former centrally planned economies had to adapt their regional and sectoral production structure to a market-based economic system. This complex process led to large labor reallocation across sectors and regions by reshaping the industrial agglomerations patterns in East Europe.

A large number of studies has been dedicated to the research of spatial distribution of industrial agglomerations and their developments in Europe (Amiti, 1999; Bruhlhart, 1998, Combes and Overman, 2004; Haaland et al., 1999). Two aspects become immediately visible when taking a closer look at this broad and still growing body of literature. First of all, the results of these studies are rather unconvincing because they seem to depend radically on the time period covered. For this reason different researches and studies will arrive at divergent conclusions depending on the specific time period under consideration. Secondly, the literature focuses mainly on Western European countries and does not include the countries from Eastern Europe. Most probably, due to an obvious lack of data until very recently, Eastern Europe has been left out of most European analyses. Our aim is to fill this gap by analyzing a relatively new and comprehensive set of industry specific time series at regional level. Hence, our breakdown is by industries and also by regions. Most case studies for Western Europe at the industry level reveal that developments prove to have been extremely various in the last decades, with alternating cycles of increasing agglomeration/concentration and diversification. Thus, our purpose here is to extend the coverage of the current literature to Eastern European countries in order to offer an overview of patterns and driving forces behind the formation of industrial agglomerations in this part of Europe, finally our paper bringing supportive evidence from Romania and Bulgaria. These two neighboring countries are notably challenging from this point of view because they imply different characteristics. Most of all, Romania is one of the largest countries in Central and Eastern Europe, being also a dominant employer, while Bulgaria is a



small country located in Southeastern Europe which has just 8,5 million inhabitants.

Considering these, the present paper proposes to shed light on the evolution of industrial agglomerations in transition countries over the last years and compare these developments in Romania and Bulgaria. Thus, the structure of this work is organised as follows. Section 2 describes the structural changes that former socialist countries experienced in the early 1990s, focusing our attention on Romania and Bulgaria case studies. Section 3 explains the methodology to calculate a necessary index in order to observe the evolution of economic agglomerations at regional level. Section 4 presents the results. Section 5 concludes.

## **2. Dynamics of Structural Changes in Bulgaria and Romania**

Until the beginning of the transition process in the early 1990s, the spatial distribution of economic activities and employment patterns in Eastern European countries strongly deviated from those of Western European economies. In the late 1980s, they were practically dominated by the manufacturing sector in general and heavy industry in particular. Afterwards, transition mechanism activated a process of catching-up of former socialist countries towards incumbent EU Member States that triggered per capita income and structural convergence. Thus, in the early 1990s, Eastern European countries rapidly re-oriented their external relations towards Western Europe. As a result, the sectoral allocation of production and labour resources among the three main sectors (agriculture, industry and services) has become more similar to the sectoral allocation prevailing in Western economies. Considering these, this section aims at understanding the evolution of employment landscape in the main three sectors and dynamics in two transition countries, Romania and Bulgaria. We first analyze the evolution of GDP and aggregate employment figures, so as to gain insights into the process of transition. The evolution of sectoral employment shares in the economy describes the process of economic restructuring in the transition countries.

### **2.1 Bulgaria**

Bulgaria has experienced significant losses in GDP and employment since the start of the transition process. While GDP per capita was around 1200 EUR in 1990, it decreased to 1000 EUR in 1994 and to similar values again in 1997. Figure 1 shows the evolution of real GDP and employment growth in Bulgaria during the 1990s. GDP and employment growth moved together during most of the 1990s. Only in 1998, employment declined although GDP kept increasing.

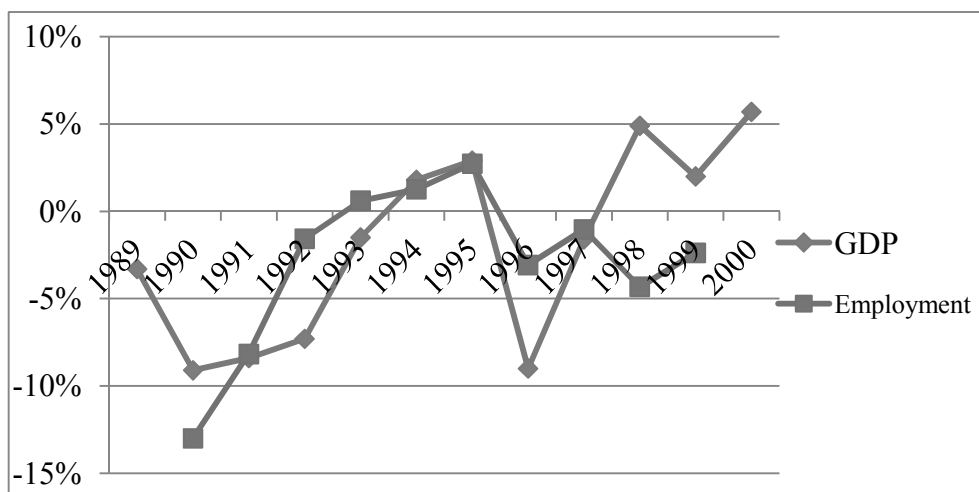


Figure 1. Real GDP and employment growth in Bulgaria

Source: EUROSTAT

The large losses in GDP were accompanied by significant restructuring across the major three sectors. The share of the industrial sector in total employment decreased dramatically during the 1990s, falling from over 45% in the early 1990s to 29% at the end of the 1990s. Concurrently (in the meanwhile), the sectoral shares of agriculture and services in total employment followed an increasing trend.

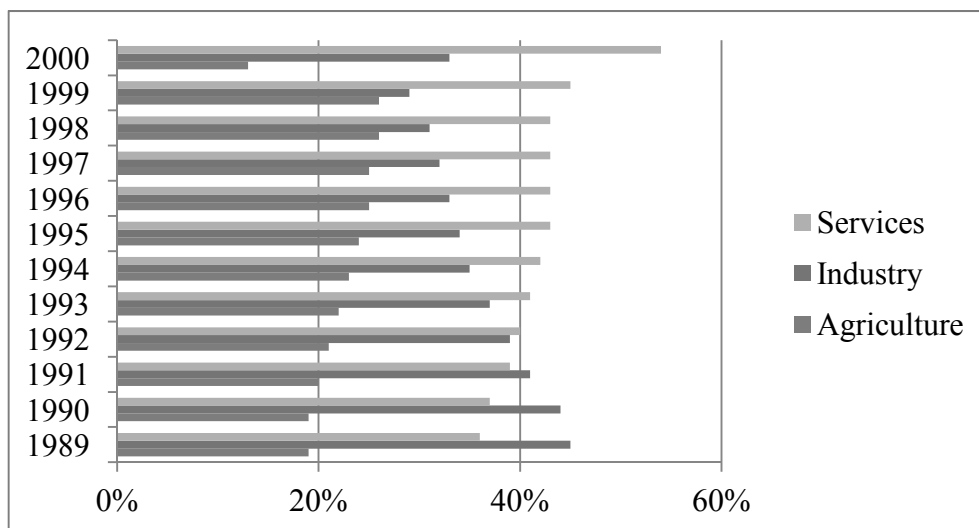


Figure 2. Sectoral shares in total employment in Bulgaria

Source: World Bank

Moreover, the share of industry in GDP also decreased from 58% in 1989 to 26% in 2000. At the same time, the services sector share continuously increased during the 1990s and so did the agricultural sector's even if these two last sectors kept having some fluctuations in the period under review.

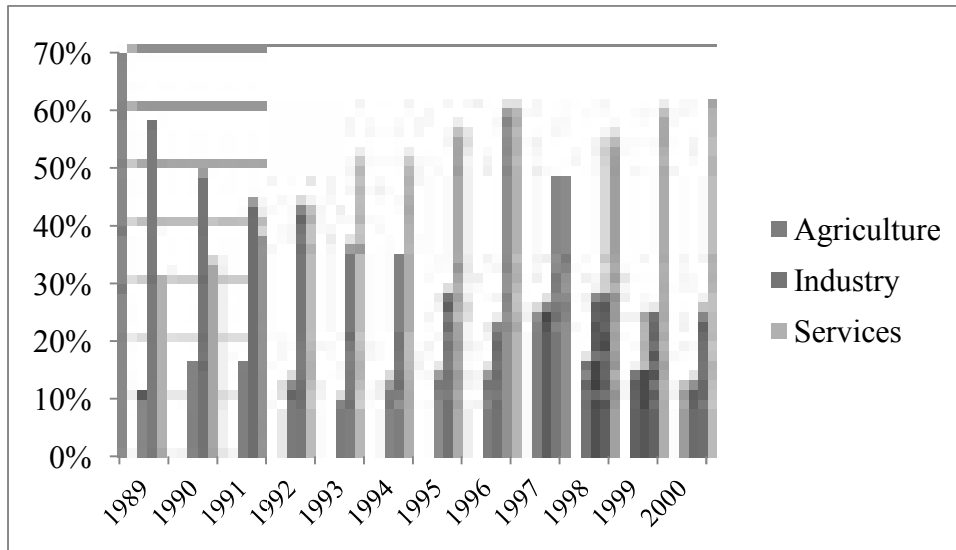


Figure 3. Sectoral shares in GDP in Bulgaria

Source: World Bank

In summary, the industrial sector has lost employment in Bulgaria, while the agricultural sector and service sector retained more or less constant employment.

## 2.2. Romania

During the 1990s, Romania has regularly lost employment (see Figure 4). The decline was especially high in 1994, a 5.1 percent decrease relative to 1993 and in 1996, a 3.8 percent respectively. Contrary to Bulgaria, the evolution of employment has not closely matched the real GDP growth. GDP contracted significantly in the early 1990s, but the economy tended to stabilize in the mid-1990s, entering in a new recession in 1997/1998. Since 2000, GDP started growing again. Particularly in 1995, GDP growth was extremely high coinciding with negative employment growth. These points at productivity gain during the mid-1990s.

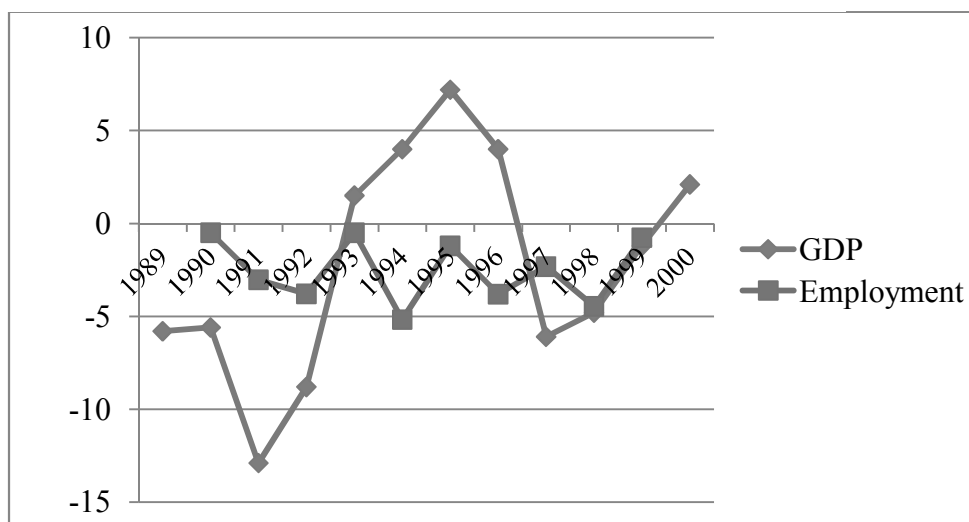


Figure 4. Real GDP and employment growth in Romania

Source: EUROSTAT

Furthermore, the employment share of the industry sector in total Romanian employment declined enormously as shown in Figure 5. This fall was matched by an increase in the employment share of the agricultural sector, which used to have a share of over 40 percent in Romanian employment in 1999. The variation in total employment is mainly driven by the largest three sectors, the agricultural, industry and service sectors.

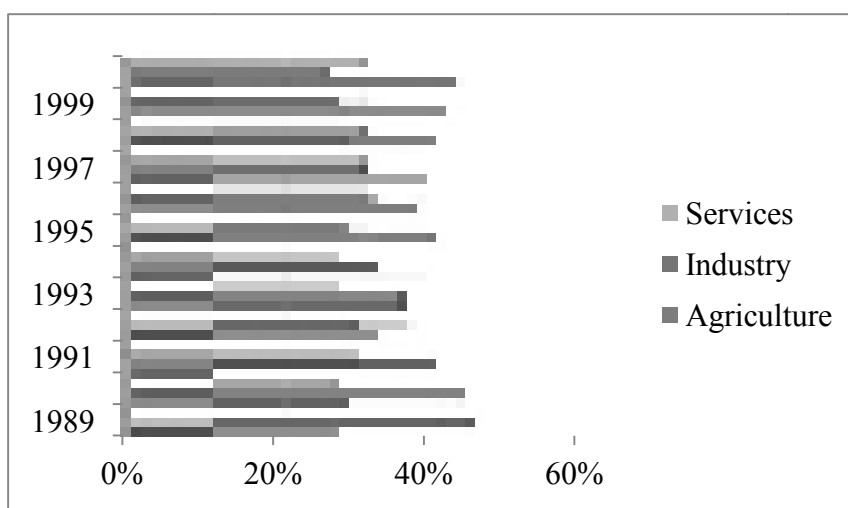
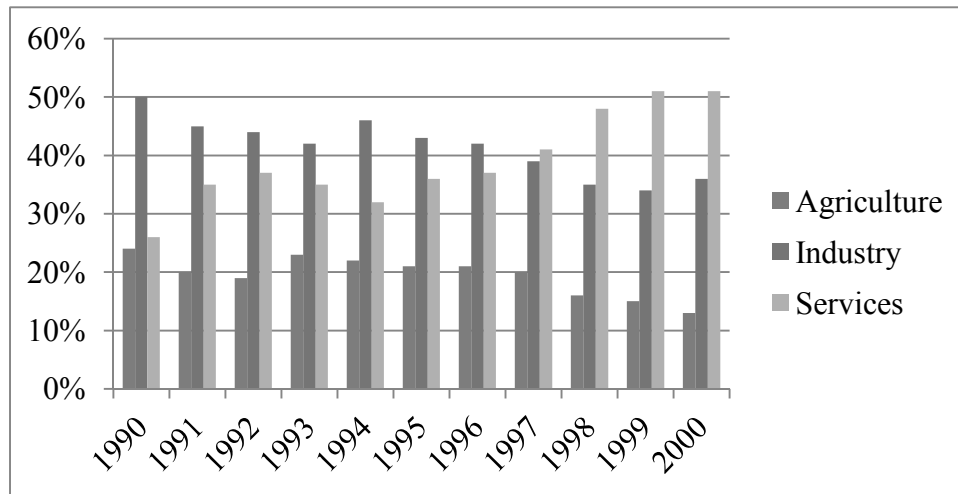


Figure 5. Sectoral shares in total employment in Romania

Source: World Bank

Likewise, the share of industry in GDP also decreased from 60% in 1990 to 36% in 2000 (see Figure 6). Similarly, the agricultural sector share continued a downward trend. On the contrary, the services sector share followed an ascending line.



**Figure 6. Sectoral shares in GDP in Romania**

*Source: World Bank*

To sum up, both Eastern European countries, Bulgaria and Romania, experienced a process of deindustrialization in the 1990s. In contrast to Bulgaria, however, in Romania there were important employment losses in the service sector even though in the mid-1990s employment in the service sector moved along with increasing GDP.

All in all, the sectoral allocation of production and labor resources among the major three sectors (agriculture, industry and services) has become more resembling to the sectoral allocation existing in Western economies. On the whole, in transition countries the shares of value added and of employment in industry and in the agriculture sector decreased, whereas the service sector became a growing segment of these developing economies. These essential structural changes can be traced mostly to the stronger integration with the EU that has taken place. Intensified trade and a higher inflow of FDI have modified the competitive environment of the Eastern companies and have reshaped the spatial distribution of major economic agglomerations.

### 3. Measuring Spatial Agglomeration

In the literature on spatial agglomeration, there is a variety of approaches to measure the extent to which an industry is concentrated in a certain area. Probably the most commonly utilized measure to spatially delimit agglomerations is the location quotient, simply written as LQ (O'Donoghue & Gleave, 2004, p. 421). Its ease of use, the accessibility of data, and its applicability at different geographical scales suggest that the LQ is suitable to be used for our purpose of measuring agglomeration. Generally, location quotient is expressed in terms of employment and turnover. The formula for computing this index can be written as:

$$LQ = \frac{E_{ir}}{E_r} \cdot \frac{E}{E_i}$$

where:

- represents employment in sector  $i$  of region  $r$ ;
- represents total employment in all sectors of region  $r$ ;
- represents employment in industry  $i$  of all regions;
- represents total employment in all sectors of all regions.

It is assumed that the base year is identical in all of the above variables.

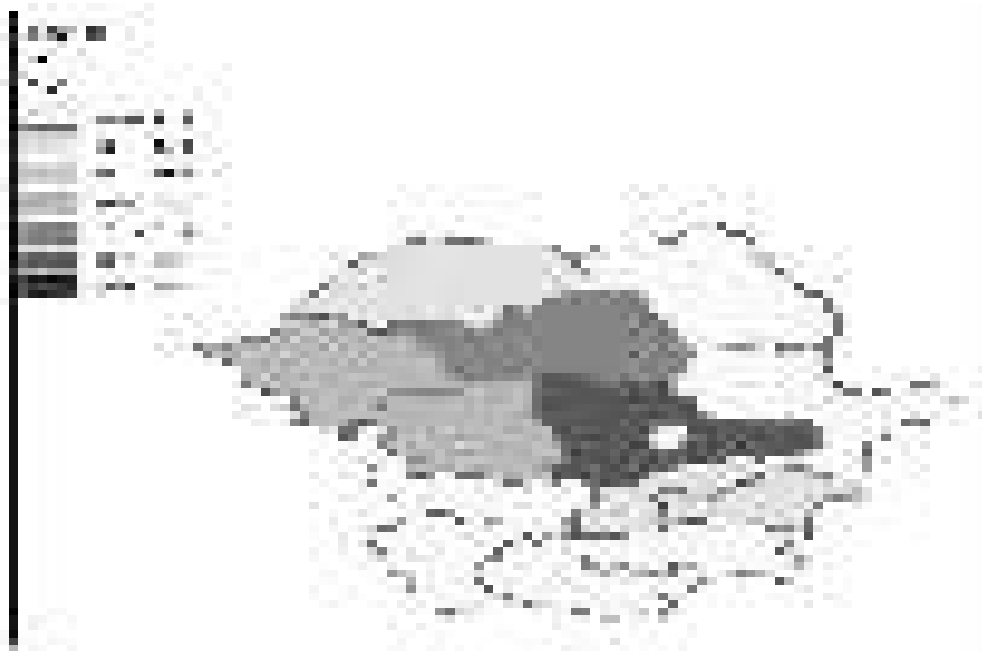
The rationale underlying this index is that if  $LQ > 1$ , the industry is “over-represented” in the case study region compared with the rest of the regions. If  $LQ < 1$ , the sector is “under-represented” in the region (Hayter, 1997, p. 435).

For our analysis, in order to distinguish between those industries that have exhibited substantially different spatial patterns of agglomeration over the last years, we have computed an average LQ by calculating an arithmetic average of the number of employees needed to determine each component corresponding to location quotient.

In our study, we use employment data at regional NUTS 2 level for Bulgaria and Romania over 1999 to 2007. Considering that comprehensive data are limited, we chose this period due to the scarce availability of data. Our data set contains employment on the major economic sectors (2-digit codes) for 6 regions in Bulgaria and 8 regions in Romania. The data included in this data set has been collected from Eurostat's regional database.

#### 4. Results

In this section we present the results of LQ calculations which show the variation of spatial agglomerations in terms of employment change in some individual industries between 1999 and 2007. Measuring an average location quotient index helped us in providing an overview of the transformations regarding the evolution of regional industrial agglomerations in the last years across Romania compared to Bulgaria. Thus, in the next figures we map out the values of average LQ index in some selective industries that we considered being driving forces for developing countries.



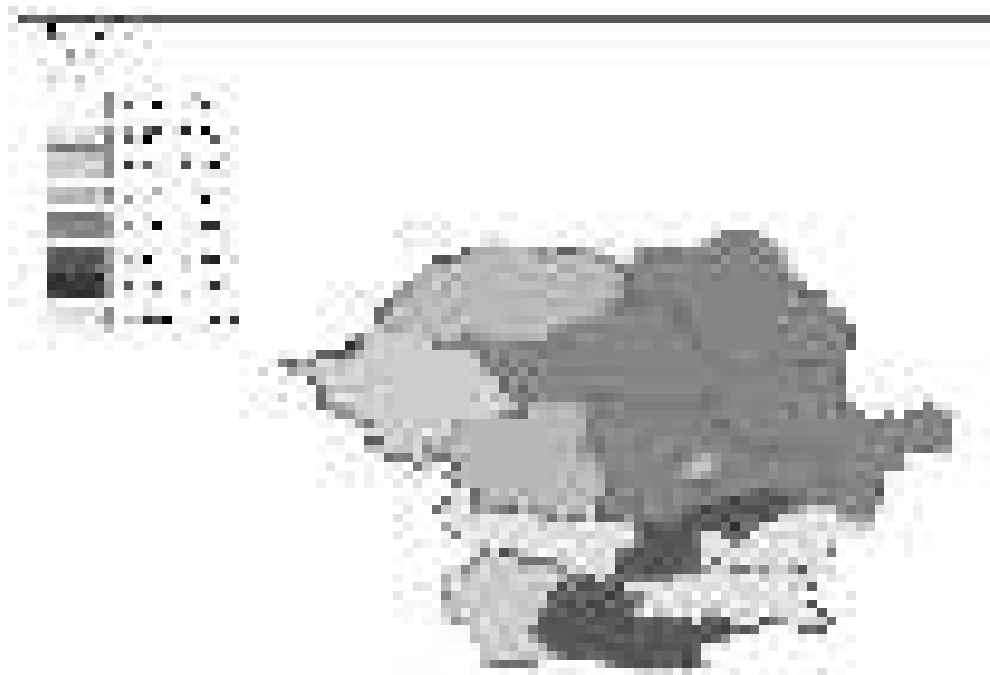
**Figure 7. Spatial distribution of agglomerations in automotive industry between 1999-2007**

*Source: own calculations based on REGSTAT data set*

As we can easily observe from the above map, between 1999 and 2007 the South-East part of Romania and the South-West area of Bulgaria developed the same spatial agglomeration patterns in automotive industry. It is quite obvious that in these regions the automotive sector recorded the lowest increase in the degree of labour force concentration. By contrast, employment is more concentrated in this industry in the South-West area of Romania. Moreover, it seems that this particular sector registered the strongest increase in the degree of employment concentration in South-Muntenia region of Romania. This result confirms the flourishing

automotive industry especially from Pitesti city, this specific sector managing to survive from the era of Soviet-style planning.

The next map provides a spatial representation of agglomeration patterns in food and beverages in 8 Romanian regions and in 3 Bulgarian regions from 1999 until 2007.



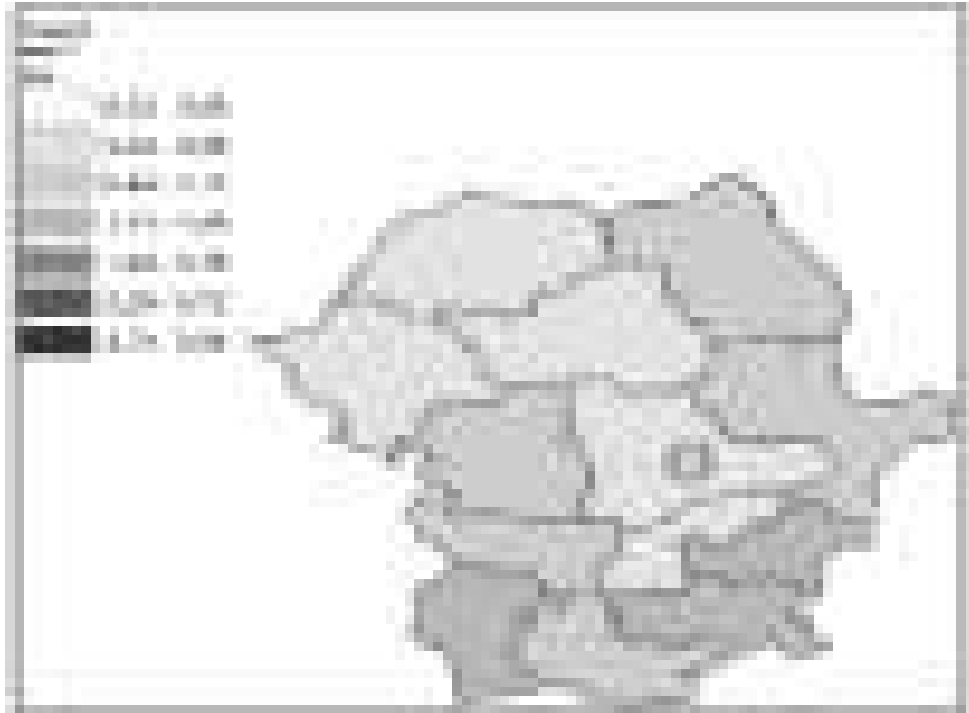
**Figure 8. Spatial distribution of agglomerations in food and beverages industries between 1999-2007**

*Source:* own calculations based on REGSTAT data set

Even though there are some missing data for Bulgaria, we can observe that this important sector registered a significant increase in the degree of labour force concentration in Severen tsentralen and Yuzhen tsentralen. By contrast, Romanian regions didn't follow the same agglomeration pattern, the central area and the South-East part of Romania being characterized by a lower degree of labour resources concentration.

In the following map, we can visualize the geographical representation of agglomeration patterns in construction industry in Romania and Bulgaria over 1999 to 2007.





**Figure 9. Spatial distribution of agglomerations in construction industry between 1999-2007**

*Source: own calculations based on REGSTAT data set*

This map presents a more or less uniform degree of agglomeration patterns of the construction industry in the regions of the two countries taken under consideration in the period under review. The only exceptions are 3 Bulgarian regions: Yugozapaden, Severoiztochen and Yugoiztochen. In contrast with all the rest regions, these 3 Bulgarian regions are characterized by a slightly higher degree of labour resources concentration.

## 5. Conclusions

In this paper we have attempted to explore the transformations occurred in the spatial industry agglomeration across the Eastern EU developing countries, paying special attention to lagging regions from two neighboring countries, namely Bulgaria and Romania. We have carried out more an explorative analysis which came up with interesting results. First of all, we found both similarities and particularities in the process of employment growth in the two above mentioned transition countries. During the 1990s the industrial sector has declined strongly in Bulgaria and Romania, while the service sector has grown in Bulgaria.

Nevertheless, Bulgaria and Romania have experienced a growing share of employment in agriculture. At a general level, these two developing countries have experienced a massive reallocation of production and the labor force during transition, which strongly affected the patterns of regional concentration of employment. In a further step we investigated the evolution of spatial agglomerations in terms of employment change across 14 regions from Bulgaria and Romania by closely looking at regional agglomeration patterns inside individual industries. Our results suggest that economic activities have become increasingly concentrated at regional level between 1999 and 2000. All in all, our outcome can be of special interest because it concerns situations from Eastern Europe that are substantially different from the common case-study material found in the current literature. Of course, much supplementary work is needed in order to provide more vigorous clarification of the questions raised.

## 6. Acknowledgement

This work was supported by the European Social Fund in Romania, under the responsibility of the Managing Authority for the Sectorial Operational Programme for Human Resources Development 2007-2013 [grant POSDRU/CCP 107 DMI 1.5/S/78342].

## 7. References

- Amiti, M. (1999). Specialization Patterns in Europe. *Weltwirtschaftliches Archiv/World Economic Archives*, 135(4), pp. 573-593.
- Brühlhart, M. (1998). Trading Places: Industrial Specialization in the European Union. *Journal of Common Market Studies* 36(3), pp. 319-346.
- Combes, P.P. & H. Overman (2003). The Spatial Distribution of Economic Activities in the EU. *CEPR Discussion Paper 3999*. London: Centre for Economic Policy Research.
- Haaland, J.I., Kind, H.J., Midelfart-Knarvik, K.H. & J. Torstensson (1999). What Determines the Economic Geography of Europe? *CEPR Discussion Paper 2072*. London: Centre for Economic Policy Research.
- O'Donoghue, D. and Gleave, B. (2004). A Note on Methods for Measuring Industrial Agglomeration. *Regional Studies*, 38(4), pp. 419-427.
- Hayter, R. (1997). *The Dynamics of Industrial Location. The Factory, the Firm and the Production System*. England: John Wiley and Sons Press.

### **Online sources:**

<http://www.worldbank.org/>.

[http://epp.eurostat.ec.europa.eu/portal/page/portal/statistics/search\\_database](http://epp.eurostat.ec.europa.eu/portal/page/portal/statistics/search_database).

## **Is Industrial Districts Logistics Suitable for Industrial Parks?**

**Fabio Musso**<sup>1</sup>

**Abstract:** The paper discusses the role of logistics for industrial districts, highlighting the current status and defining a logistics model supporting the relationships between providers and users of logistic services within the local context of an industrial district. A comparison with industrial parks, with reference to Romanian ones, allows identifying the potential of adaptation for industrial district logistic models to industrial parks.

**Keywords:** industrial districts; logistics; industrial parks

**JEL Classification:** P25; R58; L16; O2

### **1. Introduction**

Local industrial systems are in recent years exposed to strong stimuli arising from technological change and the growing competitive pressure both in the internal and the international markets. Under the influence of globalization and internationalization, industrial districts are forced to redesign their organization in order to open their boundaries to new markets and suppliers, being also forced to rethink their model of value generation, based on a local concentration of firms. In this scenario, logistics is particularly important for the role of local connector of networks focused on firms' ability to interact and coordinate themselves to respond to market changes on the basis of speediness and flexibility.

However, integrated logistics inside industrial districts, in spite of its potential, still faces infrastructural and cultural barriers. Industrial districts are characterized by the agglomeration of medium and small-sized industries, localized within a certain geographic area with precise social and cultural connotations. A crucial element of industrial districts is the existence of a wide immaterial flow of knowledge and information. In this sense, the industrial districts seem to have a network shape, rather than a hierarchical one. After an overview on the concept of industrial district, this paper analyses the role of logistics as a support framework in the

---

<sup>1</sup> Professor, PhD, University of Urbino "Carlo Bo", Italy, Address: Saffi 1, 61029 Urbino, Italy, Tel.: +390722305327, Fax: 390722329186, Corresponding author: fabio.musso@uniurb.it.

relationships between providers and users of outputs. A model for industrial district logistics will be proposed.

Then a comparison with industrial parks will be made with reference to Romanian industrial parks, which are a relatively new phenomenon in Romania. The model of industrial parks seems to fit better Romanian market that has lack of industrial tradition. Unlike industrial districts, industrial parks are usually administered by a company which holds the title of industrial park while the land must meet certain conditions, provide certain facilities (access to road infrastructure and / or rail, exemption from taxes) and obligations (Dodescu & Chirilă, 2012).

Potential of adaptation of industrial district logistic models to industrial parks will be discussed.

## **2. Industrial Districts and the Role of Logistics**

Industrial districts are characterized by a concentration of small and medium-sized enterprises, localized within an area with specific social and cultural characters (Carbonara, Giannoccaro & Pontrandolfo, 2002). Firms are generally specialized in one or more production phases and are connected each other through a complex relationships network based on complementarity and interdependence.

This decentralized organization varies among districts, depending on the characteristics of the production technology. Particularly, the recourse to the network depends on the possibility of clearly distinguishing phases along the productive process and on the existence of different minimum efficient scales at each stage.

According to Ketels (2004), a particular industrial district shares four critical characteristics: proximity, linkages, active interactions between firms, and critical mass.

Referring to the concept of cluster, Porter (1990) identified two types of clusters: *vertical clusters*, made up of industries that are linked through buyer-seller relationships, and *horizontal clusters*, that include industries which might share a common market for the products, use a common technology, labor force skills and similar resources.

With reference to the type of links and level of coordination, Markusen (1996) distinguished four types of industrial districts:

- a) Marshallian industrial districts, where the business structure is comprised of small, locally owned firms that make investment and production decisions locally, and characterized by the fact that they consciously relate with each other to solve problems;

- b) Hub-and-spoke industrial districts, present in regions where a number of key firms and/or facilities act as anchors or hubs to the regional economy, with suppliers and related activities spread out around them like spokes of a wheel;
- c) Satellite platform, a congregation of branch facilities of externally based multi-plant firms;
- d) State-anchored industrial district, where a public or non-profit entity (a military base, a university, or a concentration of government offices) is a key anchor tenant in the district.

Beccattini and Rullani (1993) identified the reason of the success of industrial districts. A key character, mainly in the cases of marshallian or hub-and-spoke industrial districts, is the presence of information flows that do not occur following only formal channels, but also informal and social based channels. These information flows ensure a rapid circulation of knowledge and foster the creation of widespread innovation processes. Information exchanges refer to specialised knowledge, uncodified and which cannot then be easily transferred to other systems (Gottardi, 1996; Maskell, 1999).

Therefore, the industrial district takes a network shape, rather than a hierarchical one, making the system more flexible. From a division of cognitive labor perspective, inside the network each company has its specific task.

To provide an output that fits to the customer's requirements a coordinator role is played by a firm that acts as an interface between the market and the district supply chain. Within this network, logistics plays a fundamental role, as essential support to interactions among companies taking part to networks/districts/supply systems.

For a better comprehension of the importance of logistics for industrial districts, a perspective focused on the firm and its relationship system is necessary, since logistic activities arise from the need to interact upstream and downstream according to criteria of efficiency and effectiveness. This is necessary to face competition in a market context.

The reduced size of the firm and, more important, the inclusion within industrial districts, are characters that emphasize the role of connector exercised by logistic activities in the presence of mechanisms of division of labor and specialization. These mechanisms are incomplete forms of transfer and re-transfer of knowledge (Di Bernardo & Rullani, 1990) and they need, especially in mature markets/industries, infrastructures that serve as support for innovative paths, with the objective to establish new competitive advantages (Albertini & Pilotti, 1996). Logistics plays an important role in this supporting task. Its potential can be exploited on a double front: the firm itself, supporting its value chain, and the system of relationships with suppliers and customers, inside and outside the industrial district.

With specific reference to logistics for firms, it is now widely recognized the role it takes in order to optimize the connection between purchasing, production and sales, through planning, organizing and controlling the activities of moving and storage of goods, starting from the points of acquisition of materials, along with the manufacturing process, up to the final customer.

Traditional activities that make up the logistic cycle (storage and inventory management, in-bound and out-bound transportation, final products storage, materials handling) tend to identify themselves as flow activities, that allow the overcoming of the single firm boundaries leading to a wider perspective, by which some activities can be placed outside the firm, along the sale or supply phases, mainly with the use of specialized operators.

In addition to these activities there are others who see their importance increased in relation to the need of improving the level of coordination with the partners of the supply chain / channel. This enhanced coordination can be pursued for the management of administrative flows (that represents a potential constraint on the fluidization of logistic activities, and that can be overcome thanks to the development of information and communication technologies - ICT), the provision of pre and post-sales services (customer service, returns management), optimization of reverse logistics for the organization of the recovery flows and reconditioning (or disposal) of products and packaging, and related administrative tasks.

This set of activities is supported by information flows, which are the basis on which the current concept of integrated logistics can be stated. Integrated logistics enables information processing and exchange at more affordable costs and in shorter time along the supply and distribution chain. Therefore, the traditional idea of logistics as an internal function for firms is superseded by a wider, but also more complex, concept which connotes logistics as a technical and organizational infrastructure that supports the management of all the physical and information connections with the subjects involved in the value chain.

In favor of the integration along the supply chain, on the upstream side, and the distribution/marketing channel, on the downstream side, are the benefits obtained with the approach related to the enterprise resource planning (ERP) systems, the use of which leads to an integration of the external relations of the firm with its internal activities. In this sense also the Supply Chain Management (SCM) concept can support an integrated view of the external activities of the value chain.

Thus, the objective of logistics becomes the coordination and alignment of its strategic components through the harmonization of all the physical and information flows that run along the firm's activities, both internal and in its relations with the outside environment (Cerruti & Musso, 2004).

Similar considerations can be made with reference to logistics for industrial districts, that becomes even more important. The small size of firms and the increased dependence of the single production units from the mechanisms of division of labor emphasize the importance of logistics as a connector on which the competitive advantage of the entire local system can be established.

However, some typical features of industrial districts are limiting the possibilities of full exploitation of logistics applications. The first of these is in the reversible character of the production networks (Corò & D'Agostino, 2001). In this sense networks are not stable, since they can be seen as “teams of firms” (Becattini, 1999) that are constituted time to time around specific product / market related projects. The composition of each team is made on the basis of the goals of the single project and also depends on the performance of partners, that can be easily replaced in the event of incapacity or inefficiency.

This character is not compatible with strong and stable links, as a necessary condition to justify high relation specific investments, as those related to the acquisition of software (SCM, ERP, extended ERP), to the recruitment of qualified human resources dedicated to the interface functions, to the re-engineering and sharing of practices, technical standards and databases.

In addition to this, the competitive/conflictual character of industrial districts relationships leads companies to distrust shared structures and procedures (Pepe, 2000). Small entrepreneurs fear loss competitive advantage, or undermining the uniqueness or differentiation of their products, or to weaken the relationship with their customers.

Another limit to the development of industrial district logistics is in the strong heterogeneity between the different districts due to localization (and de-localization) choices, characteristics of the final and intermediate demand (type of customers, time to market, seasonality), characteristics of the production processes, materials, technology, so that a general model of district logistics cannot be easily defined.

Also the poor orientation to the outsourcing of logistics services and a general distrust to outsource the downstream stages of the supply chain (order processing, packaging, etc.) are an obstacle for district logistics (Cerruti & Musso, 2004).

The comprehension of the potential of logistics within industrial districts must be analyzed considering the limitations and obstacles described above. In order to assess this potential, the main factors that determine the specificity of a single industrial district must be kept into account. The specificity factors are as follows:

- Technological cycle of the district supply chain and product characteristics: type of sector, materials, specialization / division of labor, contextual location and

- infrastructural conditions, i.e. all the features related to products manufactured, which have influence on production processes and supply chain relationships;
- Degree of homogeneity / heterogeneity in size and organization of firms, and their degree of strategic rationality. This is a factor that affects the possibility to develop and share innovative solutions related to logistics and ICT;
  - Type of government of district relationships, depending on the level of centralization / dispersion of decision nodes and the degree of power of leading firms.

### **3. A Model for Industrial District Logistics**

To organize an integrated logistics for industrial districts a double level, single firm and district, can be assumed. The firm's level solutions should be consistent with those for the structural strengthening of the local environment and its links with outside markets.

A first step is a better coordination and synchronization of all parties involved, including those that offer logistics services. This means first of all to achieve a minimum level of ICT capacity among all subjects, including smaller ones, to allow the establishment of digital networks whose effectiveness depends on the quality of information exchanges and the degree of organizational integration among firms.

In this field local authorities and entrepreneurial unions can play a relevant role in organizing or supporting training initiatives and the adoption of ICT solutions, even coordinating the searching and negotiating activities with local or external providers of ICT services.

The organization of logistic activities can be analyzed looking at infrastructures and services in relation to two critical areas: the first is referred to physical flows and transports, that occur within the firms (between production phases or plants), outside firms but inside the district (for interfirm relationships), and outside the district linked to the supply logistics (inbound) and distribution (outbound). The second area is referred to the management of stocks, in this case with reference to stocks within the district supporting both the single firm production flows and the interfirm relationships (Figure 1).



	Internal to firms	External to firms Internal to the district	External
Flows	Own managed by firms	Shared transport services (third party managed)	Open (to other firms within the area) hubs
Stock management	Own or third party managed warehouses and platforms	District platforms (third party managed)	

**Figure 1. Organization of flows and stocks for industrial district logistics**

As regard to the first of these two areas, internal flows refer to materials, components and semi-finished products movement from a production line to another, or from a plant to another. Internal flows need to be managed by the firm as part of the production process.

Interfirm transport flows within the district are usually managed by the single firms with their own vehicles. This is an area of possible optimization through the adoption of a third party transport service, that can better organize all transports thanks to an ICT based coordination system.

External transport, both from the supply side (inbound) and to the market side (outbound) can also be managed by specialized companies which can also provide infrastructure and services for materials and products handling. These services can be open to other firms of the area that are not part of the industrial district. The only limit, in this case, is in the degree of compatibility of other sectors with the technical facilities and vehicles that in some cases need to be sector-specific. The benefit from the open shape of the hub is in the possibility to rely on a scale size of facilities which in many cases goes over the volumes handled by a single district.

With regard to the second area, the stocks management, referred to inbound materials and components, intermediate products through the production processes and the final outbound products, solutions can be found at the single firm level and at the district level.

Inside the single firm, warehouses and storage areas can be managed directly (in-house) or through specialized service suppliers (in-sourcing), which can also use their own facilities inside the firm's boundaries.

Within the district, common solutions can be adopted for the management of specific platforms and warehouses. These structures can be managed by external specialized service suppliers or by associated / co-operative organization.

For the success of this model, not only the physical issues are critical, but also the ICT infrastructure, that requires a strong partnership with advanced suppliers. Since the integrated logistics problem is firstly an information-sharing problem, it is fundamental studying the information channels within the district; that is, information flow and existing relationships among different companies, to facilitate the rationalization of material flows (Dell'Orco & Giordano, 2002).

For both levels of intervention discussed above (flows and stocks), innovation of logistics processes is necessary and it is favored by the development of digital platforms within the district. The support from these platforms is in terms of efficiency and optimization for all commercial, administrative and logistics related relationships among the district firms and with the external partners. This can at least partially compensate for the lack of internal information management and organizational capabilities of individual small businesses.

Also this area can be a field on which local authorities, institutions, administrators and entrepreneurial unions can support and stimulate the search for coordination and the selection of external specialized providers of logistics and ICT services and infrastructures.

#### **4. Industrial Parks and Industrial Districts: A Comparison**

Industrial parks are agglomerations of firms within a dedicated area with facilities and centralized services that support the functioning of the resident firms. They are usually located near a city, possibly nearby road / rail infrastructures and accompanied by tax exemptions and discounted utilities. As tools to encourage agglomeration economies, they can be considered as instruments of industrial policy in order to influence the development of a locally rooted industrial structure.

Industrial parks can also be named as science parks, technology parks, innovation parks, technological development zones, hi-tech industrial zones (Dodescu & Chirilă, 2012) or, in particular circumstances with tax and duty concessions, free trade zones, border economic zones or special economic zones (Musso, Bartolucci & Pagano, 2005).

In case of the prevailing industrial character, the relevant facilities are those related to spatial conditions, dedicated infrastructure and services, and support from public

authorities. When the prevailing character is on innovation and technology, additional conditions come from partnerships with universities, research institutes, training centers and other subjects.

Industrial parks are usually administered by a company owned (or participated) by a local administration (Municipality or Province).

Compared to industrial districts (Table 1), industrial parks are more clearly focused on the objective of industrial development, with weaker links with the surrounding social and economic environment but with a more efficient and rational organization of the infrastructure and services required for the functioning of the businesses that are located inside them.

**Table 1. Differences and similarities between industrial districts and industrial parks**

Characters	Industrial Districts (ID)	Industrial Parks
Localization area	Close proximity (Gordon, McCann, 2000) or more widespread in a territory. Wider extension and blurred boundaries compared to IP	Close proximity, smaller extension than ID and delimited boundaries
Origin	Spontaneous on the basis of: a) Manufacturing tradition (e.g. Italian IDs); b) Regionalized or localized outsourcing system by a single "channel master," such as "Toyota City" (Isbasoiu, 2007; Sheffi, 2010); c) Closeness to Universities, research centers (e.g. Silicon Valley)	Deliberate structures, planned by local administrative authorities
Industry / sector specialization	Yes	Possible, but not common
Specialization of individual firms and division of labor among firms within a district value chain	Yes: technical fragmentation of the manufacturing cycle and original method of social coordination of the supply chain (Piore, Sabel, 1984)	Possible, but not common
Interdependence	Yes	Possible, but not common
Competition and co-operation among firms	Strong	Weak or non-existent
Common services and public utilities	No	Lighting, energy, electricity, heating, running water, gas, security, cleaning, catering, public transport to the park site (Dodescu, Chirilă, 2012)
Common customers	Yes	Possible, but not usual
Social links	Yes, in the form of a social community (Morosini, 2004)	No
Information networks	Wide flow of knowledge and information (codified and tacit) both upstream and downstream the value chain (Dell'Orco, Giordano, 2002)	Only for centralized services
Land ownership	Widespread among entrepreneurs	Municipalities or other administrative authorities. Administration managed by a public owned real estate company

One of the key characters of industrial districts, the common language and culture among all firms participating to the same sectorial value chain, is not present in industrial parks, which are planned by local authorities with the objective to stimulate entrepreneurship and innovation, but not with reference to a specific sector / industry.

The more heterogeneous specialization of firms within industrial parks brings them to connect separately with the market, preventing them to exploit those that have been defined as “channel district economies” (Pepe & Musso, 2003). As a matter of fact, the industrial district plays an important role in market relationships, first of all, because of the greater visibility, compared to the single firms, among channel subjects. Once located the production area, it is easier for intermediaries, especially those at the international level, to find a supplier inside a sector specialized district. Therefore, being placed inside a district becomes a natural promotional tool towards trade operators, for which the presence of many firms in competition each other offers an easy way of comparison and the possibility of selecting the best supplying conditions.

Although industrial parks do not offer the same advantages of industrial districts in terms of Marshallian industrial atmosphere and channel economies, the presence of favorable conditions is a stimulus particularly for smaller firms and star-ups, as a pre-condition for the fertilization of an industrial culture at the local level.

## **5. Industrial Parks in Romania**

Like all the Eastern European countries, in the last two decades Romania experienced the transition from a centrally planned economy to a market economy. Romania was a highly industrialized country in the communist period, with mono-industrial or predominantly agricultural economic structures (Dodescu & Chirilă, 2012).

However, the transition turned into a process of de-industrialization, as a consequence of the crisis of the post-communist system, the closure of relevant factories and unsuccessfully privatization processes (Boștină, 2010). The strongest stimulus to industrialization came from foreign direct investment (FDI) inflows, in correspondence of a weak national industrial policy, that was characterized by chronic low public research and development and insufficient indirect instruments, such as tax incentives (European Commission, 2010).

A relevant part of FDI came from Italy, whose firms found unique opportunities to develop international supply chains, mainly based on intensive-labor manufacturing processes. The geographical closeness favored North-East Italian companies, that re-located their factories partially reproducing the industrial district model (Majocchi, 2000). However, this did not stimulate an autonomous

entrepreneurial development of local firms. Lack of manufacturing traditions and a weak entrepreneurial culture (strongly influenced by the communist experience) prevented the activation of autonomous mechanisms of proliferation of firms, as typically occurs for industrial districts.

More recently, the phenomenon of industrial parks arose. The development of industrial parks began in Romania in 2001 when the Government introduced new legislation for the creation and functioning of industrial parks (Law 490/2002), providing fiscal advantages and facilities for the investment in infrastructure for industrial activity in specific local areas.

In 2010, in the records of the Ministry of Interior and Administrative Reform were registered 63 industrial parks in various industries (e.g. textile, software and electronics) for a total an area of over 2000 ha, of which 1200 ha were “greenfield” investments (Dodescu & Chirilă, 2012).

The model of industrial parks seems to fit Romanian market and registers a growing trend. Industrial parks are until now considered the only “success stories” in the field of Romanian EU convergent industrial or enterprise policy, like in the case of Industrial Park Eurobusiness Oradea (Dodescu & Chirilă, 2012).

## **6. Conclusion: Industrial District Logistics for Romanian Industrial Parks**

Romania industrial policy must face the risk of deindustrialization and needs to improve the mono-industrial or predominantly agricultural economic structure, in conditions of poor infrastructure and strong migration processes of active population.

In this context, agglomeration economies can be encouraged, with the objective of an industrial structure that could exploit the benefits of the locally rooted economic systems. In the previous sections a lack of manufacturing tradition and local entrepreneurial culture in Romania was discussed, and the role of industrial parks emerged as a policy tool to stimulate a widespread industrialization following the model of the industrial district. For this purpose a key role is played by logistics, that fosters more efficient processes, both physical and informative, within inter-firm relationships inside the district and in market relations.

The logistics optimization model seen in section 3 must be considered with regard to its applicability to industrial parks, especially those in Romania. About this, it must be considered that within industrial parks, intra and inter-firm efficiency in relationship processes is a more relevant key factor, that needs to be stressed. Indeed, whereas manufacturing factors related to agglomeration economies and local know-how are weaker, a more efficiency level must correspond. On the other

hand, in industrial parks sectoral specialization is less relevant as a cohesion factor, and many of the benefits of industrial atmosphere, that are typical of industrial districts, are missing. Hence, these weaknesses can be offset by a higher level of efficiency thanks to the possibility of a greater coordination level that centralized choices can guarantee as regard to common services and infrastructures to be activated. Common services can be related to transports, ICTs and warehouse management, as well as training, administration, banking, insurance, and others. Infrastructures can be those seen for stock management and complementary facilities. In both cases the outsourcing to specialists could ensure more efficient and effective results.

For industrial parks logistics optimization derived by industrial district logistics can produce more effective results than those obtained in industrial districts, therefore representing an important intervention area for economic policy, as well as a valuable reference for the management choices of industrial parks.

## 7. References

- Albertini, S. & Pilotti, L. (1996). *Reti di reti/Networks of networks*. Padova: Cedam.
- Becattini, G. (1999). *L'industrializzazione leggera della Toscana. Ricerca sul campo e confronto delle idee/The industrialization light of Tuscany. Field research and exchange of ideas*. Milano: Angeli.
- Becattini, G. & Rullani, E. (1993). Sistema locale e mercato globale/The local and global market. *Economia e politica industriale/The economy's industrial policy*, no 80.
- Boștină, C. (2010). Reindustrialization of Romania: politics and strategies. *Economistul/The Economist Magazine*, no. 3193 (4219), September. <http://www.economistul.ro/reindustrializarea-romaniei-politici-si-strategii-a2871/>.
- Carbonara, N.; Giannoccaro, I. & Pontrandolfo, P. (2002). Supply chains within industrial districts: A theoretical framework. *International Journal of Production Economics*, Vol. 76, no 2, March 21, pp. 159-176.
- Cerruti, C. & Musso, F. (2004). La logistica nei distretti industriali. Scenari di evoluzione per l'integrazione delle filiere/ The logistics in industrial districts. Evolution scenarios for the integration of supply chains. *Finanza, Marketing e Produzione/ Finance, Marketing and Production*, Vol. 22, no. 4, pp. 23-40.
- Corò, G. & D'Agostino, Z. (2001). *Dal sistema dei trasporti alla organizzazione logistica: spazi di iniziativa strategica per le reti produttive dell'economia mantovana/By the transport system to logistics: spaces of strategic initiative for the economic production networks valance*. Camera di Commercio di Mantova, Rapporto sulla logistica.
- Dell'Orco, M. & Giordano, R. (2002). Web Community of Agents for the Integrated Logistics of Industrial Districts. *Proceedings of the 36th Hawaii International Conference on System Sciences*, IEEE.
- Di Bernardo, B. & Rullani, E. (1990). *Il management e le macchine. Teoria evolutiva dell'impresa/ The management and machines. Evolutionary theory of the enterprise*. Bologna: Il Mulino.

Dodescu, A. & Chirilă, L. (2012). Industrial Parks in Romania: From Success Stories to Emerging Challenges. *International Journal of e-Education, e-Business, e-Management and e-Learning*, Vol. 2, No. 4, August.

European Commission (2010). Member States competitiveness performance and policies. *Commission Staff Working Document - SEC (2010) 1272*, [http://ec.europa.eu/enterprise/policies/industrial-competitiveness/industrial-policy/files/member\\_states\\_competitiveness\\_performance\\_and\\_policies\\_en.pdf](http://ec.europa.eu/enterprise/policies/industrial-competitiveness/industrial-policy/files/member_states_competitiveness_performance_and_policies_en.pdf).

Gordon, I. & McCann, P. (2000). Industrial clusters: complexes, agglomeration and/or social networks? *Urban Studies*, Vol. 37, no. 3, pp. 513-532.

Gottardi, G. (1996). Technology Strategies, Innovation without R&D, and the Creation of Knowledge within Industrial Districts. *Journal of Industry Studies*, Vol. 3, no. 2, pp. 119-134.

Isbasoiu, G.M. (2007). *Industrial Clusters and Regional Development. The Case of Timisoara and Montebelluna*. MPRA Paper No. 5037, November, <http://mpa.ub.uni-muenchen.de/5037/>.

Ketels C. (2004). *European Clusters, Structural Change in Europe, Innovative City and Business Regions*. Hagbarth Publications.

Majocchi A. (2000). Are Industrial Clusters Going International? The Case of Italian SMEs in Romania. *Working Paper* No. 12, University of Insubria.

Markusen, A. (1996). Sticky places in slippery space: A typology of industrial districts. *Economic Geography*, 72, pp. 293-313.

Maskell, P. (1999). Localized Learning and Industrial Competitiveness. *Cambridge Journal of Economics*, no 23, pp. 167-185.

Morosini, P. (2004). Industrial Clusters, Knowledge Integration and Performance. *World Development*, Vol. 32, no. 2, pp. 305-326.

Musso, F.; Bartolucci, F. & Pagano, A. (2005). *Competere e radicarsi in Cina. Aspetti strategici e operativi/Competing and settling in China. Strategic and operational aspects*. Milano: Franco Angeli, p. 44.

Pepe, C. (2000). Il doppio sistema distretto-canale nei percorsi internazionali delle imprese minori/The dual-channel district in international routes for small businesses, in Musso F., *Economie distrettuali e canali di distribuzione all'estero/District economies and distribution channels abroad*, INS-EDIT, Genova.

Pepe, C. & Musso, F. (2003). The International Opening of Small District Firms. Flexibility vs. Consolidation in Channel Relations. *Conference on Clusters, Industrial Districts and Firms: The Challenge of Globalization*. Modena, 12-13 September.

Piore, M. & Sabel, C. (1984). *The Second Industrial Divide: Possibilities for Prosperity*. New York: Basic Books.

Porter, M.E. (1990). The Competitive Advantage of Nations. *Harvard Business Review*, Vol. 68, no. 2, pp. 77-93.

Sheffi Y. (2010). Logistics Intensive Clusters. *Época/Epoch*, Vol. 20, no. 1-2, pp. 11-17.

## Analyzing E-Government Development in Albania. Problems and Conditions

**Fioralba Vela<sup>1</sup>, Luciana Koprencka<sup>2</sup>, Migena Petanaj<sup>3</sup>, Lorena Cakeri<sup>4</sup>**

**Abstract:** E-government development is considered one of the crucial factors for achieving an advanced stage of development in Albania. The number of e-government services introduced to the user in Albania is increasing, although its development and ICT development in general is not in the same level as other countries of the region, due to a lot of problems which Albania faces regarding it. This paper firstly presents a review of e-government for developing countries. The paper then presents the actual situation of ICT development in Albania, with a focus on e-government development stages and services. The paper then proposes an analytical framework for e-government development problems within the context of developing countries, such as Albania.

**Keywords:** e-government; Albania; ICT; development

**JEL Classification:** O38; R58

### 1. Literature Review

#### 1.1. E-government for Developing Countries

A key aspect is the country's context where the phenomenon is deployed and operates. A developing country is generally defined as one that has a per capita gross national product less than USD\$ 2,000 (Ball, 1990). Nearly 80% of the world's population is living in developing countries. The developing terminology doesn't imply that all developing countries are experiencing similar development. Each country has its unique setting and constraints such as political and economic

---

<sup>1</sup> PhD, "Ismail Qemali" Vlore University, Albania, Address: Sheshi Pavarsia, Skele Vlora, 1001 Vlorë, Albania, Tel: +355 (33) 22 288, fax: +355 (33) 22288, Corresponding author: fiorivela@yahoo.it.

<sup>2</sup> PhD, "Ismail Qemali" Vlore University, Albania, Address: Sheshi Pavarsia, Skele Vlora, 1001 Vlorë, Albania, Tel: +355 (33) 22 288, fax: +355 (33) 22288, e-mail: lucianakoprencka@yahoo.it.

<sup>3</sup> PhD candidate, "Ismail Qemali" Vlore University, Albania, Address: Sheshi Pavarsia, Skele Vlora, 1001 Vlorë, Albania, Tel: +355 (33) 22 288, fax: +355 (33) 22288, e-mail: migenapetanaj@hotmail.com.

<sup>4</sup> Msc. "Ismail Qemali" Vlore University, Albania, Address: Sheshi Pavarsia, Skele Vlora, 1001 Vlorë, Albania, Tel: +355 (33) 22 288, fax: +355 (33) 22288, e-mail: lorytaraj22@yahoo.it.



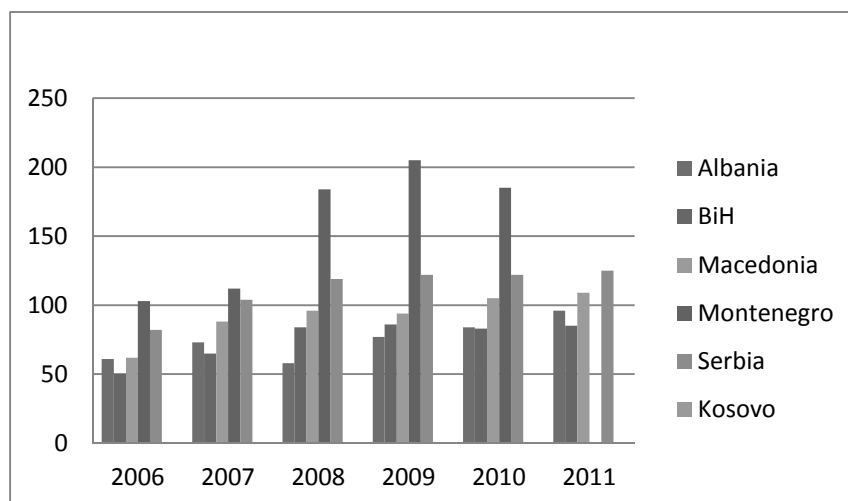
ones. Ultimately, those constraints will impose different issues relevant to e-government security management. It has been suggested that in an environment of low level of democratization initiatives and low level of e-government readiness, there would be less emphasis on privacy, security, and confidentiality issues (Nour, 2007). It is, therefore, necessary to gain an understanding of cultural dimensions that cover both organizational and national culture (Mendonca, 1996; Molla, 2005; Ciganek, 2004; Hofstede, 2001) by taking into account the overall context in which e-government operates.

According to Heeks (2002; 2003) most ICT programs such as e-government in developing countries fail with 35% being classified as total failures and 50% partial failures. The author attributes these figures to the gap between the current reality (physical, cultural, economic and other contexts) and the design of the ICT program - the greater the gap, the greater the chances of failure. Security has always been identified as one of an information system's important components. Contemporary information assurance management recognizes the imperative to include people and processes, as well as the more traditional technology security issues, in ensuring the quality of information in all modern organizations. To a large extent technological solutions for the majority of security issues have been previously developed. There are however still many application challenges, the people and processes components of information assurance management. This leads to the need for the socio-technical approach to focusing on these issues in the required context for technologically developing countries.

ICT in developing countries is generally under-represented in the open literature. A few publications fleetingly concede that there can be major issues with transitional countries developing their systems, but the subject is not treated in any depth or breadth. Given the widespread prescription of IT, particularly e-government for developing countries, the urgency of their needs, and the often paucity of their economic resources, it would be useful to understand in depth the factors and issues that underpin them. Yet there are very few published empirical studies directly addressing the issue.

## **2. A Brief View of ICT Development in Albania**

Telecommunication sector in Albania is characterised by the presence of new service operators, improvement and expansion of existing services and new services present in the market. The number of fixed telephone lines users is increased with 32% in 2009 in comparison with 2001 data.

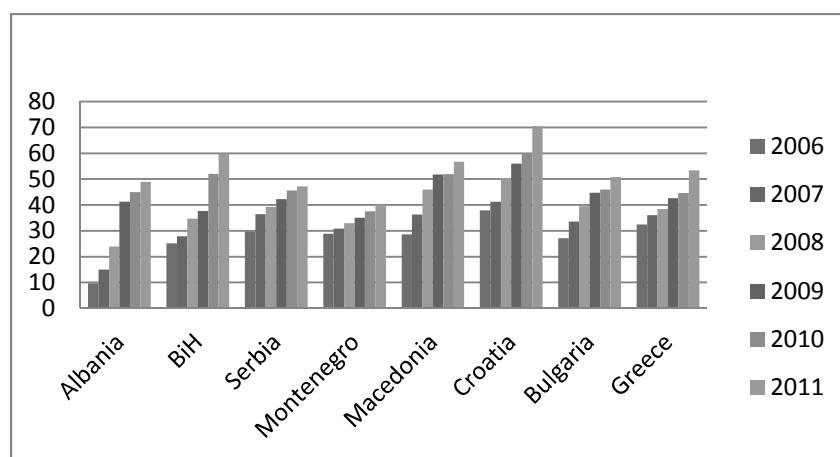


**Figure 1. Mobile cellular subscribers (per 100 people)**

*Source: <http://data.worldbank.org/indicator/IT.CEL.SETS.P2/countries>*

Despite the rapid growth, telecommunications sector infrastructure in Albania still needs to be enhanced when compared with the achievements of other countries in the region. Figure.1 gives a view of the situation in cellular line subscribers per 100 people in the region, ranking Albania behind Montenegro, Serbia, etc.

Another indicator of infrastructure in the telecommunications sector is internet users per 100 people. As presented in Figure.2 the number of internet users in Albania is still below that of other countries in the region, despite of the fact that in 2009 is noticed a considerable increasing in the number of internet users, which makes Albania comparable with Bulgaria, Montenegro and BiH.



**Figure 2. Internet users per 100 people**

Source : <http://data.worldbank.org/indicator/IT.NET.USER.P2/countries> (2010)

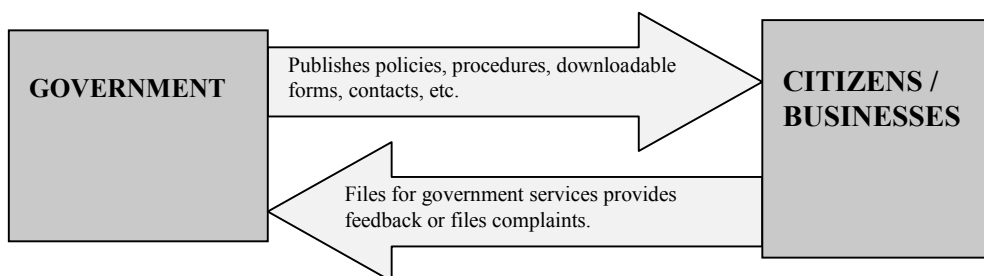
### 3. E-government Development in Albania

In Albania the re-organization and public administration reform requires a much greater streamlining of Government electronic data gathering, exchange and integration. There is an urgent and growing need for the synergistic development of a well-integrated and extensive Government information infrastructure based on advanced ICT. Moreover, following years of un-coordinated development of technical infrastructure in Albania, many local policy makers and donor organizations have come to realize that the success of many projects will depend heavily not only on how efficiently the high-speed communications networks are constructed, but also on how effectively they are utilized and shared by all Government institutions.

#### 3.1. E-government Development Stages in Albania

Although in the first stages, important steps have been made to improve the electronic communication of the government with all the citizens. The ministries and public agencies' web pages can be an efficient mass medium to convey and distribute information, or messages that can serve to different publics and cannot be interpreted by someone other than the organization itself. On the other hand, it is a trans-active two-way communication that facilitates procedures for all actors involved in the process, thus stimulating the public feedback mechanism as a subset of two-way interactions between citizens/businesses and governments that

are channeled to a direct point of contact, and might be both internally and externally traceable.



**Figure 3. The communication process between government and citizens/business**

Most governments realize the potential for e-government initiatives to disseminate information, improve service delivery, increase transparency, decrease corruption, and widen democratic participation. E-Government initiatives can be categorized as internal, which are government to government (G2G) and government to employee (G2E), or external, which are government to business (G2B) and government to citizen (G2C). E-Government transforms the governments' external relationships, whether G2B or G2C, by enabling citizens to directly receive government services from anywhere in the world without making personal visits or going through bureaucratic procedures. Interactions with the government can either be one-way, from government to citizen/business, or two-way, which allows citizen/business to communicate to Government (Figure 3).

Most e-government initiatives that deal with external relations begin with a web presence and evolve into a platform for transactions of government services to take place. Two-way interactions between the citizen/business and government can actually occur from the very beginning with a mere web presence. For example, a website that publishes government policies on registering a business can contain the email or other contact information of the civil servant in charge.

This enables the citizen to initiate a two-way interaction by emailing or calling the person. Online government transactions of course, are two-way interactions where the government first offers the service, the citizen provides relevant information, and the government completes the service.

As shown in the figure below the communication process of e- Government services in Albania has evolved from the passive model of just distributing information on the web, to downloading templates for different services and lastly to direct services delivered online.

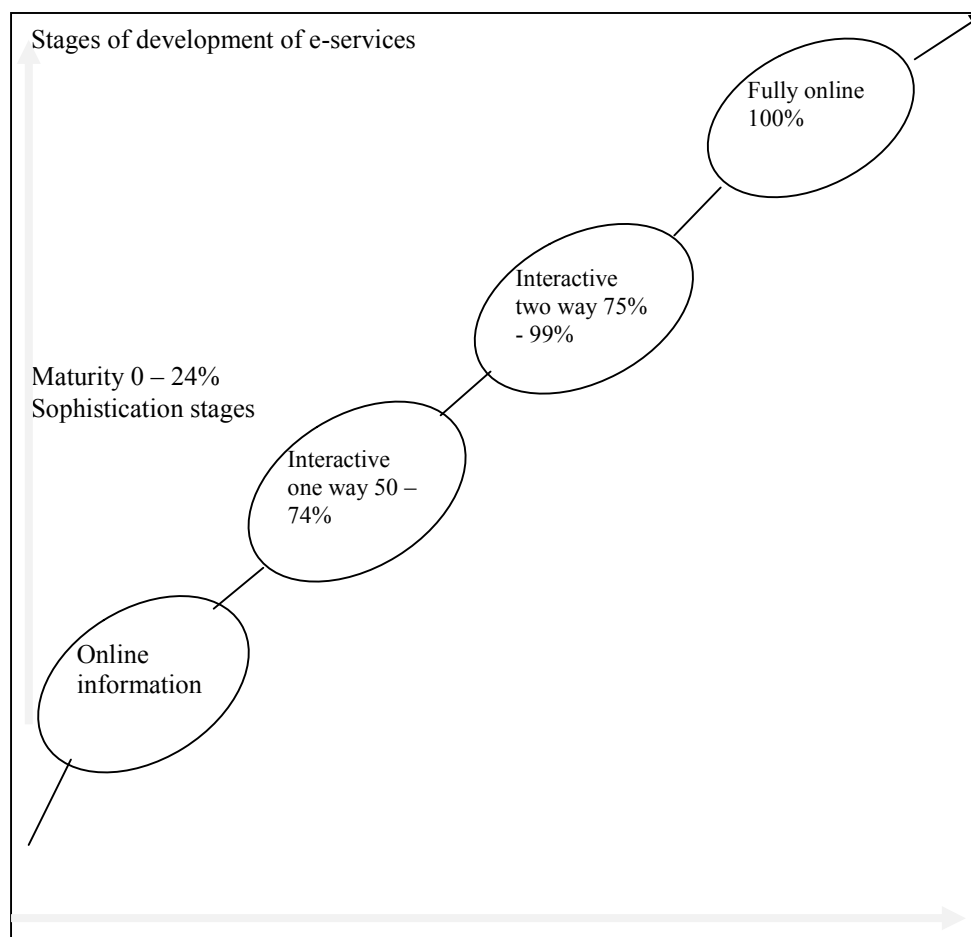


Figure 4. The development stages of e-services

Table 1. Services offered by e-government

<i>Public services (G2C)</i>	<i>Public services for business (G2B)</i>
- Taxes on income	- Staff social insurance
- Job searches and applications	- Taxes for corporations
- Social security	- VAT
- Personal documents (driving licence, passport)	- Business registration (e – business)
- Car registration	- Statistical data
- Application for construction licence	- Custom declaration

- Police denouncement	- Environmental licences
- Public libraries	- Public procurement
- Certificates	- Public finance
- Register for university ( of e- Education)	
- Change of address	- Online trading (e – trade)
- eHealth	
- eCulture	

As a medium in itself e-government can offer information strictly related to the government such as political events, projects, visits, press releases, departmental organization or any other relevant information that might be of public interest. Today, a webpage of a ministry can offer the citizen information on job vacancies, how to address a complaint, how to apply online, or even find the electoral center to vote, etc. Therefore, from the commodity of their house the citizen can have the kind of information needed from the government while avoiding queues and bureaucracies if they were to go there in person.

On the other hands, businesses can use web pages to apply online for public tenders, or pay taxes, download application forms, e.g. in registering a new business, or in declaring good at the custom, etc. In fact businesses are more willing and enthusiastic about the developments that e-government is implementing, because of the time and money saving benefits.

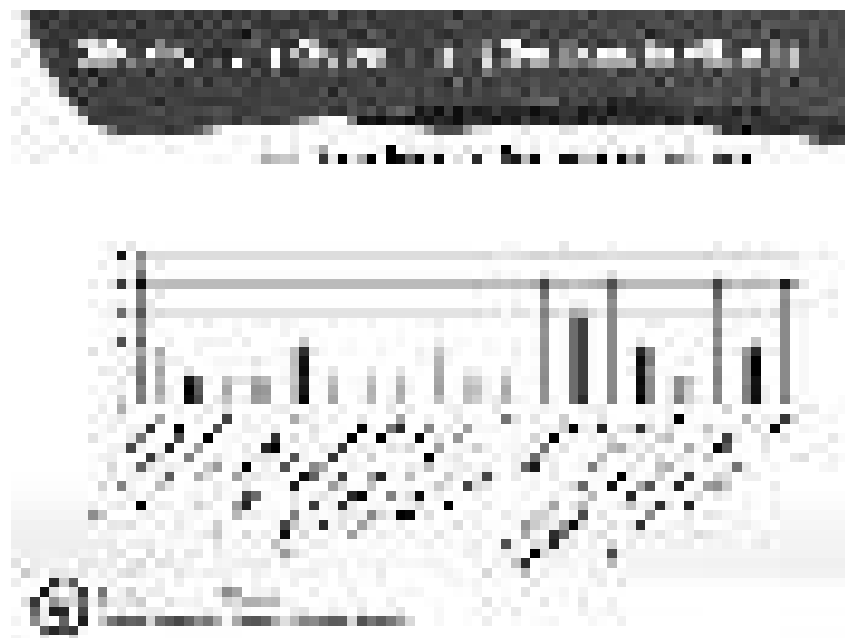
While e-government is in process of transformation of e-government aiming to get all services online, below are some new more services, on which is still working to get online:

- Treasury System – Computerized System for Public Finances, financed by WB;
- NCR – for business registration;
- E - taxes – modernization of tax system;
- HRMS – HR Management system, DoPA;
- E-Custom – ASYCUDA, modern data processing system;
- Health System Modernization – Financed by WB;
- ALUIZNI – Legalization and Urbanization of Informal Areas/Buildings;
- E-Justice – Penalty Declaration;
- E-Albania;
- Civil Registry – Digitizing of hand-writt en records;
- Addressing System – In progress;
- ID Card & Biometric Passports;
- PKI & CA – In progress with Ministry of Interior;

- National Business Licensing Center & National Planning Registry;
- Future Development of GovNet – (GoA).

### **3.2. Situation of E-Government Services Development in Albania**

In the following figure is presented the level of sophistication of e government services in Albania. We notice that social contribution, VAT (value added tax), custom declaration and public procurement are the government services that achieve the highest level of sophistication, in a Lickert scale from 1 to 5. The data used for this evaluation are taken from NAIS (National Agency on Information Society).



**Graphic 1.**

Also, is noticed that the majority of e-government services have not the adequate level of sophistication, which gives us the right to think that e government services are not developed in the right way.

### **3.3. Planning of e - government infrastructure and services development**

In the last years, Albanian government has been focused on e - government development in a special way. National Agency on Information Society has

planned to build the new e - Government infrastructure and services in four phases as following:

- Build the reconfigured physical fiber network that connects all the GoI Institutions in the country.
- Build the network nodes and services point, implement the physical security, administration and monitoring, build the base centralized electronic directory services, starting to implement first layer of Data center Services.
- Implementing interoperability service layer.
- Implementing the full Data center services and G2G, G2C, G2B services.

#### **4. Problems Related to E-Government Development in Albania**

##### **Security Culture**

Security culture represents the prevailing attitude towards approaches to a secure organizational environment. Regulatory intervention is particularly important in formulating rules for using and protecting information assets. These factors are affected by legislative and regulatory frameworks, and national and organizational cultures.

##### **Management**

Information assurance also depends on the management rules, responsibility, awareness and commitment of senior management and users, and relevant policies. These factors are affected by a variety of issues such as available budget, information security management standards and skilled staff.

##### **Information Systems Structure**

According to Heeks (1999) there are three possible approaches to information systems responsibilities: Centralized decisions are taken at the most senior or central level; Decentralized decisions are taken at some level lower than the most senior; typically by individual work units within the organization or even by individual staff; and Core-periphery decisions are taken at both senior and lower levels, either separately or in an integrated manner. Heeks suggests that Core-periphery is most effective for ICT usage and information systems development (Heeks, 1999).

In developing countries governments often exert more influence over industries and organizations, for example controlling access to key resources and setting costs. In developing countries a heavily-centralized management approach is most likely to be favoured over a decentralized one. This centralized approach usually



forces organizations to accept limited information security solutions that might not fit their real needs (Atiyyah, 1999).

## **5. Conclusions and Recommendations**

The network established and other services applied on top of it require from the Government of Albania a long-term strategy in order to sustain it. The Government should designate adequate financial and human resources in order to address the issues formulated in the National ICT Strategy and more specifically the ones related to network maintenance and operation. Ensuring funding and controlling disbursement of financial resources and ensuring a correct awareness of the costs associated to ICT services will be an immediate need the Government has to face. In addition, the Government has to appoint a special ICT structure that will direct, manage, coordinate and supervise all the ICT projects within the Government and at the same time will have a central role in designing and planning for the network. Specialized IT experts will have

to be hired and motivated for working directly in maintaining and operating the network, the e-mail system and many other applications that are and will be implemented on top of the network. The IT staff that has been trained during the implementation of the project should remain at work and given more responsibilities in running the network.

Also, the Government needs to adapt and utilize a generally applicable and accepted standard for good IT security and control practices to support management's needs in determining and monitoring the appropriate level of IT security and control for their organizations, otherwise serious risks will soon appear from improper use of IT equipments and systems. These standards will ensure that users are making effective use of technology and are aware of the risks and responsibilities involved in using the ICT tools. Government has to recognize that the issues exist and need to be addressed immediately.

For countries which are still developing, as Albania, technologically e-government security management has added issues, mostly to do with environmental factors which differentiate them from the implicit assumptions of leading countries.

Potential key problems are security culture, security and privacy legislation, management commitment, management style, senior management and user awareness, skills and training, management change and information security infrastructure.

This paper contributes to the open literature in general and to ICT policy developers in transitioning environments in particular. In today's Information Age this is a very topical issue which is yet to be widely addressed.

## 6. References

- Aljifri, H. A., Pons, A. & Collins, D. (2003). Global e-commerce: a framework for understanding and overcoming the trust barrier. *Information Management & Computer Security*, 11 (3), 130-138.
- Atiyah, H.S. (1999). Public Organizations' Effectiveness and Its Determinants in a Developing Country. *Cross Cultural Management*, 6 (2).
- Bozeman, B. & Bretschneider, S. (1986). Public Management Information Systems: Theory and Prescription. *Public Administration Review*, 46, 475-487.
- Bozeman, B. (1987). *All Organizations are Public*. San Francisco, CA: Jossey Bass.
- Bretschneider, S. (1990). Management Information Systems in Public and Private Organizations: An Empirical Test. *Public Administration Review*, 50 (5), 536.
- Caudle, K.E.N.S.L. (1991). Evaluating Public Sector Information Systems: More Than Meets the Eye. *Public Administration Review*, 51 (5), 377-384.
- Chang, S.E. & Ho, C.B. (2006). Organizational factors to the effectiveness of implementing information security management. *Industrial Management & Data Systems*, 106 (3), 345-361.
- Chang, S.E. & Chin-Shien, L. (2007). Exploring organizational culture for information security management. *Industrial Management & Data Systems*, 107 (3), 438-458.
- Conklin, W.A. (2007) Barriers to Adoption of e-Government. *System Sciences, 2007. HICSS 2007. 40th Annual Hawaii International Conference on system sciences. IEEE*.
- Curire, W.L. (1996). Organizational Structure and the Use of Information Technology: Preliminary Findings of a Survey in the Private and Public Sector. *International Journal of Information Management*, 16 (1), 51-64.
- Ebrahim, Z. & Irani, Z. (2005). E-government adoption: architecture and barriers. *Business Process Management Journal*, 11 (5), 589-611.
- Gilbert, D., Balestrini, P. & Littleboy, D. (2004). Barriers and benefits in the adoption of e-government. *The International Journal of Public Sector Management*, 17 (4/5), 286.
- Heeks, R. (1999). *Centralised vs. Decentralised Management of Public Information Systems: A Core-Periphery Solution*.
- Heeks, R. (2003). Most eGovernment-for-Development Projects Fail: How Can Risks be Reduced? *iGovernemnt Working Paper Series*, Paper no. 14.
- Ho, A. T.K. (2002). Reinventing local governments and the e-government initiative. *Public Administration Review*, 62 (4), 434-444.
- Joia, L.A. (2003). In *Knowledge Management in Electronic Government: 4th IFIP International Working Conference, KMGov 2003, Rhodes, Greece, May 26-28, 2003. Proceedings*, 76-81.
- Kanungo, R. N. and Jaeger, A. M. (1990). *Management in Developing Countries*. New York: Routledge.
- Lam, W. (2005). Barriers to e-government integration. *Journal of Enterprise Information Management*, 18 (5/6), 511-530.
- Lyytinen, K. (1987). Different Perspectives on Information Systems: Problems and Solutions. *ACM Computing Surveys*, 19 (1).

May, L. & Lane, T. (2006). A Model for improving e-Security in Australian Universities. *Journal of Theoretical and applied Electronic Commerce Research*, 1 (2), 90-96.

Rainey, H.G. & Steinbauer, P. (1999). Galloping Elephants: Developing Elements of a Theory of Effective Government Organizations. *Journal of Public Administration Research and Theory: J-PART*, 9 (1), 1-32.

Salman, A. (2004). Elusive challenges of e-change management in developing countries. *Business Process Management Journal*, 10 (2), 140-157.

Shalhoub, Z.K. (2006). Trust, privacy, and security in electronic business: the case of the GCC countries. *Information Management & Computer Security*, 14 (3), 270-283.

Singleton, J. P., McLean, E. R. and Altman, E. N. (1988). Measuring Information Systems Performance: Experience with the Management by Results System at Security Pacific Bank. *MIS Quarterly*, 12 (2), 325-337.

Stewart, J. and Walsh, K. (1992). Change in the Management of public services. *Public Administration*, 70 (4), 499-518.

## Changes in Global Economy Influencing the Maritime Industry

Grama Izabella Gilda<sup>1</sup>

**Abstract:** The world economic situation has brightened in 2010. However, multiple risks threaten to undermine the prospects of a sustained recovery and a stable world economy – including sovereign debt problems in many developed regions, and fiscal austerity. These risks are further magnified by the extraordinary shocks that have occurred in 2011, which have included natural disasters and political unrest, as well as rising and volatile energy and commodity prices. Given that for shipping, all stands and falls with worldwide macroeconomic conditions, the developments in world seaborne trade mirrored the performance of the wider economy. After contracting in 2009, international shipping experienced an upswing in demand in 2010, and recorded a positive turnaround in seaborne trade volumes especially in the dry bulk and container trade segments. However, the outlook remains fragile, as seaborne trade is subject to the same uncertainties and shocks that face the world economy. This paper highlights some developments that are currently affecting maritime transport and have the potential to deeply reshape the landscape of international shipping and seaborne trade.

**Keywords:** shipping industry; maritime transport costs; container shipping; energy security; carbon emission

**JEL Classification:** L91; L95; L98; R41

### 1. Introduction

The world economic situation has brightened in 2010. However, multiple risks threaten to undermine the prospects of a sustained recovery and a stable world economy – including sovereign debt problems in many developed regions, and fiscal austerity. These risks are further magnified by the extraordinary shocks that have occurred in 2011, which have included natural disasters and political unrest, as well as rising and volatile energy and commodity prices. Given that for shipping, all stands and falls with worldwide macroeconomic conditions, the developments in world seaborne trade mirrored the performance of the wider economy. After contracting in 2009, international shipping experienced an upswing in demand in 2010, and recorded a positive turnaround in seaborne trade volumes especially in the dry bulk and container trade segments. However, the outlook

---

<sup>1</sup> Associate Professor, PhD, Faculty of Accounting and Financial Management, Spiru Haret University, Romania, Address: 32-34 Unirii Str., Constanta 900532, Romania, Tel.: +40241 618 903, Corresponding author: izabella.grama@spiruharet.ro.

remains fragile, as seaborne trade is subject to the same uncertainties and shocks that face the world economy.

This paper highlights some developments that are currently affecting maritime transport and have the potential to deeply reshape the landscape of international shipping and seaborne trade.

## **2. Emerging Trends Affecting International Shipping**

The latest economic downturn and the subsequent recovery have highlighted new trends that are reshaping the landscape of international maritime transport and trade. While not an exhaustive list, the key issues set out below are emerging as very important. These include, in particular:

- a global new design;
- energy security, oil prices and transport costs;
- cutting carbon emissions from international shipping and adapting to climate change impacts;
- environmental sustainability and Corporate Social Responsibility;
- maritime piracy and related costs.

### **2.1. A Global New Design**

With large emerging economies such as the Brazil, Russian Federation, India and China being the main engine of growth and trade expansion, the relative weight of advanced economies such as the European Union and the United States appears to be diminishing. The downturn has reinforced a shift of the economic influence from the North and the West to the South and East. This, clearly, is altering the shipping industry's operating context and can be expected to evolve further as cargoes; markets and trade patterns also change in response to the new global design. One recent study finds that China will overtake the United States and dominate global trade in 2030; China will feature in 17 of the top 25 bilateral sea and air freight trade routes (PWHC, 2011). The study also concludes that four key areas could potentially present significant opportunities for transport and logistics firms, including:

- increased intra-Asia-Pacific trade, developed-developing region trade (e.g. China and Germany);
- intra-emerging economies trade (e.g. China-Latin America);
- China-Africa trade.

These developments are likely to affect market segments differently and result in shifts in international transport patterns, with transport growing faster on some routes than others. This also raises the opportunity of opening new markets. In this

respect, one study assessing the routing flexibility of container shipping finds that the Cape of Good Hope route has the potential to emerge as a viable alternative to the Suez Canal route for 11 South–South trade lanes, including West Africa–Oceania, West Africa–East Africa, East Coast South America – Oceania and East Coast South America–East Africa (Notteboom, 2011). From the perspective of shipping, however, these trends raise crucial questions and uncertainties. For example, there remain questions with respect to the future and the shape of globalization in view of:

- a potential growth in regionalization;
- the Doha Round of multilateral trade negotiations;
- the proliferating trade agreements;
- the possible growth of trade protectionism;
- efforts of balancing global economic growth and trade flows;
- the complex nexus between energy security, oil prices, transport costs, climate change and generally environmental sustainability.

## **2.2. Energy Security, Oil Prices and Transport Costs**

The rapid growth in global trade recorded over the past few decades was powered by easily available and affordable oil. Shipping, which handles over 80 % of the volume of world trade, is heavily reliant on oil for propulsion and is not yet in a position to adopt alternative energy sources (UNCTAD, 2010). However, as evidenced by the recent surges in oil prices and as highlighted by many observers, the era of easy and cheap oil is drawing to an end with the prospect of a looming peak in global oil production. It should be noted, however, that there could be some mitigating facts such as high oil prices and carbon emissions concerns that push the industry to consider alternatives such as natural gas and renewable energy sources.

Supply and demand fundamentals are the major driver of oil price hikes. According to the International Energy Agency (IEA), worldwide oil demand is outstripping growth in new supplies by 1 million barrels per year. China is leading the growth in demand and nearly 20 million vehicles will be added to roads in 2011. The IEA estimates that some \$60 billion must be invested in global oil production capacity every year in order to meet global demand (Blair, 2011). Higher oil prices can impact on shipping and trade through both their dampening effect on growth – as it is estimated that \$10 per barrel rise in the price of oil, if sustained for a year, can cut about 0.2 percentage points from GDP growth (EIU, 2011) – and the upward pressure on the cost of fuel used to propel ships – as higher oil prices drive up ship bunker fuel prices. As fuel costs can account for as much as 60 % of a ship's operating costs, a rise in oil prices will undoubtedly increase the transport cost bill for the shippers and therefore potentially undermine trade. A recent study by UNCTAD has shown that a 10 % increase in oil prices would raise the cost of

shipping a container by around 1.9 % to 3.6 %, while a similar increase in oil prices would raise the cost of shipping one ton of iron ore and one ton of crude oil would increase by up to 10.5 per cent and 2.8 per cent, respectively (UNCTAD, 2010). The study concludes that “the results of the investigation confirm that oil prices do have an effect on maritime freight rates in the container trade as well as in the bulk trade with estimated elasticities varying, depending on the market segment and the specification. Moreover, the results for container trade suggest the presence of a structural break, whereby the effect of oil prices on container freight rates is larger in periods of sharply rising and more volatile oil prices, compared to periods of low and stable oil prices”. Bearing in mind the perspective of developing countries, another recent study estimated the impact of higher bunker prices on freight rates, as well as the impact of higher freight rates on consumers and producers (IMO, 2010.) The analysis, which was conducted for several markets – including grain, iron ore, and the container and tanker trades – finds that in the longer term, a change in fuel costs may alter patterns of trade, as the competitiveness of producers in different locations changes as a result of increased transport costs. In line with results of UNCTAD’s own investigation, the elasticity of freight rates to bunker prices was found to differ across shipping routes and trades.

Another issue arising as important for shipping is regulatory driven and relates to the transition to low sulphur fuel. Tighter sulphur limits for marine fuels were introduced through amendments to the International Convention on the Prevention of Pollution from Ships, known as MARPOL 73/78. The MARPOL Convention includes Annex VI titled “Regulations for the Prevention of Air Pollution from Ships” and which sets limits on NO<sub>x</sub> and SO<sub>x</sub> emissions from ship exhausts, and prohibits deliberate emissions of ozone depleting substances. The limits set out in Annex VI can have far-reaching implications for the shipping and oil industry as they affect bunker fuel costs and quality<sup>1</sup>, the future of residual fuel, oil refineries, as well as technologies such as exhaust cleaning systems and alternative fuels. Sulfur limits under MARPOL Annex VI will become effective for emission control areas (ECAs) such as the Baltic Sea, the North Sea, the United States and Canada in 2015. The limits will apply globally from 2020 or 2025.

### **2.3. Cutting Carbon Emissions from International Shipping and Adapting to Climate Change Impacts**

The discussion on energy security and sustainability is closely tied to the current debate on addressing the climate change challenge, since energy can be viewed as both the root cause of the problem and the potential solution. Carbon emissions from international shipping result from the burning of heavy oil in ships’ bunkers. Consequently, addressing the issue of bunker fuel through, for example,

technology or operational solutions and economic instruments or other measures that provide incentives and/or deterrents can help cut emissions and therefore solve the carbon emissions problem. However, recent estimates by the IEA indicate that greenhouse gas (GHG) emissions increased by a record amount in 2009, to the highest carbon output in history, jeopardising the likelihood of reaching manageable carbon concentration levels (Harvery, 2011). The IEA estimates that if the world is to mitigate the worst impacts of climate change, annual energy-related emissions should not exceed 32Gt by 2020. If the 2010 emissions level is sustained, the 32Gt limit will be exceeded a full nine years ahead of schedule (Blair, 2011).

Like other economic sectors, international shipping is facing a dual challenge in relation to climate change. International shipping relies heavily on oil for propulsion and generates at least 3% of global carbon emissions and these emissions are projected by the International Maritime Organization (IMO) to treble by 2050. International shipping is now the subject of negotiations under the auspices of the IMO and the United Nations Framework Convention on Climate Change (UNFCCC). Current discussions are guided by a number of proposals that aim to introduce a variety of measures that could help curb carbon emissions from international shipping. Relevant measures being considered include operational and technological as well as market-based instruments, such as emissions trading scheme and a levy on ships' bunker fuel. However, international shipping and more broadly maritime transport is also facing the challenge of adapting to the current and potential impacts of climate change.

One recent study has estimated that, assuming a sea level rise of 0.5 m by 2050, the value of exposed assets in 136 port mega-cities will be as high as \$28 trillion (Lenton, Footitt, Dlugolecki, 2009). The challenge is thus significant, and raising awareness and improving understanding of the impacts of climate change on maritime transport and the associated adaptation requirements, including funding needs, are fundamental. Accurate information on the likely vulnerabilities and a good understanding of relevant climatic impacts – including their type, range and distribution across different regions and industries – are required for the design of an effective strategy for adequate adaptation measures in transport. Mobilizing requisite resources to finance adaptation action in maritime transport is important, particularly for developing regions. Yet, so far, resources generally allocated to adaptation remain inadequate, especially when compared with the significant adaptation costs estimated in various reports and studies. It is against this background that the High-level Advisory Group on Climate Change Financing (AGF) – established by the Secretary-General of the United Nations in February 2010 to consider, among other things, the potential sources of revenue that will enable achievement of the level of climate change financing that was promised during the UNFCCC in Copenhagen in December 2009 – recommended imposing



a price on carbon emissions from international transport as a potential source for important funding for climate action.

To help fill the prevalent information gap, raise awareness and contribute to shaping effective adaptation action in transport, UNCTAD is increasingly devoting attention to dealing with “the climate change challenge on maritime transport”. Earlier related work by the UNCTAD secretariat includes the Multi-year Expert Meeting on Transport and Trade Facilitation, held 16–18 February 2009, whose theme was “Maritime Transport and the Climate Change Challenge”. The meeting, held in Geneva, brought together around 180 delegates from 60 countries, including representatives from 20 international organizations, as well as the international shipping and port industries. The three-day meeting was the first of its kind to deal with the multiple challenges of climate change for the maritime transport sector in an integrated manner, focusing both on mitigation and adaptation, as well as on related issues, such as energy, technology and finance. Experts at the meeting highlighted the urgent need to reach agreement in the ongoing negotiations on a regulatory regime for GHG emissions from international shipping. They noted then with great concern that so far, insufficient attention had been paid to the potential impacts and implications of climate change for transportation systems, and in particular for ports, which are key nodes in the supply chain and vital for global trade. The central role of technology and finance was highlighted, as was the need for international cooperation among scientists and engineers, industry, international organizations and policymakers in relation to the preparation and design of adequate adaptation measures.

More recently and drawing on its mandate and this work, UNCTAD and the United Nations Economic Commission for Europe (ECE) jointly convened a one day workshop on 8 September 2010 with a focus on “Climate Change Impacts on International Transport Networks”. The workshop aimed in particular to help raise awareness of the various issues at stake, with a view to assisting policymakers and industry stakeholders, including transport planners, operators, managers and investors, in making informed adaptation decisions. The workshop provided a useful platform for considered discussions and set the pace for future work on how best to bridge the knowledge gap relating to climate change impacts on transport networks and effective adaptation responses for both developed and developing countries. Work on these important considerations continues with the establishment in March 2011 of an international group of experts under the auspices of the ECE to help advance understanding of climate change impacts on international transport networks and related adaptation requirements. The first meeting of the international Expert Group was held on 5 September 2011. It approved the work plan of the Expert Group and its key deliverables, which will include a substantive report on relevant issues as well as an international conference to disseminate the results of its findings.

Following up on the abovementioned work, UNCTAD organized on 29-30 September 2011 an Ad Hoc Expert Meeting on “Climate Change Impacts and Adaptation: A Challenge for Global Ports”. The meeting aimed to provide policymakers, key public and private sector stakeholders, international organizations as well as scientists and engineers with a platform for discussion and an opportunity to share best practices relating to climate change impacts on ports and associated adaptation requirements.

#### **2.4. Environmental Sustainability and Corporate Social Responsibility**

Greater public awareness is driving demand for industries to adopt the principles of corporate social responsibility (CSR) including environmental sustainability.<sup>5</sup> This pressure about the socioeconomic as well as environmental sustainability is being felt among the shipping community from both individuals and corporate customers, and there is an increasing call for the shipping industry to adopt as part of its strategic planning, business and operations increased levels of CSR, especially as it applies to environmental sustainability. In adhering to these principles, the shipping community is expected to achieve efficiency, effectiveness and quality of service, while at the same time taking into account the cost generated by any potential negative externalities generated by their activities, including environmental and social. This is particularly illustrated by the growing demand for greater transparency which means that customers and business throughout the supply chains, whether internal or external to the shipping industry, are demanding that social and environmental targets be set and fulfilled to ensure better performances. New technology enables real-time monitoring and assessment of the degree to which shipping is demonstrating leadership in terms of complying with environmental and social targets. The shipping industry can be expected to demonstrate the quality of its performance by allowing customers, regulators and other potentially interested parties to review their performance records. The shipping industry – through the Case for Action paper, which looks ahead to 2040 – recognizes this emerging trend and is considering ways in which it can best respond to these shifting demands. The Case for Action Paper was released under the Sustainable Shipping Initiative (SSI) which brings together leading companies from across the industry and around the world. The goal of the SSI is to transform the global shipping industry and the wider maritime sector by establishing a new, sustainable approach as the norm.

This is illustrated by the liner operators who are increasingly adapting their market strategies to emphasize the ecological and social dimensions as factors of competitiveness business. An example is the ordering by Maersk Line of the triple E-class 18,000 TEUs ships. The design of the 18,000 TEU ships is named triple E-class, reflecting three principles: economy of scale, energy efficiency and

environmental improvement (*IHS Fairplay*, 2011). The ships are expected to be deployed on the Asia–Europe route. This trend is likely to step up competition as few other carriers could potentially be in a position to also order larger ships with a view to enhancing economic and resource-use efficiency, environmental sustainability as well as safeguarding market shares. For instance, CMA CGM announced in May 2011 that three of its 13,830 TEU ships on order are to be increased in size to a super-post-Panamax 16,000 TEU class, i.e. potentially the largest ships afloat if received before Maersk’s 18,000 TEU ship. Germanischer Lloyd, a leading classification society for large vessels, maintains that the technology is available for the building of 18,000 TEU ships, although the port infrastructure required for the handling of such ships may be lacking. As these ships are expected to be delivered in 2014, it can be expected that ports will be modified to adapt to the new ship sizes. However, ports that rely on tides may be facing more challenges in handling these super-post-Panamax ships (Beddow M, 2010).

## 2.5. Maritime Piracy and Related Costs

Despite international efforts to address the problem of maritime piracy, IMO reports that a total of 489 actual or attempted acts of piracy and armed robbery against ships occurred in 2010. This represents an increase of 20.4 % over the 2009. Consequently, 2010 is marked by the IMO as the fourth successive year that the number of reported incidents increased. The scale of the attacks and the size of the vessels targeted are raising further concerns in the international community. This threatens to undermine one of the world’s busiest shipping routes (Asia–Europe) and chokepoint (the Suez Canal).

While shipping has in many cases avoided the piracy affected area in the Gulf of Aden and off the coast of Somalia by rerouting via the Cape of Good Hope, this alternative is not without costs. These costs are likely to be passed on to shippers in the form of higher freight rates and surcharges. Piracy activities raise insurance fees and ship operating costs, and generate additional costs through rerouting of ships. It is argued that if piracy attacks increased 10 times, it would lead to a reduction of 30 % in total traffic along the Far East–Europe trade lane, and that only 18 % of the total traffic would sail through the Cape of Good Hope. Existing studies provide a wide range of cost estimates depending on the methodology and the cost items considered. One recent study has estimated the total cost of maritime piracy in 2010 at \$7 billion–\$12 billion per year, including the ransoms, insurance premiums, rerouting ships, security equipment, naval forces, prosecutions, piracy deterrent organizations and the cost to regional economies (Bowden, Hurlburt, Aloyo, Marts & Lee, 2010). Re-routing ships, insurance premiums, naval forces and security equipment account for the bulk of the costs.

It is estimated that a rerouting through the Cape of Good Hope results in a diversion which lengthens the voyages, and generates costs in addition to the opportunity cost of being unable to make more voyages in a given time period. Additionally, in view of the geographical concentration of recent piracy activity, Africa is likely to be directly affected. In 2010, the macroeconomic costs for four selected African countries and Yemen amounted to \$1.25 billion, with Egypt incurring largest loss per year (\$642 million) followed by Kenya (\$414 million), Yemen (\$150 million), Nigeria (\$42 million) and Seychelles (\$6 million). In Kenya, for example, the costs of imports are estimated to increase by \$23.9 million per month and the costs of its exports by \$9.8 million per month due to the impact of piracy on the supply chains (Tsolakis, 2011). However, another report shows that – based on a case study of a 10,000 TEU ship sailing from Rotterdam to Singapore – insurance risk premiums and the Suez Canal transit fees offset to a great extent the additional fuel and opportunity costs of going through the Cape of Good Hope (Bendall, 2009).

### **3. Conclusion**

Together, the new developments are expected to cause a shift in global trade away from advanced economies toward emerging developing countries as these continue on their urbanization path, growing consumer demand, and a relocation of lower value manufacturing toward new locations (e.g. from China to Indonesia).

These issues need to be better understood and their implications duly considered and assessed, and to the extent possible, incorporated into the decision-making process involving shipping (e.g. planning, investment, ship design, expansion, market locations, etc.).

The costs pass-through of increased freight rates into product prices also varied across product and market from nearly zero to over 100 %: this meant that in some cases the increased costs were effectively paid for by the consumer, and in other cases by the producer. In this context, a good understanding of the interplay between transport costs, energy security and oil price levels is fundamental, especially for the trade of developing countries.

Apart from the impact on transport costs, sustained high oil prices raise a number of questions for international shipping. These include, for example, how to deal with related implications for capital-intensive newly built ships of any changes in fuel type and fuel technology requirements; and the potential for a modal shift when feasible from other modes of transport in favour of shipping, given the relative energy efficiency of ships as compared with other modes of transport.

Little attention has been paid so far to the impact of climate change factors such as sea-level rise and extreme weather events on maritime transport, especially ports –

the crucial nodes of the global chains linking together buyers and sellers, importers and exporters, and producers and consumers. While mitigation action in international shipping is crucial to curb carbon emissions, building the resilience of the maritime transport systems and strengthening their ability to cope with climatic factors are equally important. Adaptation in transport involves enhancing the resilience of infrastructure and operations through, inter alia, changes in operations, management practices, planning activities and design specifications and standards. The extended timescale of climate change impacts and the long service life of maritime infrastructure, together with sustainable development objectives, imply that effective adaptation is likely to require rethinking freight transport networks and facilities. This may involve integrating climate change considerations into investment and planning decisions, as well as into broader transport design and development plans.

The shipping operators must increasingly adapting their market strategies to emphasize the ecological and social dimensions as factors of competitiveness business, while at the same time taking into account the cost generated by any potential negative externalities generated by their activities, including environmental and social.

Last but not least, in addition to the security risk involved in sailing through piracy ridden areas and related direct costs (e.g. loss of life, injury, loss of ship or cargo, etc.), transiting through the Suez Canal or rerouting via the Cape of Good Hope both entail other significant costs (e.g. delays, higher insurance premiums, opportunity costs, fuel costs, revenue loss for the Suez Canal Authority/Egypt, etc.) which pose a burden to the shipping industry and will ultimately be borne by global trade.

## **Notes**

1. Annex VI (Regulations for the Prevention of Air Pollution from Ships) was added to the International Convention for the Prevention of Pollution from Ships (MARPOL) in 1997, with a view to minimizing airborne emissions from ships (SO<sub>x</sub>, NO<sub>x</sub>, ODS, VOC) and their contribution to global air pollution and environmental problems entered into force on 19 May 2005 and was amended in October 2008. Two sets of emission and fuel quality requirements are defined by Annex VI: (a) global requirements, and (b) more stringent requirements applicable to ships in Emission Control Areas (ECA). An Emission Control Area (ECA) can be designated for SO<sub>x</sub> and PM, or NO<sub>x</sub>, or all three types of emissions from ships, subject to a proposal from a Party to Annex VI. Existing Emission Control Areas include: the Baltic Sea; the North Sea; the North American ECA, including most of United States and Canadian coast (NO<sub>x</sub> & SO<sub>x</sub>, 2010/2012).

2. A summary of the proceedings of the meeting was published in December 2009 (publication No. UNCTAD/DTL/TLB/2009/1) and submitted to the United Nations Framework Convention on Climate Change (UNFCCC) secretariat ahead of the Copenhagen Conference to provide reference material, including a substantive background note prepared by the UNCTAD secretariat. Additional information about the workshop including a joint UNECE-UNCTAD background note and other relevant meeting documentation are available at <http://www.unctad.org/Templates/meeting.asp?intItemID=2068&lang=1&m=2010>
- 1.
3. For additional information visit [www.unctad.org/ttl/legal](http://www.unctad.org/ttl/legal) or [http://live.unece.org/trans/main/wp5/wp5\\_workshop4.html](http://live.unece.org/trans/main/wp5/wp5_workshop4.html). The Terms of Reference of the expert group are available at <http://live.unece.org/fileadmin/DAM/trans/doc/2010/wp5/ECETRANSWP548e.pdf>
4. Additional information about the Ad Hoc Expert Meeting, including related documentation, presentations and the report of the meeting are available at [www.unctad.org/ttl/legal](http://www.unctad.org/ttl/legal) under “Meetings and Events”.
5. See, for example, *Global Shipping Leaders Call for Sustainable Industry*. (2011). Press Release. 17 May; Meade R, (2011). *Sustainable Shipping Gets More Industry Clout*. Lloyd’s List. 23 May.
6. The Case for Action paper can be downloaded from <http://www.forumforthefuture.org/project/sustainableshippinginitiative/more/ssicas> e-action.
7. Post-Panamax container ship moulded breadth > 32.31 m; Panamax container ship moulded breadth < 32.31 m. *Source*: IHS Fairplay.

#### 4. References

- Beddow, M. (2010). Maersk examining super-super post Panamax vessels. *Containerisation International*, 26 November.
- Bendall, HB. (2009). *Cost of Piracy: a Comparative Voyage Approach*. IAME. Copenhagen.
- Blair, D. (2011). Price Rises Wipe Out Bids to Cut Fuel Subsidies. *Financial Times*, 12 May.
- Bowden, A., Hurlburt, K., Aloyo, E., Marts, C. & Lee, A. (2010). The Economic Cost of Maritime Piracy. *One Earth Future Working Paper*.
- De Coster, P. & Notteboom, T. (2011). Piracy off the Horn of Africa: Impact on Regional Container Services on the Middle. *The Economic Cost of Maritime Piracy*, One Earth Future Working Paper East-Africa Trade in *Current Issues in Shipping, Ports and Logistics*.
- Harvery, F. (2011). Worst Ever Carbon Emissions Leave Climate on the Brink. *The Guardian*, 29 May, [www.guardian.co.uk](http://www.guardian.co.uk).
- Einemo, U. (2011). Fuelling Up. *IHS Fairplay*, 6 January.

- Hargreaves, H. (2011). Oil Price Spike: Speculators Aren't to Blame. *CNN Money*, 29 April.
- Lenton, T., Footitt, A., Dlugolecki, A. (2009). *Major Tipping Points in the Earth's Climate System and Consequences for the Insurance Sector*. World Wide Fund For Nature (WWF) and Allianz. Germany.
- Matthews, M. (2011). *Stop ford Calls for Rethink on Economics and Environment*, *Lloyd's List*, 30 March.
- Notteboom, T. (2011), In search of Routing Flexibility in Container Shipping: the Cape Route as an Alternative to the Suez Canal. *Current Issues in Shipping, Ports and Logistics*. Port Economics, Uitgeverij UPA University Press Antwerp, Brussels.
- Pandya, A.A, Herbert-Burns, H. & Kobayashi, J. (2011). *Maritime Commerce and Security: the Indian Ocean*. The Henry L. Stimson Center, February.
- Roussanoglou, N. (2011). Hellenic Shipping News Worldwide, 11 March.
- Sand, P. (2011). *Need for Rethinking When to Sail Around the Cape of Good Hope to Avoid Piracy?* Update 3, BIMCO, 3 March.
- Te Velde, D.W. (2011). *Oil Prices, Poor Countries and Policy Responses*. Overseas Development Institute (ODI), 16 March.
- Tsolakis, K. (2011). African Trade Pays the Price for Piracy. *IHS Fairplay*, 27 January.
- Wackett, M. (2011). CMA CGM's leviathans to pip Maersk to the post? *Containerisation International*, 26 May.
- Price Waterhouse Coopers (PWHC) (2011). *Economic Views: Future of World Trade: Top 25 Sea and Air Freight Routes in 2030*.
- Forum for the Future – Action for a Sustainable World (2011). *Sustainable Shipping Initiative, The Case of Action*.
- ESKEA (2011). *Deliverable D2.1.1.1. Maritime Transport Market*, 15 May.
- UNCTAD (2009). *Oil Prices and Maritime Freight Rates: An Empirical Investigation Technical report by the UNCTAD secretariat*. UNCTAD/DTL/TLB/2009/2.1 April.
- Economist Intelligence Unit (EIU) (2011). *Country Forecast. Global Outlook*, May; International Monetary Fund (2011).
- World Economic Outlook (2011). *Tensions from the Two-Speed Recovery: Unemployment, Commodities, and Capital Flows*. April.
- Vivideconomics (2010). *Assessment of the Economic Impact of Market-based Measures*. Prepared for the Expert Group on Market-based Measures, International Maritime Organization, Final Report, August.
- ICS/ISF Annual Review 2011; Shipping and the Environment: an insightful look at the environmental issues that are affecting the shipping industry (2011). Issue 02/ Spring. *Lloyd's Register*. London.
- International Finance Corporation (IFC) (2011). *Climate Risk and Business Ports: Terminal Marítim Muelles el Bosque*. Cartagena, Colombia.
- UNCTAD (2009). *Report of the Multi-year Expert Meeting on Transport and Trade Facilitation on its first session*. TD/B/C.I/MEM.1/3, 23 March.

ECE and UNCTAD (2010). *Climate Change Impacts on International Transport Networks: Note by the United Nations Economic Commission for Europe and United Nations Conference on Trade and Development secretariats* (ECE/TRANS/WP.5/2010/3), 29 June [www.unctad.org/ttl/legal](http://www.unctad.org/ttl/legal).

UNCTAD (2008). *Maritime Transport and the Climate Change Challenge. Note by the UNCTAD secretariat*, TD/B/C.I/MEM.1/2, 9 December.

UNCTAD (2009). *Multi-Year Expert Meeting on Transport and Trade Facilitation: Maritime Transport and the Climate Change Challenge, Summary of Proceeding*. UNCTAD/DTL/TLB/2009/1, 1 December.

United Nations (2010). *Report of the Secretary-General's High-Level Advisory Group on Climate Change Financing*. 5 November, United Nations, New York: United Nations. [www.un.org/climatechange/agf](http://www.un.org/climatechange/agf).

UNCTAD (2009). *Report of the Multi-year Expert Meeting on Transport and Trade Facilitation on its first session*. TD/B/C.I/MEM.1/3, 23 March.

Lloyd's List (2011). *Sustainable Shipping Gets More Industry Clout*, 23 May.

Lloyds Register (2011). *Shipping and the Environment*, Issue 02, Spring.

IHS Fairplay (2011). *Maersk's Big Ship Order Leaves Competition Training*, 10 March.

<http://www.unctad.org/Templates/meeting.asp?intItemID=2068&lang=1&m=20101>.

[http://live.unece.org/fileadmin/DAM/trans/doc/2010/wp5/ECE-TRANS-WP5\\_48e.pdf](http://live.unece.org/fileadmin/DAM/trans/doc/2010/wp5/ECE-TRANS-WP5_48e.pdf).

<http://www.forumforthefuture.org/project/sustainable-shippinginitiative/more/ssi-case-action>.

[www.imo.org](http://www.imo.org).



## Employment and Regional Inequality in Romania

Laura Patache<sup>1</sup>

**Abstract:** It is no doubt that thinking about inequality plays a part in the judgments and actions of politicians, sociologists, economists and ordinary people, too. This paper examines which factors substantially influenced regional employment. Labour market, employment and unemployment have been the subject of various researches and the labour market object has been subject of dispute. Employment and unemployment are both decomposed and analyzed through separate components (such as: full employment, effective employment, atypical employment, precarious employment, regional/local employment etc., respectively, total unemployment, partial or hidden unemployment, technical and structural one and so on). The specific literature about the regional inequalities considered the income per capita as the most relevant indicator measured by Gini coefficient. Gini index measures the extent to which the distribution of income or consumption expenditure among individuals or households within an economy deviates from a perfectly equal distribution. At regional level we studied several indicators that generate regional disparities, and influence employment quality such us: employment rate, tertiary and medium employment, unemployment rate, occupied population in informal sector, employment in primary sector, rural employment, female employment. We developed a scoring based on the deviation from the average of a group of key indicators and devised a map of employment quality resulting from multi-criteria analysis.

**Keywords:** employment sensitivity; Gini index; multi-criteria analysis

**JEL Classification:** E24; R12; R15

### 1. Introduction

There are many possible pathways among the structure, intensity and quality of employment, and regional inequality: from the point of view of outcomes (Frías, Iglesias & Vazquez, 1998; Amiel and Cowell, 1998, Hull, 2009; Herman, 2011 s.o.; Boldea M., Parean M. and Otil M., 2012, s.o.), or decentralization (Lessmann, 2011 and others), in terms of poverty or welfare (World Bank, 2007; Chelliah and Shanmugam, 2007; Sivakumar, 2012 etc.).

Employment, in or outside the labour market area, became a strategic objective, so that, the public and/or private companies will follow the right employment degree to reach wellness. Implicitly, employment becomes strategic objective only when

---

<sup>1</sup> Associate Professor, PhD, Spiru Haret University, Romania, Address: 32-34 Unirii Str., Constanta 900532, Romania, Tel.: +40241 618 903, Corresponding author: laura.patache@spiruharet.ro.

productivity and GDP per capita are capable to secure a decent satisfaction of the basic needs. (Pert, 2002; EU, 2000 and 2010)

Regarding the regional disparities between the 8 Romanian development regions, in a previous study carried out for the period 2000-2008, we measured the convergence degree by  $\alpha$ -convergence and  $\sigma$ -convergence; the results have shown the fact that the disparities between development regions grew. (Patache and Grama, 2011) So, it is a fact that income, quality of employment, poverty or welfare are unevenly distributed into territorial profile.

The present study aims to answer the question: *Is employment concentrated and what is the quality of its distribution in territorial profile?*

## 2. Research Methodology

The methodology proposed in this article is based on two steps:

First point of view is concerned with the analysis of regional disparities regarding employment in relation to the coefficients of concentration/diversification (also known as indices of geographic distribution) – Gini coefficient.

Second, we devised a map of employment quality based on multi-criteria analysis.

## 3. Employment Concentration/Diversification

Measuring the concentration degree of an activity in a region is based the Lorentz curve and the Gini coefficient.

The interpretation of concentration coefficients shows, in case they are close to zero level, the state of “equity”, balance or proportion between the different analyzed elements.

The formula used to calculate the Gini coefficient (G) is the following (with values on the interval  $[1/n^{0.5}; 1]$  and  $n$  = number of observations):

$$G = \sqrt{\sum_{i=1}^n g_i^2} \quad (1)$$

where:  $g_i$  specific weight of the indicator

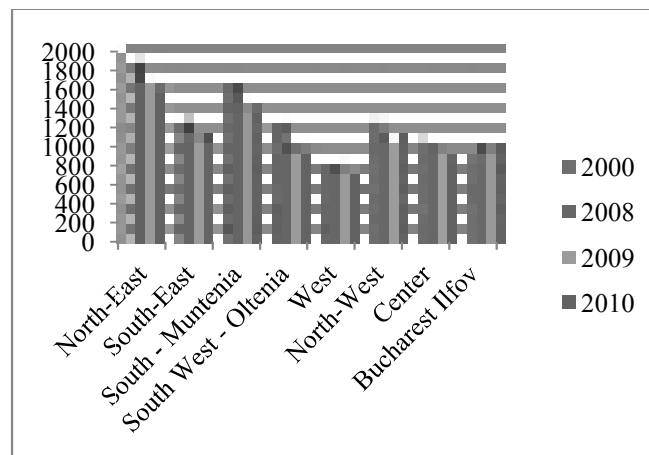
The Gini-Struck coefficient (GS) is calculated as:

$$GS = \sqrt{\frac{n \sum_{i=1}^n g_i^2 - 1}{n - 1}} \quad (2)$$

The Struck concentration coefficient represents the corrected form of the Gini coefficient; the values may be in the interval [0; 1]; the minimum possible value (zero) is independent of the number of considered categories, which allows comparison with other structures.

If the value of the coefficients exceeds 0.3, there is a relative concentration that can be mentioned and taken into account, and if the value is higher than 0.5, then we can speak of a high concentration.

The evolution of employment in the 8's regions as presented in the figure below reveals a decrease in the number of employed persons in 2008, and even more in 2009, except Bucharest-Ilfov region. This region during the period of economic boom, 2000-2008, generated employment increase, even in 2009 in spite of the fact that the regional GDP slowly decreased. In 4 regions (North East, South East, South- Muntenia, South West Oltenia), economic growth caused reductions in the number of employed persons, maybe, as a result of a better labour productivity generated by the restructuring of economic activities. Year 2010, in terms of employment, shows out of the crisis for 3 regions North-East, North West and Bucharest –Ilfov - the last one seems have not been touched by economic crisis, only 1.1 decrease in GDP 2009/2008- all other regions are still continuing crisis downtrend in 2010.

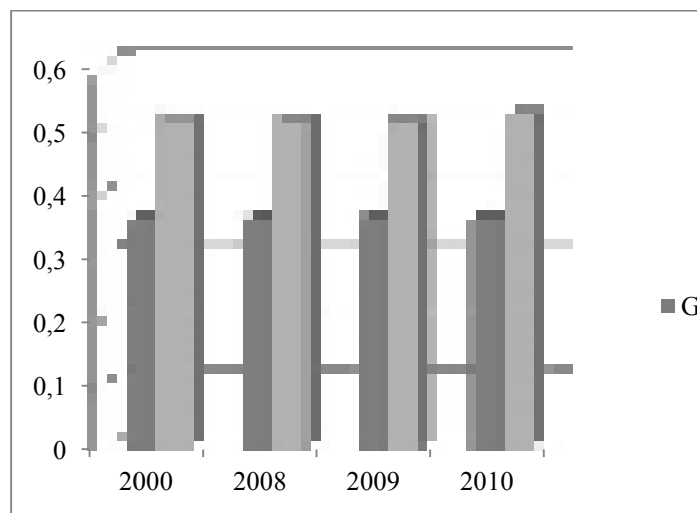


**Figure 1. Regional employment evolution, period 2000-2010**

Source: Data based on the Romanian Statistical Yearbook 2011, NIS, Bucharest

In 2000, the level of Gini/Struck coefficients reveals that *there is a concentration of employment in the eight development regions*, the value of the Gini coefficient being around 0.363 and the value of the Struck coefficient being 0.522. Compared with 2000, in 2010 there is a slight decrease in the degree of concentration of

employed population (the Gini coefficient was 0.362 and the Struck coefficient was 0.520). (see Figure 2)



**Figure 2. Regional concentration of employment, period 2000-2010**

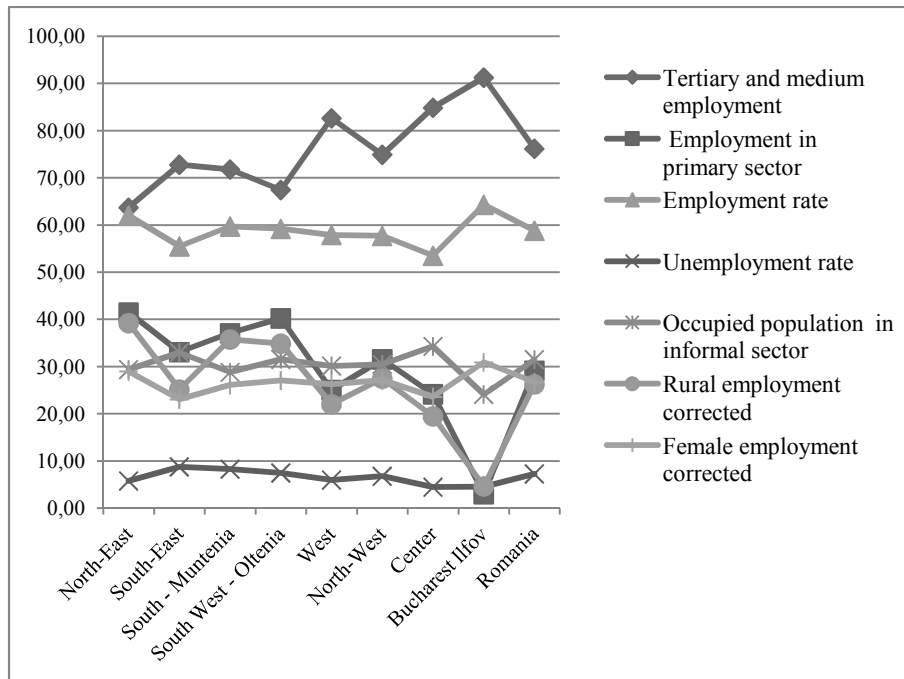
*Source: Data based on the Romanian Statistical Yearbook 2011, NIS, Bucharest*

But we still don't answer at *what is the quality of its distribution in territorial profile?*

#### **4. Employment Quality Regional Distribution Map**

At regional level we studied several indicators that generate regional disparities such as: on one hand, employment rate, tertiary and medium employment, both with positive impact, and, on the other hand, unemployment rate, occupied population in informal sector, employment in primary sector, rural employment corrected with share of rural population, female employment corrected with share of female population with negative influence on employment quality.

In 2010 these indicators are presented at regional level as shown in Figure 3.



**Figure 3. Indicators of employment quality at regional level in 2010**

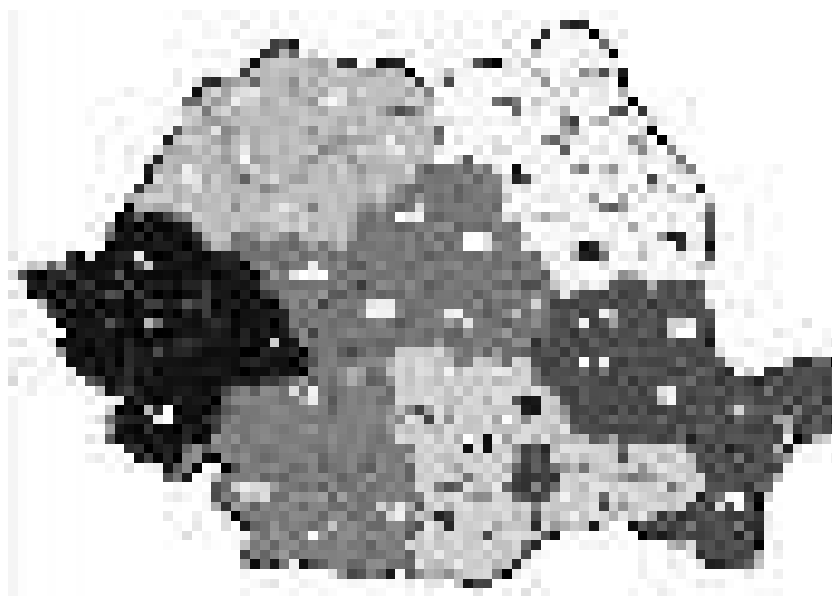
Source: Author's calculation based on the Romanian Statistical Yearbook 2011, NIS, Bucharest

The occupied population in informal sector was calculated on the premise that in urban areas, most of the working population are employed in the formal sector (almost 86%), while in the rural areas are employed just over a third (35.0%). The share of employment in the informal sector has relatively close values, in both areas of residence (urban 12.6%, rural 13.7% respectively).

In contrast, the household sector is insignificant in urban areas (1.6%), but mostly important in rural areas (51.3%). (Voinea, Albu et al, 2011)

We developed a scoring based on the deviation from the average of above mentioned indicators with an equal step (maximum value of the indicator divided by 3).

The map of employment quality resulting from multi-criteria analysis is shown in Figure 4.



**Figure 4. Employment quality distribution at regional level**

3 regions recorded a high quality of employment, in this order: Bucharest-Ilfov (with 27 points), Center (13) and West (7). The North West region has a good quality of employment (0); employment quality of North East (-3) and South Muntenia (-4) must be improved; and the lowest ranked regions are South West – Oltenia (-7) and South East (-6).

## 5. Conclusions

Increasing employment is an ongoing concern of both governments and the European and global institutions, but we must not lose sight of the elements that ensure its quality. Finally, let's remember a memorable paragraph by Milton & Rose Friedman: "For example, the supporters of tariffs treat it as self-evident that the creation of jobs is a desirable end, in and of itself, regardless of what the persons employed do.

That is clearly wrong. If all we want are jobs, we can create any number - for example, have *people dig holes and then fill them up again*, or perform other useless tasks. Work is sometimes its own reward. Mostly, however, it is the price we pay to get the things we want. Our real objective is not just jobs but productive jobs-jobs that will mean more goods and services to consume." Our study claims the reader comments, the critical and constructive ones, so that this model to be refined to perfection.

## 6. References

- Amiel, Y. & Cowell, F. (1998). Thinking about Inequality, available at URL: [darp.lse.ac.uk/papersdb/Amiel\\_Cowell\\_TAI.pdf](http://darp.lse.ac.uk/papersdb/Amiel_Cowell_TAI.pdf), Accessed on November 2012.
- Antonescu, D. (2010). The Analysis of Regional Disparities in Romania with Gini/Struck Coefficients. *The Romanian Economic Journal*, Vol. 2, Issue 40, pp. 160-183.
- Boldea, M., Parean, M. & Otil, M. (2012). Regional Disparity Analysis: The Case of Romania. *Journal of Eastern Europe Research in Business & Economics*, Vol. 2012.
- Chelliah, R.J. & Shanmugam, K.R. (2007). Strategy for Poverty Reduction and Narrowing Regional Disparities. *Economic and Political Weekly*, Vol. 42, No. 34 (Aug. 25-31, 2007), pp. 3475-3481, available at URL: <http://www.jstor.org/stable/4419942>.
- European Commission (2000). *Lisbon Scorecard 2000*.
- European Commission (2010). Communication from the Commission. Europe 2020 - A strategy for smart, sustainable and inclusive growth, Brussels, URL: <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2010:2020:FIN:EN:PDF>, Accessed on December 2012.
- Flaig, G. & Rottmann, H. (2007). Labour Market Institutions and the Employment Intensity of Output Growth. An International Comparison. *Cesifo Working Paper No. 2175*, available at URL: <http://www.cesifo-group.de/portal/pls/portal/docs/1/1187292.PDF>, Accessed on November 2012.
- Frias, I.; Iglesias, A. & Vazquez, E. (1998). Economic growth and employment: regional disparities in the EU, Vienna, available at URL: <http://www.sre.wu-wien.ac.at/ersa/ersaconfs/ersa98/papers/313.pdf>. Accessed on January 2013.
- Herman, E. (2011). The Impact of Economic Growth Process on Employment in European Union Countries. *The Romanian Economic Journal*, Vol. 14, Issue 42, pp. 47-67
- Hull, K. (2009). *Understanding the relationship between economic growth, employment and poverty reduction*, available at URL: <http://www.oecd.org/dac/povertyreduction/43280288.pdf>, Accessed on January 2012.
- Lessmann, C. (2011). *Regional Inequality and Decentralization-An Empirical Analysis*, Available at URL: <http://www.ieb.ub.edu/aplicacio/fitxers/WS11Lessmann.pdf>, Accessed on January 2013.
- Patache, L., Neacșu, G. & Dăneș-Pătrău, D. (2012). Employment Vulnerability in Romania. *Economy Transdisciplinarity Cognition*, vol.15, issue 2/2012, pp. 125-130.
- Patache, L. & Grama, I.G. (2011). The future of socio-economic regional disparities in Romania, Vol. *European economic recovery and regional structural transformations*. Cluj Napoca: RISOPRINT.
- OECD (2005). How Persistent are Regional Disparities in Employment? The Role of Geographic Mobility. *OECD Employment Outlook*, available at URL: <http://www.oecd.org/els/employmentpoliciesanddata/36780856.pdf>, Accessed on December 2012.
- Minister of Labor, Family, and Equal Opportunities, National Institute of Statistics and World Bank (2007). Romania: Poverty Assessment Analytical and Advisory Assistance Program: First

Phase Report, Fiscal Year 2007, available at

URL:[http://siteresources.worldbank.org/INTROMANIA/Resources/RO\\_Pov\\_AAA\\_Phase\\_1\\_November\\_2007.pdf](http://siteresources.worldbank.org/INTROMANIA/Resources/RO_Pov_AAA_Phase_1_November_2007.pdf), Accessed on January 2013.

Perț S. (2002). Probleme ale ocupării forței de muncă din perspectiva strategiei europene pentru ocupare (SEO)/Employment problems in terms of the European Employment Strategy (EES). Published in Vol. *Convergențe economice în Uniunea Europeană/ Economic convergence in the European Union*. Bucharest: Economică.

Voinea, L.; Albu, L. et al. (2011). Economia informală și impactul ei asupra pieței muncii/The informal economy and its impact on labor market. Available at URL <http://www.bns.ro/wps/wcm/connect/b53004b1-7995-4c5d-994a-68eb345ef0c9/Economia+informala+si+impactul+ei+asupra+pietei+muncii.pdf?MOD=AJPERES&CACHEID=b53004b1-7995-4c5d-994a-68eb345ef0c9>, Accessed on December 2012.



## **Partnership and Cooperation Models in Cross-Border Areas**

**Marcela Slusarciuc<sup>1</sup>**

**Abstract:** The paper aims at exploring the partnership and cooperation issues in cross-border areas in European Union. The theoretical part of the papers is defining the role of the borders in the framework of the European Union enlarged and it includes a review of forms of cooperation and principles applicable in cross-border cooperation considered by the Council of Europe and the European Union or the Association of European Border Regions. Further there are identified in the specific literature important challenges and key points that are marking the cross-border partnerships. The last part of the paper is focusing on some examples of cross-border cooperation, making distinction between two main situations: the border between Member States and the borders between EU and neighboring countries.

**Keywords:** cross-border; partnership; cooperation

**JEL Classification:** P48; R58

### **The Role of Borders and Cross-Border Cooperation**

The economic functions of the international borders are changing from the traditional view to a new approach in the last decades. Usually the borders were associated with barriers to trade, quantitative and qualitative ones. That meant that the goods and services flows were passing the borders according to the legal regimes from the two countries that include payment of fees, presentation of documentation and compliance with the regulations, all of the formulated within the national interest. Due to the change of the economic, political and social framework, mostly accelerated in the last years, inside the European Union the borders, as economic barriers, became less significant following the main negotiation linked to the GATT/WTO and the EU enlargement. (Clement, 2006, pp. 50-51) Due to the erosion of the traditional functions of the borders some changes are likely to happen in the border regions of the countries. First of the changes will be an increase of the cross-border flow of trade including both the traditional export-import and the informal border transactions. (Clement, 2006, p. 52) In the internal EU cross-border areas can increase the flow of investments and

---

<sup>1</sup> PhD Student, “Stefan cel Mare” University Suceava, Romania, Address: Universitatii 13 Str., Suceava 720229, Romania, Tel.: 0230 216 147, Corresponding author: slusarciuc.marcela@usv.ro.

labor and already this phenomenon was noticed between some Member States. Second change will concern the structure of the trade, investments, consumption and employment. This change is in relation with the exchange rate between the countries, mainly when we refer to the relations between the Euro countries and others. The third change is affecting the 'location' of some economic activities. It could be the tendency to move more to the peripheries where some production factors are cheaper. In the framework of the negotiation of agreements with partner countries, in this case, Eastern EU border countries, it can be the opportunity to decrease the trade costs in case of moving the operations near to the eastern border or even in the neighbouring countries. The globalization process can shift the role of border areas from peripheries of economic activity to attractors of new industries or of expansion of existing ones, leading to economic development of the region. (Clement, 2006, p. 53)

Nevertheless it should be done the distinction between two main situations: the border between Member States and the borders between EU and neighbouring countries. In the first case the communities in the border regions can explore together the development of policies for collaboration with the other side and finding solutions for common challenges. In the second case there is encouraged as well the common exploring and policy shaping but there is a supplementary factor that can affect trade and economic activities, namely the Schengen Treaty provisions that imply the respect of strict rules for the signatory states in what concerns the border inspection and control for goods and people. In this second case, no matter the economic potential of the cross-border region and the will for collaboration, the border ruling will be a brake, though a necessary one. (Clement, 2006, p. 53)

The cross-border cooperation is recommended and welcomed if there are considered three issues that are bringing good effects for the border regions. The first issue is the *economy of scale*, building the infrastructure by the parties is a benefit for the whole region making easier the access and communication inside the region and with the external areas. The second issue on which the countries involved in the cross-border cooperation can work is the *negative externalities*, meaning the management of environmental or emergency situations that can occur and spread in the cross-border region. A third one, *the transaction costs*, can bring the joint efforts in order to share information regarding market conditions, legal constraints, common business practices, language and culture of the partner country. Norris notices that the cross-border partnership mechanisms could be informal or formal and the relationship between the partners can vary from peaceful coexistence to partners in development and even in case of strong cross-border cooperation still there are issues for competition such as attracting tourism and new investments. (Clement, 2006, pp. 54-55)

The main motives considered for cross-border cooperation are<sup>1</sup>: the transformation of the border from a line of separation into a place for communication between neighbours; the overcoming of mutual animosities and prejudices between peoples of border regions which result from historical heritage; the strengthening of democracy and the development of operational regional/local administrative structures; the overcoming of national peripherality and isolation; the promotion of economic growth and development and the improvement of the standards of living; the rapid assimilation into or approach towards an integrated Europe.

### **Forms of Cross-Border Partnership and Cooperation**

Forms and methods of cross-border cooperation vary from one cross-border area to another. In the view of the Council of Europe<sup>2</sup> they result from a combination of two parameters: decisions and policy choices made jointly by local partners on both sides of the border, together with the legal avenues available to them under domestic law and international undertakings entered into by the states to which they belong. Many of the partnerships or cooperation has been conducted informally, based on the co-ordination of activities by participants on either side of a border with a view to a joint cross-border approach. Partner communities and authorities are bound only by an agreement in principle. This form of cooperation is often used in the early stages of cooperation or in the absence of a legal framework enabling local communities and authorities to formalize their cooperation.

As a next step it is when the cooperation become formalized by means of cooperation agreements signed by the executives of local communities and authorities and subject to the approval of the deliberative assemblies of these communities and authorities. In signing such an agreement, the latter formalize their partnership, set common objectives and enter into reciprocal undertakings, while overcoming differences between countries as regards administrative and institutional structure.

The participants in cross-border cooperation are communities and authorities at the local or regional level. Accordingly, the geographical scope of cooperation arrangements can range from local inter-county cooperation, which is the basic of cross-border cooperation, to inter-regional cooperation through Euroregions, depending on the strategies formulated by those involved. The wider level, depending on the issues addressed and the form of cooperation adopted, is

<sup>1</sup> Association of European Border Regions, *Practical Guide to Cross-border Cooperation*, 3rd Edition, European Commission, 2000, [http://www.aebr.eu/files/publications/lace\\_guide.en.pdf](http://www.aebr.eu/files/publications/lace_guide.en.pdf), pp. 6-7.

<sup>2</sup> Council of Europe, *Practical Guide to Cross-border Cooperation*, 2006, [http://www.espaces-transfrontaliers.org/en/studies/practical\\_guide\\_en.pdf](http://www.espaces-transfrontaliers.org/en/studies/practical_guide_en.pdf), pp. 12-13.

represented by cooperation arrangements that may, at a transnational level, entail establishing networks linking non-adjacent areas within the same extended geographical area.

With regard to cooperation beyond borders, the following types are to be clearly distinguished by the European Commission<sup>1</sup>: cross-border cooperation, interregional cooperation and transnational cooperation. Comparing these three types of cooperation we may say that the *cross-border cooperation* means directly neighbourly cooperation in all areas of life between regional and local authorities along the border and involving all actors and it is more organized because of a longer tradition, regional or local. The *interregional cooperation* supposes cooperation between regional and local authorities mostly in single sectors, not in all areas of life, and with selected actors. The organization is not advanced because of a short tradition of partnership. The third type, the *transnational cooperation* is the cooperation between countries, sometimes allowing regions to participate, with regard to a special subject (for example regional development) related to large, connected areas. The organization usually is still under development and involves a more diplomatic approach.

Important criteria which differentiate types of border regions include<sup>2</sup>:

- **degree of homogeneity of the cross-border region.** Some border areas are characterized by a common identity or regional consciousness where cross-border cooperation occurs as a natural process. This shared identity may arise from historical, cultural, linguistic, geographic and other reasons.
- **level of development and support status of the border region under the EU's structural policies:** There is an order of preference for eligibility for support, from the least-developed regions in the EU (rural, often peripheral areas, also including some areas in severe industrial decline), to more developed regions, primarily in the core regions, to the most developed regions likewise mostly in core regions of the EU;
- **position on the EU borders:** border regions on the EU's internal borders and those on the external borders which are either on the periphery and less developed
- **natural geographic features** such as mountain borders.
- Various combinations of these factors may create a multitude of types and varieties of border and cross-border regions in Europe.

---

<sup>1</sup> Association of European Border Regions, *Practical Guide*, p. 15.

<sup>2</sup> *Idem*, pp. 17-18.

### **Principles Applicable in the Cross-Border Cooperation**

The guide of Council of Europe that draws lines about cross-border cooperation presents a group of principles necessary for an efficient cooperation<sup>1</sup>:

- Cross-border cooperation provides local communities and authorities on either side of a border with a means of exercising the powers they enjoy, and does not constitute an additional power.
- Local communities and authorities enter into cooperation solely within their common areas of competence.
- Cross-border cooperation takes the form of projects of common local interest that are in the benefit of the communities
- Communities and authorities enter into cooperation in accordance with the legislation governing their powers, procedural matters and review of their decisions. Nevertheless the national and international legislation in force should be respected.
- Enforcement and regulatory powers are excluded from the scope of cross-border cooperation. Local communities and authorities may, however, agree to coordinate their policies and strategies in these areas in accordance with the domestic law applicable to each cooperation partner.
- Communities and authorities engage in cooperation in accordance with the international agreement entered into by the state to which they belong, including undertakings concerning cross-border relations and the various issues connected with the crossing of borders and cross-border mobility in general.
- Where the legal framework allows it, these local communities and authorities formalize their cooperation by signing cross-border cooperation agreements or setting up cooperation bodies having or not legal personality. They should decide together which of the domestic law of one of the partner local communities or authorities applies to the cooperation agreement or body (basically, the law of the state in which the body's headquarters are located).

The Association of European Border Regions (AEBR) has, inter alia, adopted the following principles for successful cross-border cooperation<sup>2</sup>: partnership, subsidiarity, the existence of a common cross-border development concept or programme, joint structures on regional/local level and independent sources of financing. These principles, which are generally recognized, form the basic requirements for European aid programmes. The principle of partnership has two

---

<sup>1</sup> Idem, pp. 14-15.

<sup>2</sup> Idem, p. 13.

elements<sup>1</sup>: a vertical partnership on both sides of the border; and a horizontal partnership across borders between partners who often differ from each other. *Vertical partnerships* refer to the relationships to and between the EU level, the national level and the regional/local levels on both sides of the border. The vertical organizations and structures that are created for this purpose should complement or complete those already in place, not compete with or replace them. *Horizontal partnerships* refer to the relationships between these partners (organizations/structures) on both sides of the border. This principle is based on the equality of both partners, irrespective of the size of a country, its physical or economic importance, or other characteristics like population. To develop this kind of horizontal partnership, a number of obstacles concerning differences in administration, competencies and funding sources have to be dealt with.

Experience shows that cross-border cooperation functions best and is most successful where regional and local participants take the initiative and assume responsibility. Following the „bottom-up” principle and keeping in mind the rules for horizontal and vertical partnerships enable cross-border cooperation according to the principles of subsidiarity. In this context, **subsidiarity** also means<sup>2</sup> strengthening the regional and local bodies as the most appropriate administrative level for cross-border cooperation. These bodies have the flexibility needed to balance out remaining differences in the structures and competencies on both sides of the border, and compensate for them in cross-border structures.

### **Challenges and Key Points of the Cross-Border Partnership**

In the exploring the implications of policies shaping and the decision making process that concerns the border regions and the cross-border collaboration, Wright and Pavlakovich (Wright & Pavlovich-Kochi, 2003) sum up a number of key points that should be included by the partner countries in their partnership. The first and one of the most important ones is the *regionalized decision making*, in order to realize the potential of economy of scale, manage the negative externalities effects and decrease the transportation costs as part of transaction costs in the economic activity. It is argued that due to the interconnectivity and collaboration, the increase of the economic activity on one side of the border can lead to an increase of the same activity on the other side of the border based on the cross-border flows. The continuous changes in the economic framework and processes at different levels, national, European and worldwide affect the cross-border regions and as a consequence impose *flexibility* in the approach of the cross-border partnership. On the other side there is need for *understanding the complexities of the border regions* and to reflect them in the shaping of the economic development strategies.

---

<sup>1</sup> Idem, p. 16.

<sup>2</sup> Idem.

This comes together with another two key points that are the *incorporation of the local knowledge*, the residents and local government experience in dealing with cross-border issues being a consistent one and *the importance of the catalyst*, the capacity of local decision-making factors being a good support in the coordination of the economic strategies in the cross-border area. Regional cross-border programs should respect the *regional specificities* that sometimes require targeted cooperation interventions and as important as this is the *recognition of the historical experience* by the higher level decision making bodies, national or European. Not the last as importance, in the policies shaping and cross-border decision making processes it should be considered the *building of comprehensive policy frameworks*, addressing to the region's structural problems, and the *monitoring the context-specific effects*, making easier to track the changes in the region structures and to re-shape the policies if needed.

Some authors (Krämer, 2011, *apud* Tassilo, 2011, pp. 6-7) consider that cross-border cooperation faces three main challenges. *The first ones* are the mental challenges such as to preconceptions, stereotypes and tensions accumulated during years. The gap is due to the lack of common positive memories or the focus of negative memories. A good starting point to overcome this challenge would be to build common reference points by common borderland memory, experiences and identity. *The second type* of challenges is represented by the social and economic differences, meaning the one between the Western part and the Eastern part. What was Eastern at a moment became Western by westernization and the border moves because the gap moves. The distance and periphery is *the third challenge* to which is added the presence of physical-geographical forms that are usually creating the impression of border as dividing line.

### **Models of Cross-Border Cooperation in Europe**

In most of the border and cross-border regions (Euro regions or similar structures) in the European Union cross-border initiatives and programmes were developed or are already in place. These border regions have learned from the experience in the area of cross-border cooperation in the European Union and they established cooperation with neighbouring regions in all areas of life on regional/local and national level step by step. Some of the cooperation frames are still building the structures and finding optimal ways for a good partnership.<sup>1</sup> In the following some of the examples will be presented in order to illustrate the challenges and the solutions that the partners identified aiming a good partnership in the benefit of all countries or regions involved. The partnership examples are grouped in two. The first group is formed by examples of cross-border cooperation inside the European

<sup>1</sup> Association of European Border Regions, *Practical Guide*, pp. 6-7.

Union and the second group concerns examples from the borders of the European Union.

## **Cross-border Cooperation Models inside the European Union Borders**

### *Polish-German border*

The Polish-German cross-border cooperation is considered an example of model solution mainly because of the historical events deeply imprinted in the memory of the inhabitants from the cross-border area. One of the areas with significant achievements is the management of the natural resources and environment cooperation. These are considered to be on equal level with social and economic factors in the regional development stimulation. (Degórski, 2008, pp. 161-173) The Polish-German cooperation treaty and projects are focusing on three areas: conservation activities, logistical activities concerning the establishment of consistent protection goals according to international agreements and planning of a coherent system for environmental management between the two countries. As far as concerns the previous financial assistance implementation, an analysis of the INTERREG programme<sup>1</sup>, few important conclusions arisen for the future Polish-German cooperation:

- Euroregions may play an important role in the future in the border integration, mainly because this border is between the member states;
- An important mental challenge for inhabitants from this area is that should be an increase of awareness of living in the border area, partners from the other side should be more involved and should be acknowledged that the cooperation has more benefits for both countries than the competition;
- It is recommended a change in the structure of projects with more focus on economic and social integration and less on infrastructure;
- The cooperation programmes can cause polarization within the border area.

More than the cross-border area there is a developing cooperation and networking between the capitals of the two countries that is a deeper and complementary level of collaboration which is considered a support for a cultural European West-Axis reinforcement.<sup>2</sup> The nowadays Polish-German border is considered an internal EU border “connecting rather than dividing two different and mutually complementary

---

<sup>1</sup> Stanisław Ciok, Andrzej Raczyk, *Implementation of the EU Community Initiative INTEREG III A at the Polish-German border. An attempt at evaluation* in (Leibenath, Korcelli-Olejniczak, & Knippschild, 2008, pp. 34-47)

<sup>2</sup> Ewa Korcelli-Olejniczak, *Functional complementarity a basis for inter-metropolitan collaboration and networking. A case study on cultural activities in Berlin and Warsaw* in (Leibenath, Korcelli-Olejniczak, & Knippschild, 2008, pp. 118-130)



economic, cultural and social systems.” (Gorzelał, 2006, p. 1) The support for the cross-border cooperation comes from different levels firstly EU, than national governments, regional authorities from both sides of the border, Euroregions and local administrations. One may consider that the Polish-German cross-border cooperation can serve as a model for the regions at the Eastern border of EU being identified similarities between this border and the Ukrainian-Polish one. (Gorzelał, 2006, p. 1)

### **Three Borders Area –Austria, Italy, Slovenia**

This area is an interesting example for researchers<sup>1</sup> due to the closed connections between the three countries rising from common historical roots. The economic issues, political decision-making process and social patterns influenced the communities on all the sides of the common borders. S. Janschitz and A. Ch. Kofler consider that there are few examples in Europe of “such a multicultural living space by virtue of a shared history and material culture, as well as geographical proximity”.<sup>2</sup> During the last decades, all the three countries, becoming member states of EU, step by step assumed a common European identity and were subject of various financing programmes as PHARE CBC and INTEREG. The financial framework helped in running various cross-border projects and activities and to empower the common development of the Three Borders Area. The first step of an institutionalized cooperation was made at the national level through the Working Community Alpe-Adria organization<sup>3</sup> (started in 1978) that includes regions from more than the named three countries (Austria, Croatia, Germany, Hungary, Italy, Slovenia and Switzerland). The aim of this organization was focused on traffic, economic development, tourism, water management, cultural relations and other related issues. Later on the European funds gave the proper impulse for specific projects on some certain areas. There are several examples of successful projects<sup>4</sup> that were implemented in the area: development of a cross-border cooperation plan for common marketing of cultural monuments and cultural events, design of common offers for recreation and touristic attractions, tourism development concept for the Three Borders Area that promotes a variety of cultural sites, social aspects and natural resources that united and divided the area in the past, the application of a coordinated bid for Olympic Winter Games 2006 with a common marketing view and many more.

<sup>1</sup> Susanne Janschitz, Andrea Ch. Kofler, *Protecting Diversities and Nurturing Commonalities in a Multicultural Living Space* in (Pavlovich-Kochi, Morehouse, & Eastl-Walter, 2006, pp. 193-213)

<sup>2</sup> Ibidem.

<sup>3</sup> Ibidem.

<sup>4</sup> Ibidem.

*Vienna-Bratislava metropolitan region*

The two cities are the administrative and economic centers for the two neighbourhood countries – Austria and Slovak Republic and together form the most closely located pair of capitals in the world. This offered a good context for the development of the cooperation between the two countries and to influence significantly the relationship between different actors in the region.<sup>1</sup> The cooperation, framed in the Vienna-Bratislava region, focuses on five main issues.<sup>2</sup> Firstly the region wants to become a development pole of European significance, based on a concentration of specific human, scientific, cultural, technological and institutional potentials as well as on adequate transportation and communication interconnections to other development poles in Europe. Secondly, the efforts are put for becoming a residential, economic and cultural center for the upper and middle Danube line. Thirdly, the region aims to become one of the development centers in Central Europe, which has gained importance after the accession of the four Visegrad countries (Czech Republic, Hungary, Poland and Slovakia). The fourth issue is to become an economic, cultural and information gateway to Austria and Slovakia and the last but not less important, there is the common effort to strengthen functional ties between the two capital cities and their less favoured suburban surroundings on the territory of the Slovak Republic, Austria and Hungary that is in the close neighbourhood. The accomplishment of these issues can make a model area for cross-border cooperation and for a good frame for common interest of two neighbourhood countries.

**Cross-Border Cooperation Models at the Borders of the European Union***Slovenian-Croatian Border*

This cross-border area is an interesting one because both countries are existing as the break of Yugoslavia, also they had an opened cross-border cooperation that had to change later when Slovenia became member state of the EU in 2004 and of the Schengen area in the same year. Soon the situation will be marked with new changes when Croatia will become member state too in 2013. The economic cooperation between the two countries in the cross-border area depends on the cross-border trade and the visits from a country to other for consumption goods purchasing. In 1999 it was ratified a free trade agreement between the two countries that contributed significantly to the economic cooperation between the two states but the perception in the two countries was different in what concerns

---

<sup>1</sup> Matej Jaško, *Cross-border cooperation challenges: Positioning the Vienna-Bratislava region in* (Leibenath, Korcelli-Olejniczak, & Knippschild, 2008, pp. 88-100)

<sup>2</sup> Ibidem.

the trade development.<sup>1</sup> As well there was a general perception that the political reality described above cumulated with the change in the status of the Slovenian-Croatian border from internal in international is burdening the relationship in the cross-border area.<sup>2</sup> The government representatives considered that the exports from Croatia to Slovenia declined following the border rules change. It seems that even if this border has a long and peaceful tradition the above mentioned changes in status affected the economic relationships<sup>3</sup>. At the actual moment both countries receive financial assistance from EU through Slovenia-Croatia IPA Cross-border Programme, component of the Instrument for Pre-Accession Assistance that follows an INTERREG Community Initiative for the period 2000-2006 aiming to promote cross-border cooperation. By now there are running at least cross 45 border cooperation projects in fields of economic and social development and sustainable management of the natural resources<sup>4</sup>.

#### *Hungarian-Croatian Border*<sup>5</sup>

Hungary-Croatia cross-border area was subject of various historic events, some of them event tragic. The cross-border collaboration was determined by the relationship between the two countries and by the international interests, lives of the people from the region being influenced primarily by the disadvantages of location in the border area and less by the advantages. Due to the Yugoslavian war in 1991 and in parallel the internal changes in Hungary in political, economic and social life, after 1990 the border crossing started to decline, Croatian market became risky for Ukrainian entrepreneurs, the only growing trade relations being the ones about gasoline and gun running. Further the development of the two countries was different – Hungarian economy turned westward and the trade relationships with former Yugoslavia declined more. Few years later the small border traffic started to develop Croatian people crossing the frontier in order to buy consumer goods and as long as the Croatian state started to reconstruct itself the Hungarian Chambers of Commerce and Industry along the border had initiatives of opening representation agency in Croatia. Because of Serbian military involvement some border sectors between the Hungary and Croatia were completely closed making the cross-border cooperation more difficult. On the other side at the national level there is desire of cooperation and potential for good cross-

<sup>1</sup> Ana Barbič, *Perceptions of New Realities along the Slovenian-Croatian Border* in (Pavlovich-Kochi, Morehouse, & Eastl-Walter, 2006, pp. 216-235)

<sup>2</sup> Vera Pavlakovich-Kochi, Zoran Stiperski, *The Croatian-Slovanian Border: Thee Local Experience* in (Pavlovich-Kochi, Morehouse, & Eastl-Walter, 2006, pp. 238-250)

<sup>3</sup> Ibidem.

<sup>4</sup> Operational Programme IPA Slovenia-Croatia 007-2013, <http://www.si-hr.eu>

<sup>5</sup> Zoltan Hajdu, *Renewal of Crossborder Cooperation along the Hungarian-Croatian Border* in (Pavlovich-Kochi, Morehouse, & Eastl-Walter, 2006).

border cooperation. There are three main issues on national level to focus on the cooperation of the two countries: transportation infrastructure, utilization of Adria oil pipeline and the management of the Drava River. At the local level the counties, cities and communities from both sides of the border reestablished all of them contacts with each other. The European funds play a good role in the enhancement of the cross-border cooperation between Hungary and Croatia through the IPA Cross-border Co-operation Programme, 35.6 Mil. Euro are available for projects on joint cooperation in fields of tourism, environment, cooperative economy and intercommunity human resource development.

#### *Hungary and the Eastern neighbours*

The case of Eastern borders of Hungary is specific due to the cross-border cooperation approach through Euroregions. The Eastern border of Hungary that overlap the Eastern border of EU is a short one along the Hungarian-Ukrainian border also is more significant to consider the cooperation in the Carpathian basin that includes Hungary, Poland, Slovakia, Romania and Ukraine mostly in the context of geopolitical situation of historical fragmentation and the peripheral situation of the borders that in case of Ukraine border is twice bordered. In this case the Euroregions are considered to play an important role due to flexibility in matters of territorial or regional governance<sup>1</sup>. The Carpathian Euroregion was the first of its kind in Central or Eastern Europe (1993) and it was established along what were the EU's borders with former socialist states. Moreover, it corresponds to a macroregion with peripheral status regarding all the states involved and the EU territoriality, meaning an assembly of socioeconomic peripheries<sup>2</sup>. Even if the ability to promote cooperation activities is not at the same level as in the Western of EU in the last years the status of the territories that form this Euroregion was reinforced. In order to strengthen the structure and to allow access to resources the partner countries decided to give judicial form to the Euroregion as Carpathian Foundation International which has as mission the regional presence and cross-border role for itself by strengthening its regional level programming, organizational capacity and achieving financial sustainability. They target two areas, the first one is promoting innovative initiatives and cross-border exchanges in community development and community resource mobilization and the second is about strengthening participative democracy and community organizing throughout the region<sup>3</sup>. In order to accomplish their goals they attract financial resources that further grant it to local administrations or non-governmental organizations from the Carpathian Region.

<sup>1</sup> Béla Branyi, *Euroregions along the Eastern Borders of Hungary: A Question of Scale?* in (Scott, 2006, pp. 150-161)

<sup>2</sup> Ibidem.

<sup>3</sup> Carpathian Foundation International, [carpathianfoundation.eu](http://carpathianfoundation.eu).

*Poland and Ukraine*

A decade ago Ukraine was the second largest trade partner of Poland in the Eastern Europe after Russia and the change was based on industrial centers in central Poland and eastern Ukraine.<sup>1</sup> In the two sides cooperation it appeared that Ukraine is on the path that Poland was fifteen years ago, the similarities, mainly in socioeconomic and administrative area, being a starting point for cooperation and knowledge transfer. Even if few years after the Poland accession to European Union the cross-border cooperation was disappointing as far as concern the impact in the regional development, the existence of European funds give an impulse through the projects financed by Joint Operational Programme having as priorities increasing competitiveness of the border area and improving the quality of life<sup>2</sup>. The location of European and international companies in western Ukraine can improve the management culture and the raise of management standards.<sup>3</sup> A good opportunity for cross-border cooperation between Poland and Ukraine was the organization of the final tournament UEFA 2012 that put together resources in the aim of economic development of the countries.

**Acknowledgment**

This paper has been financially supported within the project entitled „**Doctorate: an Attractive Research Career**”, contract number POSDRU/107/1.5/S/77946, co-financed by European Social Fund through Sectoral Operational Programme for Human Resources Development 2007-2013. **Investing in people!**”

**Bibliography**

Clement, N. C. (2006). Economic Forces Shaping the Borderlands. In V. Pavlovich-Kochi, B. J. Morehouse, & D. Eastl-Walter, *Challenged Borderlands: Transcending Political and Cultural Boundaries* (pg. 50-51). England: Ashgate Publishing Limited.

Gorzela, G. (2006). *Normalizing Polish-German Relations: Cross-Border Cooperation in Regional Development in James Wesley Scott, EU Enlargement, Region Building and Shifting Borders of Inclusion and Exclusion*. England: Ashgate Publishing Limited.

Krämer, R. (2011). Zwischen Kooperation und Abgrenzung – Die Östgrenzen der Europäischen Union/Between cooperation and delimitation - The eastern borders of the European Union. *Welt Trends*, 9-26.

<sup>1</sup> Katarzyna Krok, Maciej Smętkowski, *Local and Regional Cross-Border Cooperation between Poland and Ukraine* in (Scott, 2006, pp. 177-191).

<sup>2</sup> Cross-border Cooperation Programme Poland - Belarus - Ukraine 2007 2013, <http://www.pl-by-ua.eu>.

<sup>3</sup> Olga Mrisnka, *The Impact of EU Enlargement on the External and Internal Bordes of the New Neighbours: The Case of Ukraine* in (Scott, 2006, pp. 82-93).

Leibenath, M., Korcelli-Olejniczak, E., & Knippschild, R. (2008). *Cross-border Governance and Sustainable Spatial Development: Mind the Gaps!* Berlin: Springer Verlag.

Pavlovich-Kochi, V., Morehouse, B. J., & Eastl-Walter, D. (2006). *Challenged Borderlands: Transcending Political and Cultural Boundaries*. England: Ashgate Publishing Limited.

Scott, J. W. (2006). *EU Enlargement, Region Building and Shifting Borders of Inclusion and Exclusion*. England: Ashgate Publishing Limited.

Tassilo, H. (2011). *Borders in Post-socialist Europe: Territory, Scale, Society*. Surrey, England: Ashgate Publishing Limited.

Wright, B. A., & Pavlovich-Kochi, V. (2003). Epilogue: Implications for Policy- and Decision-Making. In V. Pavlovich-Kochi, & B. J.-W. Morehouse, *Challenged Borderlands: Transcending Political and Cultural Boundaries* (pg. 295-296). England: Ashgate Publishing Limited.

## **Romania's Regional Policy between the Current Realities and the Challenges of the 2014-2020 Programme Period**

**Daniela-Luminita Constantin<sup>1</sup>**

**Abstract:** When it comes to its results, the 2007-2013 cohesion policy has already faced a serious criticism: the experts consider that the actual functioning of this policy takes up a lot of resources whereas a good set of other policies could produce the conditions for healthier growth. Possible improvements are discussed in relation to the increase in competitiveness, with the industrial structure, human resources, accessibility, innovation, environmental quality as the main drivers. They are expressed by the "Europe 2020" agenda, which envisages as thematic priorities the smart, sustainable and inclusive growth, connected to the headline targets translated into the national ones. However, voices especially from the lagging behind countries express worries about the chances offered to these countries by the new cohesion policy architecture to support their current priorities, predicted to manifest after 2013 as well. One of the possible responses consists in the contribution of various national and sub-national economic policies to economic, social and territorial cohesion combined with the assessment of the relative importance of the EU cohesion policy in the design and implementation of national economic policies meant to promote cohesion (e.g. EPRC, 2010). Based on these overall considerations, this paper proposes a discussion on the challenges to the Romania's regional policy in the next programme period, aiming at revealing how the new objectives can be reached given the existing economic and institutional framework on the one hand and the drawbacks of the previous financial exercise on the other hand: in other words, it examines whether the facts of the past and present can serve as useful lessons about "do's" and "don'ts" in the 2014-2020 period.

**Keywords:** regional policy; Europe 2020; Romania, targets; solutions

**JEL Classification:** R13; R28; R38; R58

### **1. Introduction**

For Romania the 2007-2013 programme period represents the beginning of its new status, that of EU member state. The year 2007 found Romania in a period of consolidation, after nearly 20 year-long transition – from one of the most authoritarian regimes in Europe to a democratic society and market-based economy (ESI, 2009). At the end of 2007 Romania recorded a 6% GDP/capita rate and 10400 Euros per capita at PPS in absolute terms (that is 41.6% of the EU average),

---

<sup>1</sup> Professor, PhD, Academy of Economic Studies, Romania, Address: 6 Piața Romana Bucharest 010374, Romania, Tel.: +4021319 1900, Corresponding author: danielconstantin\_2005@yahoo.com.

one-digit inflation rate (6.57%), a 6.4% unemployment rate, and over 50 billion euro FDI stock. Though, a reversal of fortune happened in the last quarter of 2008, when the international economic crisis hit many East European countries (Goschin & Constantin, 2012).

In order to cope with the crisis effects many hopes have been connected to the potential contribution of the EU financial assistance via Structural Funds. Indeed, for 2007-2013 Romania has been allocated 19.7 billion Euro Structural Funds, of which 98% for seven Operational Programmes under the “Convergence” objective. 4.4 billion Euros go to the Regional Operational Programme (ROP), aiming at diminishing the economic and social development gaps at regional level by improving business environment and infrastructure for economic growth. The other OPs are also expected to contribute –directly or indirectly – to regional development.

Nevertheless, in the very middle of the current EU financial exercise serious questions and even doubts started being raised with regard to Romania’s capacity to use the allocated post-accession funds. Thus, in the Strategic Report of the EC of March, 2010 on the implementation of the 2007-2013 cohesion policy programmes Romania was subject of “name and shame” in the country-by-country comparisons, with its second-to-bottom absorption rate (EurActiv, 2010). Since then, no significant improvement has been noticed: according to Brussels’ statistics the absorption rate for Romania at the end of November 2012 was 20.70% of the Structural and Cohesion Funds. Compared to the absorption rate at EU level – of 45.15%, Romania is far lagging behind. For a broader image and comparison, on the same date Poland recorded 51.30%, Slovenia – 47.60%, Hungary – 43%, Czech Republic – 37%. Even Greece and Bulgaria, which had been in the same “7% club” with Romania in the first part of 2012, speeded up to 46.30” and 28%, respectively (Insideurope, 2013).

Starting from the overall situation described, this paper aims to examine the significance of the 2007-2013 programme period in regional policy terms, considering the relevance of the territorial dimension for the current EU’s cohesion policy. Romania represents a case study of high interest in this respect, based on the important dynamism of some of its regions (first of all – Bucharest, the capital region) on the one hand and the deepening of the regional disparities on the other hand. Accordingly, the nature of the regional problem in Romania is addressed in relation to the regional policy responses in terms of programming instruments, spatial coverage of the policy measures and specific levers activated for problem regions, followed by a brief assessment of the implementation stage.



## 2. Nature of Regional Problem in Romania. Crisis Effects

By the accession time the GDP per capita of the most developed Romanian NUTS 2 region, Bucharest-Ilfov was 83.8% of the EU average, while in the least developed – North-East (which also ranked the last among all EU’s NUTS 2 regions) it was only 24.7%, which determined a 3.39:1 development gap at the end of 2006. It was mirrored by the following key aspects of regional disparities: a major imbalance between Bucharest-Ilfov and the other regions; important imbalance between East and West of Romania; severe underdevelopment of North-East (at the border with the Republic of Moldova) and South areas (alongside of Danube river); intra- regional imbalances more important than the interregional ones (big variations between counties within the same region); the economic decline recorded by small and medium size towns; severe negative impact of economic restructuring upon mono-industrial areas (Government of Romania, 2007a). Further on, according to Eurostat, in 2009 the GDP per capita (PPS) in Bucharest-Ilfov was 26,100 Euro (111% of the EU average), whereas it reached only 6,900 Euro in North-East (29% of the EU average), indicating a relative distance of 3.78:1 between the most and the least developed Romanian regions. This gap recorded an increase not only compared to the accession time but also – even a much higher increase – compared to 1998 (the year of NUTS 2 regions establishment), when it was just 2.35:1. (Table 1). Moreover, even if the Bucharest-Ilfov region – with its special position as capital region - is put aside, the development gap was higher in 2009 (1.79:1) than in 1998 (1.45:1). However, in absolute terms the GDP per capita significantly increased in all regions. These findings confirm the so-called “Williamson hypothesis”, which supports the idea of interregional divergence in the first stages of development at national scale (Williamson, 1965).

**Table 1. GDP per capita at PPS in the Romanian NUTS 2 regions compared to the EU-27 average**

Region	GDP per capita (PPS) 1998		GDP per capita (PPS) 2009	
	Euro	As % of EU-27 average	Euro	As % of EU-27 average
North-West	4,300	25	10,100	43
Centre	4,700	28	10,700	46
North-East	3,400	20	6,900	29
South-East	4,500	27	8,900	38
South-Muntenia	3,900	23	9,500	40
Bucharest-Ilfov	8,000	47	26,100	111
South-West	4,100	24	8,400	36
West	5,000	29	12,100	52
<b>Romania</b>	<b>4,900</b>	<b>27</b>	<b>11,000</b>	<b>47</b>

*Source: Eurostat*

In 2009 and 2010 Romania's economy as a whole and, consequently, its regions have been severely affected by the global economic and financial crisis.

The crisis has been characterized by an uneven distribution of its effects at regional scale, depending on the specific economic and social structures, regional specialization degree, export orientation of economic activities, etc. A study published in 2009 by the Romanian journal "Capital", estimated that 25 counties out of the total of 42 (NUTS 3) would be in danger of being seriously hit by recession (Amariei & Hritcu, 2009). In these counties industrial production had already decreased by 30% to 70% in the first quarter of 2009 compared to the same period of 2008, while the unemployment had doubled in many cases in just five months (end of February 2009 compared to end of September 2008). Moreover, new foreign investors have not been attracted whereas some of the old ones have left / are about to leave.

A higher vulnerability to the crisis has been displayed by the most developed counties - more connected to the world economy's evolution and, thus, more influenced by the crisis shocks. On the other hand, these counties' economic potential might enable them to recover more easily after the peak of crisis intensity was surmounted. In particular, the counties of a higher production diversification will be in a better position (Goschin & Constantin, 2010).

In the opposite situation are the predominantly agricultural counties, characterized by a traditional economy, located in South and East Romania. According to experts' estimates these counties, where the rural population is prevalent, would be less affected as a result of their subsistence agriculture, the crisis influence being very low. In fact, in such counties the crisis met an already low development level.

As the internal vulnerabilities amplified the impact of international shocks, the turmoil was deeper in Romania compared to other former transition countries and a modest recovery was recorded only in the second half of 2011. The unemployment rates in 2010 and 2011 presented in Table 2 reflect this situation. However, in the second half of 2012 the rates slightly increased again, even if the levels are still lower compared to the levels during the crisis. It is also noteworthy that in all these years the national average was below the EU average while Bucharest-Ilfov is one of the most dynamic regions, being included in the 'below 5%' long-term unemployment club.

**Table 2. Unemployment rates by NUTS 2 regions – 2010, 2011 and 2012  
- percentage-**

Source: National Agency for Employment, <http://www.anofm.ro/statistica>

### 3. The Regional Policy Response

From the very pre-accession period the whole construction of the regional development policy in Romania has gravitated around the EU Cohesion Policy, the ‘Lisabonization’ of the national policies being a process at a very large scale.

As a result, the Regional Operational Programme (ROP) is the main pillar of regional development, establishing as the strategic objective “*supporting the economic, social, territorially balanced and sustainable development of the Romanian Regions, according to their specific needs and resources, focusing on urban growth poles, improving the business environment and basic infrastructure, in order to make the Romanian regions, especially the ones lagging behind, more attractive places to live, visit, invest in and work*” (Government of Romania, 2007b, p. 120). It aims to respond to the main regional development issues, which express various features of regional disparities, addressed in both national and EU context.

The ROP general objective derives from the National Strategic Reference Framework (NSRF) 2007-2013, which has established as fundamental policy goal, supported by the allocations via Structural Instruments, “*the diminishing of the economic and social disparities between Romania and the other EU member states*” (Government of Romania, 2007b, p. 86). The territorial priority of the NSRF – “*promoting balanced territorial development*”, further implemented by the ROP, responds the *regional convergence* issue, addressed in terms of reducing interregional disparities and the gap between regional GDP/capita and the EU average. This priority is also correlated with the so-called thematic priorities of the NRSF, namely (1) the development of basic infrastructure to European standards, (2) the increase of long-term competitiveness of the Romanian economy, (3) the development and more efficient use of Romania’s human capital, (4) building an

effective administrative capacity, implemented via corresponding Sectoral Operational Programmes.

The regional development objectives reflect the equity-efficiency approach employed by the policy makers in Romania. The allocation of the EU funds by region is differentiated in inverse proportion to the development level, thus offering priority to the lagging regions. Though, in order to do not entirely neglect the needs of the developed regions (and especially Bucharest-Ilfov), able to promote higher efficiency and competitiveness, this criterion has been amended by population density. The basic indicators by development region and the ROP funding by development region is presented in Table 3.

**Table 3. Basic indicators for the Romanian NUTS 2 regions and the Regional Operational Programme funding by region**

NUTS 2 Region	GDP per capita in 2004, PPS	Population in 2004	ERDF for ROP	
	% of EU-27 average	% of Romania's total population	Mil. Euro	%
North-East	24	17.2	724.09	16.32
South-East	31	13.2	587.88	13.25
South Muntenia	28	15.4	631.36	14.23
South-West Oltenia	28	10.7	621.60	14.01
West	39	8.9	458.77	10.34
North- West	33	12.7	536.41	12.09
Center	34	11.7	483.62	10.90
Bucharest- Ilfov	68	10.2	393.10	8.86

*Source: Author's calculations based on Eurostat and [www.inforegio.ro](http://www.inforegio.ro).*

The figures in the second column of this table explain a very frequently raised issue: despite the fact that Bucharest-Ilfov region has currently a GDP per capita (PPS) quite much above the EU average ( already 111% in 2009), when the 'Convergence' regions for the 2007-2013 period were established (in 2004) it was still below 75% of the EU-25 average. As a result, all Romanian regions have qualified for allocations under 'Convergence' objective and there are not specific programmes or strategies for problem regions but rather a differentiated approach within the ROP depending on the problems identified at regional level: the less developed regions benefit from higher allocations via the ROP priority axes and, at the same time, the allocations are consistent with the regional strategies agreed by local authorities.

Bucharest-Ilfov region is applied a different ceilings when it comes to the regional state aid for initial investments as well. In 2006 the Government of Romania

adopted a decision regarding the regional state aid's maximum ceiling for initial investments (Government of Romania, 2006), which has been applied starting from January 1, 2007, the date of Romania's accession to the EU. This financial support is approved for firms which do not belong to the SME category, as defined in the regulations regarding the state aid. All Romanian development regions have been approved a 50% ceiling, except for Bucharest-Ilfov with a 40% ceiling. In the case of small and medium firms different ceilings are approved, namely 10% higher (i.e. 60% and 50%, respectively) for medium firms and 20% higher for small firms (i.e. 70% and 60%, respectively) (Table 4). Besides SMEs the transport sector is another destination.

**Table 4. The regional state aid's maximum ceiling for initial investments in Romania**

- percentage -

Region	Regional state aid ceiling for:		
	Big firms	Medium firms	Small firms
North-East	50	60	70
South-East	50	60	70
South-Muntenia	50	60	70
South-West Oltenia	50	60	70
West	50	60	70
North-West	50	60	70
Centre	50	60	70
Bucharest-Ilfov	40	50	60

*Source: Based on Decision No. 946/July 19, 2006 of the Government of Romania regarding the regional state aid's maximum ceiling for initial investments*

In accordance with the EU regulations, the Government of Romania has adopted three state aid schemes for regional development through the investment stimulation, applied for 2007-2011, 2008-2012 and 2009-2013. These schemes are applied mainly to big firms, for big investment projects (i.e. eligible costs of these projects exceed the equivalent in lei for 50 million euros). They finance investments in fixed assets – material and immaterial assets – referring to creation of new production units, expanding existing units, production diversification through new, extra products or a fundamental change of production process in an existing unit.

There are also three state aid schemes available for the ROP. As in the ROP the financial support is not approved for big investment projects, the main beneficiaries are the SMEs. Another destination is the transport sector. Two of the schemes are state aid schemes for regional development: one addresses the creation and development of business support structures while the other one envisages the support to tourism investments. A 'de minimis' aid scheme for micro-enterprises support is applied as well.

As far as the absorption of the EU funds is concerned, relevant information is offered by Table 5, which presents the situation by region of the financing contracts within all operational programmes funded by Structural Instruments at the beginning of October 2012. Bucharest-Ilfov has the lowest payment ratio, explained to some extent by the fact that it is the beneficiary of large scale projects in transport and environment infrastructure which advance very slowly. In absolute terms, there are encouraging signs for the least developed region – North-East, which has the largest number of projects and highest corresponding value for these projects after Bucharest-Ilfov.

**Table 5. The situation by region of the financing contracts within the Regional Operational Programme – October 1, 2012**

Region	Population	Allocations (ERDF) million euro	Signed contracts (ERDF)		Payments to beneficiaries (pre- financing + reimbursements)	
	million people		million euro	%	million euro	%
North-East	2.7	571.15	560.23	98.09%	224.67	39.34%
South-East	2.63	463.69	396.40	85.49%	167.85	36.20%
South	3.8	497.98	465.65	93.51%	159.94	32.12%
South-West	2.8	490.28	464.25	94.69%	176.78	36.06%
West	3.45	361.87	374.05	103.37%	110.59	30.56%
North-West	2.2	423.11	380.52	89.93%	137.52	32.50%
Centre	2.4	381.45	338.50	88.74%	144.73	37.94%
Bucharest- Ilfov	1.9	310.06	230.42	74.32%	48.91	15.78%

*Source: Author's processing based on [www.inforegio.ro](http://www.inforegio.ro)*

According to Brussels' latest statistics (end of November 2012) the absorption rate for Romania is 20.7% of the Structural and Cohesion Funds. The highest absorption rate has been recorded by the OP for Administrative Capacity Development, that is 43.25%, followed by the ROP with 42.2%. Compared to the average absorption rate at EU level – of c. 45.15%, Romania is far lagging behind, the only countries still below 30% being Bulgaria (28.5%) and Italy (28%).

During his visit to Bucharest in March 2012, Johannes Hahn, the European Commissioner for Regional Policy declared that, given the low absorption rate, Romania should get 30 million euro each week in order to absorb the whole sum allocated for 2007-2013 period. Therefore the European Commissioner considered 2012 “*the year of implementation*” (HotNews, 2012), warning that if Romania

would not prove an appropriate capacity to spend the EU money it would not be possible to get the same allocation for 2014-2020, as necessary for reducing the development gap compared to the EU average.

Despite the 2012 failures, Romania obtained for 2014-2020 programme period 39.8 billion euro from the EU budget, that is 18% more than in 2007-2013. However, due to the lower absorption capacity, the EU funds allocation per capita is lower for Romania than for other new member states. In order to increase the chances to spend the EU money for 2007-2013 a series of measures have been adopted, which refer to strengthening the administrative capacity, assuming the administrative responsibility, accompanied by procedures simplification because their complexity of rules often have led to errors and delays. Even the EU has adopted support measures, the most important being the relaxation of the “n+2” rule to “n+3” (Ziarul Financiar, 2013).

#### **4. A Look Forward**

For 2014-2020 period the smart, sustainable and inclusive growth objectives, which represent a new approach to the Cohesion policy, raise important challenges to Romania, considering the still existing important development gaps at both national and regional level. On various occasions the Romanian Government and the Parliament expressed their positions with regard to the future of the Cohesion policy, affirming that Romania agrees with a higher thematic concentration of the EU-financed interventions via Cohesion policy, in accordance with the Europe 2020 Strategy, but consider that the less developed countries and regions should have the possibility to choose among a much more diversified range of interventions. In this way the Romanian regions could (and should) be able to use the EU financing in accordance with their specific needs, which still require a strong focus on local transport and basic social infrastructure, support to business environment, etc. at the same time with the possibility to turn to good account their potential comparative/competitive advantages.

As a response to these needs the EU has established a series of aspects clearly stipulated in specific regulations but, at the same time, agreed with flexibility in respect to others. For example, the thematic concentration has been clearly decided, but the choice of the key actions and intervention categories may be decided by each member state. Also, as regards the framework for the operational programmes elaboration, choices may be made between national and regional level, between one fund or multi-fund financing, between sectoral and multi-sectoral operational programmes (Ministry of Foreign Affairs, 2012).

In relation to the latter issue, a very sensitive debate is taking place in Romania in the first part of 2013 regarding the regionalisation process. The Romanian Ministry

of Regional Development and Public Administration has issued the Memorandum on adopting the necessary measures to start the process of regionalization – decentralization, one of the main goals envisaging the creation of regional management structures for the Structural and Cohesion Funds (Ministry of Regional Development, 2013). They should contribute to the better implementation of the territorial cohesion – the new dimension of the cohesion firstly introduced in the 2007-2013 programme period, to the intraregional disparities reduction – often higher than the interregional disparities, to the turning to a better account of the endogenous regional growth potential, etc. In this way the smart, sustainable and inclusive growth objectives could be translated into smart, sustainable and inclusive territories, as Territorial Agenda 2020 (2011) requires. At the same time, it opens the door for a better absorption of the EU funds in the 2014-2020 financial exercise, avoiding the perpetuation of the drawbacks revealed by the current exercise.

## 5. Acknowledgement

This paper mainly draws on research relating to regional policy in Romania conducted in 2012 under the European Regional Policy Research Consortium (EoRPA), managed by the European Policies Research Centre (University of Strathclyde, Glasgow), see <http://www.eprc.strath.ac.uk/eorpa/default.cfm>.

## 6. References

- Amariei, R. & Hritcu, M. (2009). The map of vulnerability to crisis indicates “red” in 27 counties” (in Romanian). *Capital*, March 25, available at <http://www.capital.ro/articol/capital-117887.html>.
- ESI (2009). “Romania’s EU Accession”. *European Stability Initiative*, available at <http://www.esiweb.org/index.php?lang=en&id=400>.
- EPRC (2010). The Objective of Economic and social Cohesion in the Economic Policies of Member States. *Final Report for European Commission – DG Region*, available at [http://ec.europa.eu/regional\\_policy/sources/docgener/studies/pdf/eprc\\_euroreg\\_cohe\\_rep\\_2010\\_p2.pdf](http://ec.europa.eu/regional_policy/sources/docgener/studies/pdf/eprc_euroreg_cohe_rep_2010_p2.pdf).
- EurActiv (2010). *Regional policy in the EU: A midterm healthcheck*. Available at <http://www.euractiv.com/specialweek-regions2020/regional-policy-eu-midterm-health-linksossier-494583?display=normal>.
- Goschin, Z. & Constantin, D.L. (2012). Adaptability and change – national and regional dimensions in the Romanian economy. In G. Gorzelak, C.C. Goh, K. Fazekas (Eds). *Adaptability and Change: the Regional Dimensions in Central and Eastern Europe*, pp. 229-315. Poland: Wydawnictwo Naukowe Scholar Publishing House.
- Goschin, Z. & Constantin, D.L. (2010). The geography of the financial crisis and policy response in Romania. In G. Gorzelak & Ch. Goh (Eds). *Financial Crisis in Central and Eastern Europe - from Similarity to Diversity*, pp. 161-191, Poland: Wydawnictwo Naukowe Scholar Publishing House.



Government of Romania (2007a). National Strategic Reference Framework 2007-2013, Final Version. Available at <http://www.fonduri-ue.ro/upload/118786170647.pdf>.

Government of Romania (2007b). Regional Operational Programme 2007-2013, Final Version. *Ministry of Regional Development, Public Works and Housing*, available at [http://www.mdrl.ro/\\_documente/POR/ROP%20Final%20Version.pdf](http://www.mdrl.ro/_documente/POR/ROP%20Final%20Version.pdf).

Government of Romania (2006). Decision No. 946/July 19, 2006 of the Government of Romania regarding the regional state aid's maximum ceiling for initial investments" (in Romanian). *Monitorul Oficial/Official Monitor*, No. 663/August 2.

HotNews (2012). *Johannes Hahn, Regional Development Commissioner: In order to reach the desired absorption, Romania should spend 30 million euro per week in 2012* (in Romanian). Available at <http://economie.hotnews.ro/stiri-eurofonduri-11784589-comisarul-pentru-dezvoltare-regionala-johannes-hahn-romania-trebuie-primeasca-perioada-2014-2020-cel-putin-aceeasi-suma-din-fonduri-europene-alocarea-bugetara-antieroara-continue-proiectele-pentru-avea.htm>.

InsideEurope (2013). Absorption rates – December 2012. Available at <http://insideurope.eu/taxonomy/term/35>.

Ministry of Foreign Affairs (2012). Strategic Development Framework of Romania 2014-2020 (in Romanian). Available at <http://www.tinapse.ro/home/pentru-cei-care-cred-in-voluntariat-educatie-nonformala-si-tineret/documente-de-suport/Obiective%20si%20strategie.pdf>.

Ministry of Regional Development (2013). *Memorandum on adopting the necessary measures to start the process of regionalisation-decentralisation in Romania*. Available at <http://www.mdr.ro/en/comunicare/presa/comunicate/informatie-de-presa-8464>.

\*\*\*Territorial Agenda of the European Union 2020. Towards an Inclusive, Smart and Sustainable Europe of Diverse Regions. Agreed at the Informal Ministerial Meeting of Ministers responsible for Spatial Planning and Territorial Development on 19th May 2011 Gödöllő, Hungary. Available at <http://www.eu2011.hu/files/bveu/documents/TA2020.pdf>.

Williamson, J. (1965). Regional Inequality and the Process of National Development: A Description of Patterns. *Economic Development and Cultural Change*, No. 13.

Ziarul Financiar (2013). *What Funds Does Romania Get from EU between 2014-2020?* (in Romanian). Available at <http://www.zf.ro/eveniment/ce-fonduri-obtine-romania-de-la-ue-intre-2014-si-2020-si-de-ce-basescu-vorbeste-de-succes-iar-ponta-de-esec-10553884/>.

## The Situation of Investment Projects for Modernization of Agricultural Holdings in Moldova Before and After Romania's Accession to the European Union

Alina-Mirela Marcu<sup>1</sup>

**Abstract:** The purpose of this article is to present the situation of EU funds absorption for modernization the agricultural holdings in Moldova, geographical region considered to be among the poorest in Romania. After 1989, the essential changes in the land structures ownership on the replacement the old structures land ownership of socialist economy with private property, have profoundly marked the Romanian rural space and the food trade balance of Romania suffered a continuing deterioration. The funding based on projects implemented once the SAPARD pre-accession funds, has provided many perspectives Romanian farmers, especially by increasing the budget for investments in the field. This approach shows that the economic performance of representative agricultural holdings in Moldova has evolved positively, but differently across the region.

**Keywords:** rural development; European Union funding; investment projects; agricultural holdings

**JEL Classification:** G32; Q12; Q18

### 1. Introduction

Common Agricultural Policy is one of the first common policies of the European Union, it is based on the principles of the single market, of Community preference on favoring the consumption of products from European Union and financial solidarity, i.e. the common measures are financed from a common budget (Drosu-Şaguna, 2011).

In the pre-accession period, Romania has benefited from European Union support through the SAPARD fund, generically known and under the name of program. It was intended for financial support of the candidate countries or acceding countries, including Romania, in the process of alignment with European standards and harmonization of national legislation with the European Union legislation in areas which were the subject of negotiations in the pre-accession period and their preparation for accessing funds made available to Member States.

---

<sup>1</sup> PhD, Alexandru Ioan Cuza University of Iasi, Faculty of Geography and Geology, Romania, Address: 20 Carol I Boulevard, Iasi, Romania, Corresponding author: alina\_marcu87@yahoo.com.

Romanian state financially supported the projects initiated with EU funds by SAPARD programme and Ministry of Agriculture promoted through an emergency ordinance the Romanian SAPARD, a program by which ensured co-financing projects declared conform by the regional offices of the Paying Agency for Rural Development and Fishing, but have not received money from the European Union (Florian, 2007). Similar with SAPARD, EAFRD funding is an opportunity for the Romanian rural area, which will provide by 2013 grants worth about 8 billion euros, of which 500 million are intended for direct payments and 300 million will provide Technical Assistance, this fund relying on the principle of co-financing private investment projects. Regarding the Romanian agriculture issues, these are mainly represented by the existence of a very large sector of agriculture of subsistence and semi-subsistence farms composed of small individual farms with equipment failure, with agricultural equipment and machinery in which are obtained relatively low yields, resulting an incomplete use of labor and the share of self-consumption is high (Feher, 2009).

However, agricultural holdings must be productive, profitable, and to conserve their resources. Also, agricultural holdings must pursue achievement certain basic objectives such as increasing agricultural production through integrated technologies, energy efficiency and clean production of agricultural products to European quality standards, optimum size and diversification of activities, and performance management practice (Rădulescu, 2007). The size of agricultural holdings varies depending on the profile and specialization, of the ownership and the degree of intensification of production. If in the small households, priority focus is on activities that demand more labor such as gardening, horticulture, livestock, the holdings with larger areas are moving towards mechanized activities respectively culture of plants, zoo-techniques, etc.

With all their level of development, they have some features that are still to be seen and as households. It is estimated, however, that in developed countries, traditional holding based on fruit, with very diverse activity, individualistic and independent and therefore escaping to some extent the economic laws of the market is disappearing, being replaced by units which practice commercial agriculture, adjusted to market needs (Nistorescu, 2007).

## **2. Methodology and Variables Used**

To substantiate personal opinions was necessary organization of coherent statistical researches through which being obtained information that could be processed and interpreted. Thus for statistical data collection were performed indirect observations, were conducted statistical analysis which took into account the lists of beneficiaries of the two European programs SAPARD and EAFRD and

Romanian SAPARD program, statistical data being given by the *Agency for Payments Rural Development and Fisheries*.

### 3. Analysis and Results

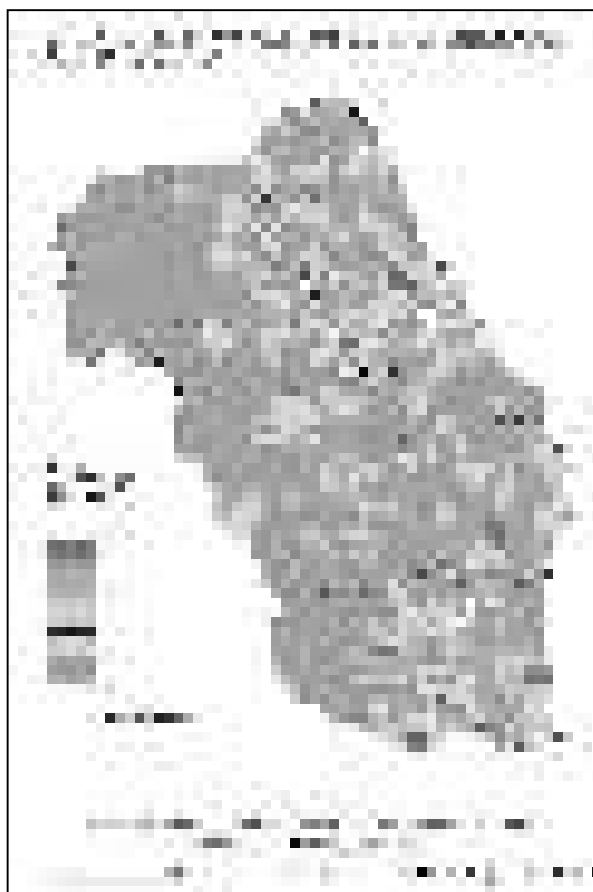
The working hypothesis of the study targeting the modernization project management of agricultural holdings and rural development in Moldavia region, evidenced by the involvement of decision makers in attracting and efficient use of EU funds. Geographical area of research is represented by the historical province of Moldova, comprising historical regions Bucovina and Moldova. Of geographically is located in the northeast of modern Romania, between river basins of rivers Siret and Prut, and in terms of administrative Moldova surface is divided into 8 counties: Bacău, Botoșani, Galați, Iași, Neamț, Vaslui, and Vrancea.

Moldova is by definition rural region of Romania, characterized by very low productivity of agriculture, influenced by the small size of individual agricultural holdings, the low level of mechanization and lack of investment in land improvement and in terms of statistical indicators, Moldova is the poorest region of the country.

In this approach, special attention is paid to measures of the pre-accession period to the European Union, respectively: Measure 3.1 of SAPARD programs and Romanian SAPARD and the one in the post-accession period, Measure 121 financed under the EAFRD.

According to the *Paying Agency for Rural Development and Fisheries* these measures are considering investment projects for the next sectors: farms of plant production (field crops, horticulture, viticulture, and greenhouses) and livestock and poultry farms (dairy farms, sheep farms, goat farms, pig farms, poultry farms, and so on).

Regarding Measure 3.1 funded by SAPARD, it had the main objectives ensuring financial support for private investment in agricultural holdings, plant and animal breeding, and improving farmers' income, attracting young people into farming by improving living conditions and work, but also by ensuring the conditions of welfare of animals.



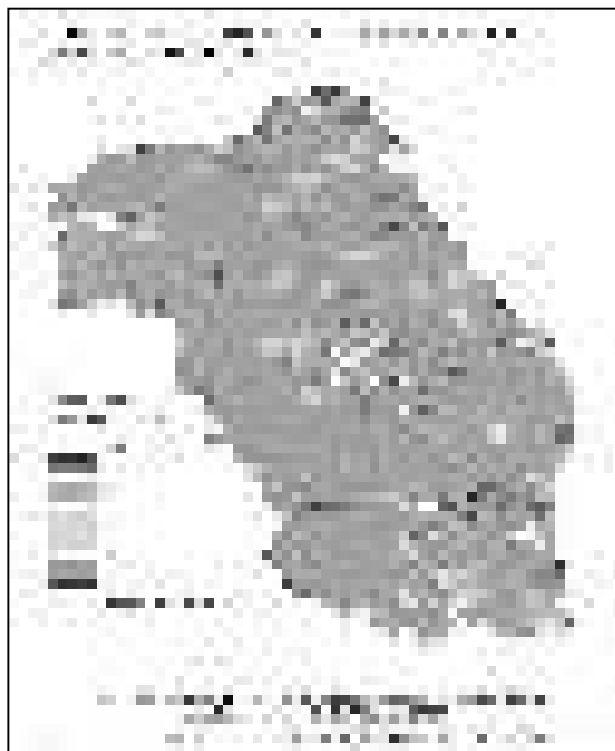
**Figure 1. Spatial distribution of investment projects on modernization of agricultural holdings made by SAPARD - Measure 3.1**

*Source: Personal contribution*

As you can see, investments for modernization of agricultural holdings in Moldova before Romania accession to the European Union, are located mainly in rural areas with functions predominantly agricultural, which covering territorial great plains and plateaus. Thus, in the Moldavian Plain there is a high percentage beneficiaries of this measure especially territory of Iași County (localities: Andrieșeni, Bivolari, Golăiești, Movileni, Plugari, Popricani, Șipote, Trifești, Vlădeni, etc.) and also in Botoșani County, in the Săveni Hills (localities: Albești, Avrămeni, Manoleasa, Răchiți, Roma, Todireni, Trusești, etc.) and Ibănești Coast (localities: Ibănești, Concești, Drabani, Păltiniș, Suharău, etc). The reason these investments are possible in these areas is given the large share of agricultural land and the share of small and medium forest land. Also and in mountain areas in counties: Suceava (localities: Fundu Moldovei, Iacobeni, Șaru Dornei, etc.), Neamț (village Pipirig in

the Stânișoarei Mountains) and Bacău (locality Agaș on Trotuș Valley) have been implemented projects, under this measure, although tourism function is or absent or very weak developed, and the share of employment outside agriculture is very low. However fragmentation of agricultural land, to which is added an underdeveloped technical infrastructure and an aging workforce or unqualified for to practice agriculture, make this potential to be much better developed in southern Moldova, in Plain Covurluiului territory Galați County (localities: Băileni, Corni, Foltești, Rediu, Slobozia Conachi, etc.) and Lower Siret Plain, territory Vrancea County (localities: Ciorăști, Măicănești, Tătăranu, etc.), traditionally underdeveloped area of the region, with a particularly high agricultural potential.

To accelerate the absorption of SAPARD funds in late 2005, was released Romanian SAPARD program, by which the Romanian state granted for applicants for funds, a financial guarantee, for it to can borrow the amount necessary for co-financing projects, the result being next: the number of submitted applications for Measure 3.1 greatly increased, exceeding the amounts allocated to Romania by the program.



**Figure 2. Spatial distribution of investment projects on modernization of agricultural holdings made by the Romanian SAPARD - Measure 3.1**

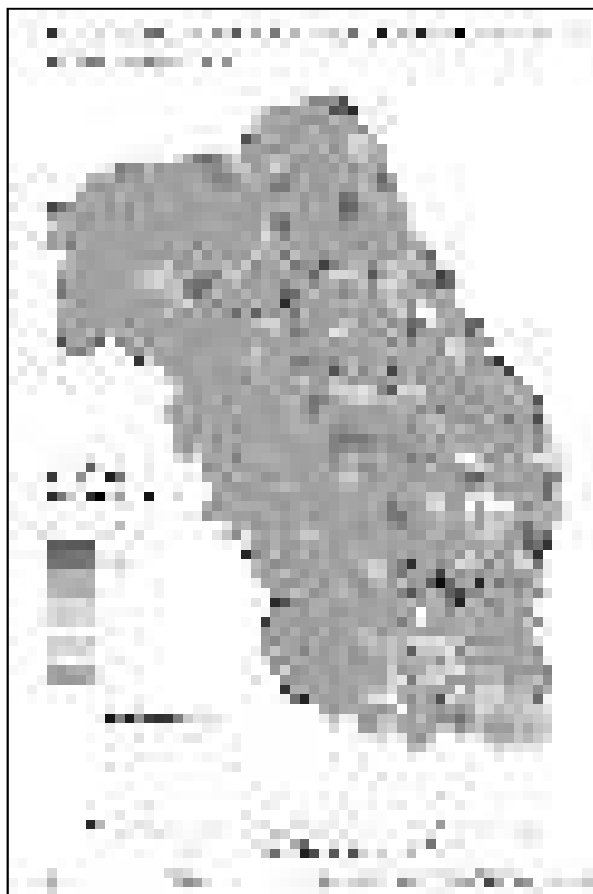
*Source: Personal contribution*

Looking at *Figure 2*, it is found that the use module of land in Moldova is discontinuous, the agricultural lands alternating with areas occupied by forests. With regard to livestock, this is the main concern in mountain areas of is the Suceava County (localities: Câmpulung Moldovenesc, Dorna-Arini, Fundu Moldovei, Iacobeni, Sadova, etc.) because in most cases, there prevails pastures and meadows the shape of extensive grazing.

Thus, for these mountain regions are required facilities to develop agrotourism households, for animal husbandry and horticulture extension, and traditional wood processing activities, the acquisition and processing of berries, or revitalization of crafts.

Our attention is drawn to the massive concentration of investment projects in the Neamț County, in Subcarpathians area (localities: Bălățești, Dumbrava Roșie, Făurei, Girov, Roznov, Săvinești, Tibucani, etc.) and those in the Siret Corridor (localities: Horia, Sagna, Secuieni Trifești, etc.) where human resources are compatible with development of the diversified rural economy. Currently, we can say that the investments made with financial support granted in the pre-accession period for agricultural holdings in rural areas Moldovan failed only to some extent to adapt to current market needs.

Therefore for the programming period 2007-2013, farm modernization will be achieved through EAFRD measure 121, as falling within Axis I – “Improving the competitiveness of agriculture and forestry”.



**Figure 3. Spatial distribution of investment projects on modernization of agricultural holdings made by EAFRD - Measure 121**

*Source: Personal contribution*

Observed an improvement in competitiveness of agricultural holdings, especially those of subsistence which by the fixed capital investments and by introducing new and advanced technologies lead to transform a large number of such farms in viable agricultural holdings.

However the agricultural units in Plain Moldovan within counties Botoșani (localities: Dumești, Hlipiceni, Gorbănești, Critinești, Havin, etc.) and Iași (localities: Focuri, Ceplenița, Românești, Aroneanu, Popești, Brăiești, Movileni, etc.) and agricultural units in Bârlad Plateau, hold small areas of land with elongated perimeters conditioned of the orientation of slopes, of hydrographical network and the network of communication paths.



Also, investment projects implemented in the sub-mountainous hills of Central Moldavian Plateau and Oriental Subcarpathians on the territories of counties: Bacău (localities: Ardeoani, Birtănești, Solonț, etc.) and Neamț (localities: Răucești, Bălțătești, Girov, Tupilați, Zănești, etc.) they have as the agricultural specific the system of culture corresponding slope groups and existing climatic conditions. There is a reduced absorption of European funds in rural areas with mixed functions, because they are characterized by a tourist function, little or medium developed and a low proportion of employment outside agriculture, most of the territory is characterized by an average state of development.

#### 4. Conclusions

The conclusion that emerges after analyzing the situation of investment projects for modernization of farms in Moldova is that rural agriculture of this space should be helped and supported both financially and through the adoption of sustainable agricultural policy decisions to ensure increased performance. Also it is an evident need to accelerate the formation of agricultural sectors so that, farmers in this region to become competitive in the market both in Romania and the European Union.

#### 5. References

- Drosu Șaguna, D. & Găinușă, Nicolae R. (2011). *EU structural funds*. Bucharest: Universul Juridic
- Feher, A. (2009). *Financing Agriculture and Rural Development: Community policies*. Timisoara: Orizonturi Universitare.
- Florian, V.; Dobrescu, E.M. & Ghonoiu, I. (2007). *Rural development - multidisciplinary approach*. Iasi: Terra Nostra.
- Nistorescu, T.; Macabiau, J. & Russeau, J.C. (2007). *Overall management of the farm*. Craiova: Universitaria.
- Rădulescu, C.V. & Ildiko, I. (2007). *Sustainable farm organization*. Bucharest: ASE.
- A guide to accessing European funds for rural development. *Modernization of agricultural holdings*. (2010). Final Report on SAPARD Programme Implementation in Romania.
- Guide for Applicants for accessing Measure 121. *Modernization of agricultural holdings*. Version 05 of April 2010.
- National Strategic Plan of Rural Development 2007-2013*.
- www.apdrp.ro (Payment Agency for Rural Development and Fishing - *statistical data*).

## **Pan-Kazakh Centrism and the Construction of a Regional Axis in the ‘Innovated’ Asia**

**Pierre Chabal<sup>1</sup>**

**Abstract:** The interest of Kazakhstan for Central Asia is the interest of a ‘constructor’. Since 1991, it has been at the direct or indirect origin of several key initiatives: CICA, the Shanghai Cooperation Organization and even a project of a Union of Central Asia. Theories of regional integrations have been enriching Asia for 20 years, and for 60 years in Europe. The key concept is that of a regional axis: a region is multilateral but needs to build itself around a privileged bilateralism among two neighbors-partners. The definition of such an “axis” is: two countries that have born among themselves the seeds of tension but that decide, voluntarily, to turn the page of history, through a strong and enduring bilateral relationship, sometimes through a founding Treaty, investing in the irreversible, political link with the aim of ‘radiating’ throughout the region.

**Keywords:** regional integrations; regional axis; Pan-Asia Centrism

**JEL Classification:** R58; R59

The link between the concept of “regional axis” and Ibrachev’s concept of “Pan-Asia Centrism” is simple. But there are two ways of understanding the concept of “Pan Asia Centrism”. 1) Pan “ASIA CENTRISM”: Asia is at the center everywhere in the world. Asia is at the center of Eurasia. Eurasia is at the center of the world. In a reverse pattern from Mackinder’s, Central Asia dominates the world. 2) ‘PAN ASIA “centrism: Asia is united and becomes a center among the several centers of a multi-polar world. Central Asia, here, is animated by a more realistic and credible project, that of a legitimate pole. The second manner of understanding Ibrachev’s concept of “Pan Asia Centrism” inspires the present analysis applied to Kazakh centrism and the concept of a regional axis, through three concentric circles around Kazakhstan, which form the three sections of my analysis: I - First circle: the IMMEDIATE NEIGHBOURHOOD / II: THE expanded “GOOD NEIGHBOURS” / III - Third circle: the STRATEGIC INTER-REGIONAL dimension

---

<sup>1</sup>Associate Professor of Political Science (MdC) at Le Havre University, France & Invited Professor, national universities of Mongolia, Kazakhstan and Uzbekistan, Address: 25 Rue Philippe Lebon, 76600 Le Havre, France, Tel: + 33 (0)6 01 18 02 04, Corresponding author: pierrechabal@yahoo.fr.

In total, 12 possible axes for Kazakhstan are examined, starting from the idea of a 2-country “axis” and coming to that of a “3-parter” axis (among 3 countries or 3 organizations). The 3 “circles” analyzed suggest 3 different axes: i) Kazakhstan-Russia, ii) Kazakhstan-India iii) Kazakhstan-ASEAN according to 3 different logics (i-neighborhood, ii) extended SCO ii, iii-continent). Reflection is therefore open towards all options.

The interest of Kazakhstan for Central Asia is the interest of a ‘constructor’. What is at hand is the construction of a region. Since 1991, Kazakhstan has been at the direct or indirect origin of several key initiatives: CICA, the Shanghai Cooperation Organization and even a project of a Union of Central Asia.

The region “Central Asia” is building itself. Theories of regional integrations have been enriching in Asia for 20 years, and 60 years in Europe. For me, the key concept is that of a regional axis. It is a simple concept: a region is multilateral but needs to build itself around a privileged bilateralism among two neighbors-partners. The definition of such an “axis” is: **two countries that have born among themselves the seeds of tension but that decide, voluntarily, to turn the page of history, through a strong and enduring bilateral relationship, sometimes through a founding Treaty, investing in the irreversible, political link with the aim of ‘radiating’ throughout the region.** An example of such an axis is that between France and Germany in 1963, which reversed the course of European history.

The link between the concept of “regional axis” and the concept of “Pan-Asia Centricism” of Professor IBRACHEV is simple. But there are two ways of understanding the concept of “Pan Asia Centricism”.

#### 1) Pan “ASIA CENTRISM”

Here, Asia is at the center everywhere in the world. Asia is at the center of Eurasia. Eurasia is at the center of the world. In a reverse pattern from Mackinder’s, Central Asia dominates the world

#### 2) 'PAN ASIA “centricism

Here, Asia is united and becomes a center among the several centers of a multipolar world. Central Asia, here, is animated by a more realistic and credible project, that of a legitimate pole

The second manner of understanding Professor IBRACHEV’s concept of “Pan Asia Centricism” inspires my analysis such as I present it. I will apply it to Kazakh centricism and to the concept of a regional axis, through three concentric circles around Kazakhstan.

These three circles form the three sections of my analysis:

## 1. First Circle: the Immediate Neighborhood

This is the invention of a neighborhood and of post-Soviet internationalization.

Kazakhstan is analyzed here with its “bordering neighbors”, a voluntary redundancy because these neighboring states are “new” in 1991. These 6 neighbors are new, even China because until 1991, China is located geopolitically above all in East Asia. Kazakhstan and its neighbors must do three things at once: i) to manage post-Sovietism ii) to invent a “neighborhood” and iii) to understand the international character of this neighborhood: that is, to become aware of “new possibilities”.

Internationalization is especially the equalization of neighbors among whom to choose a partner for an “axis”.

1) a Kazakhstan-**China** axis represents the greatest innovation and thus the greatest need for “confidence building”. It would be a return to the pre-Kazakh-Russian partnership from the 18<sup>th</sup> century onwards. For China, too, is an innovation within its policy geared towards its “periphery of the west”.

2) a Kazakhstan-**Russia** axis, classic, places the center of the 7 partners in the northeast of the area. Such an axis, if it were to become the ‘center-axis’, also suggests to ‘hook up’ onto it Belarus and Ukraine. This is the hypothesis of the extension to the west of the “new” Asia.

3) a Kazakhstan-**Uzbekistan**, thus among two great civilizations, nomadic and sedentary, places two middle powers at the center of the Russia-China-India triangle. This is a geopolitically logical axis, that of a *realpolitik* looking to the future, which innovate with respect to a “supposed domination” by India, China or Russia.

4) a Kazakhstan-**Kyrgyzstan** axis has all its meaning for the creation of a ‘community management’ of common problems, notably of water resources. The economic and political models of the two polities are different but the differences, economic or political, do not prevent, as such, the invention of an axis, for example in Europe.

5) a Kazakhstan-**Tajikistan** axis is less likely, as in Europe an axis between “France-a Benelux country.” However, in Europe, the Benelux countries welcome each one of the European institutions (Commission, Court and Parliament). In addition, Tajikistan too could help directly a common management, in a unified Central Asia, of water.

6) a Kazakhstan-**Turkmenistan** axis would be an “energy” one and would guide the region towards an “energy community”, as the ECSC in Europe from 1951. It would be an axis of “producers” (oil and gas) interesting for a “consumer”: China.

There is a Forum of Gas Producers or OGEP. But one would need to know better the positions of Turkmenistan.

In all, 6 scenarios, some of which suggest a “three-partner axis”. Concepts are flexible.

## **2. The Expanded “Good Neighbors”**

This is the institutionalization of a “good neighborhood”, the deepening of the Shanghai dynamics in 1996 and from 2001/2012. The “good neighborhood lies at the heart of the SCO philosophy since the SCO Charter of June 2002.

The dynamics of the SCO, its geopolitical potential, is a 10-partner dynamic. It also allows us to consider an axis between two non-neighboring countries even. The question is the degree of institutionalization of this axis between i) two countries already heavily involved in the SCO and ii) the China-Russia-India triangle.

Kazakhstan imposes itself here for four reasons: it is the largest country among the new States of 1991, it is a country at the center of the SCO space with 10 countries, it is a link-space for the transportation of goods; it is also the country suggesting initiatives transcending the OCS: the CICA, an Central Asia Union.

But with whom should one constitute an axis within the framework of the SCO?

7) a **Kazakhstan-China** axis within the framework of the SCO would be one of the “middle” Asia, ranging from the Caspian to the mouth of the Tuman River. This axis would complement the “China-Russia” logic of the Shanghai Group. It would be a logical axis of ‘surveillance’ of i) boundaries, ii) East-West transport corridors (from East Asia to Europe). Russia would “resent” such an axis, just as in Europe Britain “resents” the Franco-German axis, but this Kazakhstan-China axis best corresponds to the new Asia since 1991.

8) a **Kazakhstan-Russia** axis within the framework of the SCO would be is a conventional way to balance out Chinese power. It would also be a classic logic of the “middle” Asia but one that could attract India into this new Asia, the Asia of the SCO. The difficulty here lies in the risk of the perception of “encirclement” of China. This difficulty is not real: the SCO is already multilateral and, in Europe, a bilateral axis has reinforced the multi-lateral construction secured by the Franco-German axis

9) a **Kazakhstan-India** axis within the framework of the SCO would be the most innovative. It would anchor the SCO to the “south”, at the risk of placing China and Russia in the “periphery”. This is today the less likely axis but an SCO one day with 10 members will necessarily reflect and give way to India. A Kazakhstan-India axis would be a better solution than an India-Russia axis, difficult for China, or than an India-China axis, difficult for Russia. A Kazakhstan-India axis is also a

better solution than a 3-partner axis (China, Russia, India), which would place Central Asia in the position of “second inner circle.”

In total, these three scenarios confirm that an axis can be between two not-bordering countries. These scenarios, mainly, raise the logical assumption of a three-country” axis.

Concepts allow this flexibility.

### 3. Third Circle: the Strategic Inter-Regional Dimension

This is the level of an inter-regionalization strategy within a context of continental competition. To ‘think’ Asia strategically is a natural intellectual activity. One of the ways in which to do so is to consider the acquisition of regional influence, including i) in *relation* to other regions and ii) in *response* to other regions.

Asia is characterized by a proliferation of initiatives in 10 years since the CIS in 1991 to the SCO in 2001, with in between APEC, ASEAN “+”, ASEM, SAARC, the CSTO, CICA, etc. In this multiplication, which axis should one choose?

The choice of an axis depends on the preferred strategy: a strategy of direct power or of influence? A strategy of expansion of Asia and of inclusion of West Asia? A strategy of hard rivalry, especially vis-à-vis the ASEM? Among these, Kazakhstan may thus consider:

10) axis Kazakhstan-**Mongolia** axis, a strategy rejected by most of my colleagues. Mongolia is considered peripheral to central Asia. Yet, the two countries, Kazakhstan and Mongolia (considered together in the Soviet vision) are at the center of the Sino-Russian space. They form a “link-space”, in the geopolitical sense, between the East of the continent and the Caspian region. Here again, a 3-partner axis with Turkmenistan would make sense. Mongolia is the first SCO Observer since 2004 but is tempted by a third, extra-continental circle.

11) a Kazakhstan-**Turkey** axis, an original Turkic strategy. Kazakhstan has been for 20 years an initiator. Turkey has been looking for 50 years for a “direction” of foreign policy after: Europe, the Arab world, the Black Sea, which direction? Europe again or the “wider East” of Central Asia ? This would be an axis of strength between i) Asia and the Middle East, and between ii) Southeast Asia and the wider Europe. With China, this axis would be, with 3 countries, capable of welding the 3 Asias: East Asia, Central Asia, West Asia.

12) an axis between Kazakhstan and a **region**, an abstract but challenging hypothesis. This partner-region could be either the European Union or ASEAN. Kazakhstan would here be the symbol of Central Asia as a country which has suggested a “Union of Central Asia” and a founding-State of the SCO. It would be

an axis between two organizations or a “bi-organizational” axis, yet at the “expense” of another organization:

- an Kazakhstan-EU-SCO axis would be at the expense of ASEAN and of ASEM
- an Kazakhstan-SCO-ASEAN axis would be to the detriment of ASEM and of the EU

but this 2<sup>nd</sup> axis would provide a “direction” for all Asia (continental Asia and maritime Asia). Already since 2007, it is suggested to bring the CSTO and SCO together!

In total, I examined 12 possible axes for Kazakhstan.

In conclusion, I started from the idea of a 2-country “axis” and I come to the idea of a “3-partner” axis (among 3 countries or 3 organizations). The 3 “circles” which I have analyzed suggest 3 different axes: i) Kazakhstan-Russia, ii) Kazakhstan-India iii) Kazakhstan-ASEAN according to 3 different logics (i-neighborhood, ii) extended SCO ii, iii-continent). Reflection is therefore open towards all options. None of these options is useless in Europe in 1950, nobody imagined such a lasting construction and integration. A hypothesis can become a reality. It is the job of diplomats.

## **The International Migration in the EU. A Descriptive Analysis Focused on Romania**

**Raluca Mariana Grosu<sup>1</sup>, Daniela Luminița Constantin<sup>2</sup>**

**Abstract:** Migration represents one of the main means humans have chosen for improving their standards of living. Even though it is an important phenomenon manifested since ancient times, migration has never been so much in the attention of scholars and policy makers as it is in present times, especially for its implications in different areas such as demography, economy, sociology, politics, etc. As well, migration is a vital component of the contemporary society and in the same time plays a key role in the development of regions, from various perspectives such as economic, social, or cultural. Taking into consideration the previously outlined framework, the present paper aims at analyzing in a descriptive manner the international migration phenomenon in the European Union (EU) countries between 2006 and 2010, in order to highlight the frame in which Romania is placed from the perspective of the quantitative dimension of international migration.

**Keywords:** international migration; immigration; emigration; Romania; descriptive analysis.

**JEL Classification:** F22

### **Introduction**

Established following a series of treaties, the EU (named since 1993) was formed initially of six countries namely Belgium, France, Germany, Italy, Luxembourg and the Netherlands (1952). Subsequently, the EU was enlarged with new members: Denmark, Ireland and the United Kingdom (1973); Greece (1981); Spain and Portugal (1986); Austria, Finland and Sweden (1995); the Czech Republic, Estonia, Cyprus, Latvia, Lithuania, Hungary, Malta, Poland, Slovenia and Slovakia (2004); Romania and Bulgaria (2007) (Europa, 200-; Ministerul Afacerilor Externe și Integrării Europene al Republicii Moldova/ Ministry of Foreign Affairs and European Integration of Moldova, 200-).

---

<sup>1</sup> Assistant Professor, PhD, Academy of Economic Studies, Romania, Address: 6 Piața Romana Bucharest 010374, Romania, Tel.: +40213191900, Corresponding author: petrescu\_raluca\_mariana@yahoo.com.

<sup>2</sup> Professor, PhD, Academy of Economic Studies, Romania, Address: 6 Piața Romana Bucharest 010374, Romania, Tel.: +4 021 319 1900, e-mail: danielconstantin\_2005@yahoo.com.



International migration has a both positive and negative impact on the EU as a whole and on the member states in particular. International migration plays a significant role in the structure and the size of the population of most EU countries; the total population growth of the member countries in recent years is due to the very high positive balance of the international migration (Oblak Flander, 2011). Also, migration involves the development of economic and social opportunities for host countries (Herm, 2008).

For example, after the fall of the communist regime in 1989, migration represented for Romania one of its most important socio-economic phenomena (Siar, 2008). Furthermore, once the communist regime has fall, the free movement of the population was guaranteed by the Constitution (Săseanu, Neagu & Petrescu, 2010). “During the communist regime, the migration policy in Romania was extremely strict; migration was only accomplished under the strict observation of the state. Furthermore, in case of emigration, only labour exchange, student visits, organized tourism, border traffic on short distances and the emigration of ethnic minorities, were allowed.” (Lăzăroiu & Alexandru, 2008, p. 215) In the same context, immigration was almost nonexistent. In what concerns the research in the area of the migration phenomenon in Romania, especially international migration, according to Constantin, Nicolescu and Goschin (2008), after 2004, an increase was noticeable. The investigation of remittances impact on local communities or of the causes for labour migration can be placed among the main research directions in the area. Even though, according to Lăzăroiu and Alexandru (2008), in recent times, there are very few researchers that investigate different issues related to migration in Romania; a leading factor to this situation can be represented by the difficulty in obtaining the statistical data, or in some cases, even their inexistence.

The paper aims at analyzing in a descriptive manner the international migration phenomenon in the EU countries between 2006 and 2010, in order to highlight the frame in which Romania is placed from the perspective of the quantitative dimension of international migration. Furthermore, with the aim to provide a better image of the quantitative dimension of international migration in Romania, its in-depth analysis is accomplished. In this sense, the paper is structured into two parts. The first one puts forward a series of methodological aspects, while the second one outlines the main findings of the analysis. The paper ends up with a series of final considerations.

## **1. Methodological Aspects**

For the descriptive analysis of the international migration phenomenon in the EU countries between 2006 and 2010, data concerning emigration and immigration flows identified on Eurostat (2012a, 2012b) were utilized. As the identified series of data were incomplete, in order to fill this gap, the webpage of the statistical

institutions in the member states where no data were identified on the Eurostat's webpage were consulted (Hellenic Statistical Authority, 2008; Statistics Belgium, 2010; Central Statistical Office, Poland, 2011; National Institute of Statistics, 2011; Central Statistical Bureau of Latvia, 2012; Hungarian Central Statistical Office, 2012; National Institute of Statistics and Economic Studies, France, 2012; National Statistical Institute, Bulgaria, 2012; Statistical Service, Cyprus, 2012; Statistics Netherlands, 2012). Thus, a series of data were updated and completely filled; however, the data series are incomplete in the case of Belgium, Bulgaria, Greece, France, Cyprus, Hungary, and The Netherlands. For the in-depth descriptive analysis of the international migration flows in Romania, data identified in the "Statistical Yearbook of Romania" 2010 edition (National Institute of Statistics, 2011) were processed.

The period for the analysis was chosen mainly with the aim to investigate the migration phenomenon especially during the economic crisis, and in the particular case of Romania, after the EU accession. Thus, the period for the analysis captures a pre-accession period, one of negotiation for the EU accession (respectively 2006, the accession being accomplished in 2007), and according to Ailenei, Cristescu & Vişan (2012), the pick of the inflationary gap (2007) and the well-known period of economic crisis (2008-2010).

According to Eurostat (2011), the terms associated to international migration used in this paper in the part related to the analysis of the migration phenomenon in the EU are explained as follows: "Immigrants are people arriving or returning from abroad to take up residence in a country for a certain period, having previously been resident elsewhere. According to the 1998 United Nations recommendations on the statistics of international migration (Revision 1), an individual is a long-term immigrant if he/she stays in his/her country of destination for a period of 12 months or more, having previously been resident elsewhere for 12 months or more. On the other hand, emigrants are people leaving the country where they usually reside and effectively taking up residence in another country. According to the 1998 UN recommendations on the statistics of international migration (Revision 1), an individual is a long-term emigrant if he/she leaves his/her country of previous usual residence for a period of 12 months or more." Nevertheless, the terms associated to international migration used in the section of the paper dedicated to the analysis of the phenomenon in Romania, are differently defined by the National Institute of Statistics (2010, p.39): "International migration represents the change of permanent residence to another country or, from another country to Romania. Data on emigrants refer to Romanian citizens who settled their permanent residence abroad. Data on immigrants refer to citizens from another country who settled their permanent residence in Romania." Thus, it can be noticed that the statistical data utilized in the analysis of the international migration in Romania refers only to legal permanent migration.

## **2. International Migration in the EU, with Focus on Romania –Main Findings of the Descriptive Analysis**

The descriptive analysis of the international migration phenomenon in case of the EU members followed the investigation of its dynamics and evolution of the international migration balances, by using a series of statistical indicators on the identified data, such as absolute, relative, and average indicators.

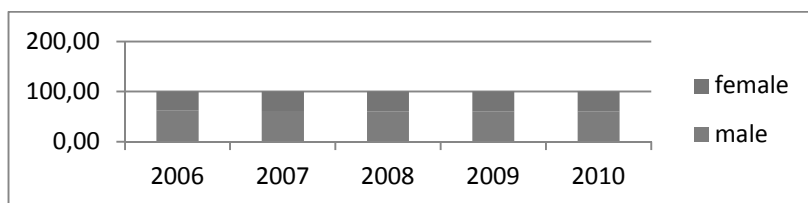
Analyzing the immigration dynamics in the EU members between 2006 and 2010, the results of the calculated indicators have shown a general oscillatory evolution of the number of immigrants in the reference period. In what concerns the dynamics trend, a relative equilibrium between the countries that registered a positive orientation and the ones that registered a negative orientation could be observed. Nevertheless, the balance tipped slightly in favor of the second category. Romania, along with the Czech Republic, Denmark, Germany, Ireland, Spain, Latvia, Lithuania, Austria, Portugal, and Slovenia, is one of the countries that registered an oscillatory evolution of the number of immigrants with a negatively oriented trend, which outlines a general tendency of decrease in the number of immigrants in the analyzed period.

On the other hand, between 2006 and 2010, the dynamics of the emigration in the EU members, in general, highlighted an oscillatory evolution with a positively oriented trend that leads to the idea of an increase in the number of emigrants in the analyzed period. The exceptions to the mentioned situation include Denmark, Germany, Estonia, Austria, Finland, the United Kingdom, and Romania that registered in the analyzed period an oscillatory evolution of emigration with a negatively oriented trend, which outlines the fact that the general tendency was of decrease in the number of emigrants. Different from the countries that registered oscillatory evolutions of emigration, Spain, Lithuania, and Hungary registered increasing evolutions of emigration, while Poland registered a decreased evolution of emigration.

Based on the available data and using the formula for obtaining the international migration balance, the results revealed that, in general, the EU members were host countries in the analyzed period. The exceptions to the outlined trend include Bulgaria, Estonia, Latvia, Lithuania, Poland, and Romania that represent the main providers of immigrants.

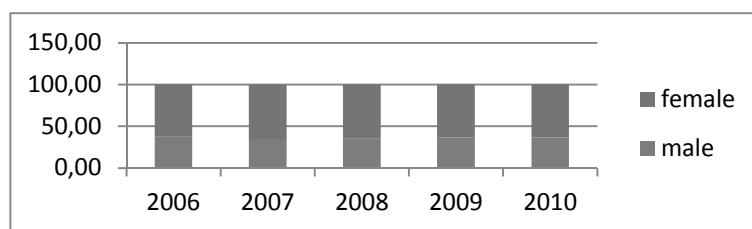
Important provider of immigrants, Romania needs to be paid a special attention in what concerns the structure of its international migration phenomenon. In this sense, further on, an in-depth analysis focused on the investigation of the phenomenon according to different criteria like sex, age, country of origin, nationality, or country of destination, is accomplished for the 2006-2010 period of time, using the data available at the National Institute of Statistics (2011).

In what concerns the structure of international migration flows according to sex, the image is different in case of immigration and emigration. Thus, in every year of the analyzed period, the vast majority of the immigrants were men (figure 1), their shares in the total number of immigrants being very close from one year to another. Nevertheless, in 2006, men registered the highest share in the total number of immigrants from the analyzed period, respectively 61.73%. One factor that can explain the situation can be the fact that in 2006, a series of branches (such as constructions) were confronted with lack of labor; in order to solve this issue, entrepreneurs sought immigrants (Horváth, 2007). Also, the fact that men represent the majority of immigrants in Romania in the analyzed period can be explained by the ethnic entrepreneurship. According to the Ministry of Administration and Interior (2007), immigrant entrepreneurs, especially Chinese and Turkish people, came to Romania for business purpose and after reaching a certain stability level they brought their family. In case of emigration, females had the highest share in the total of emigrants from Romania every year in the analyzed period (figure 2).



**Figure 1. The structure of the immigration flow, according to gender (%)**

*Source: Own representation based on data from the National Institute of Statistics (2011)*



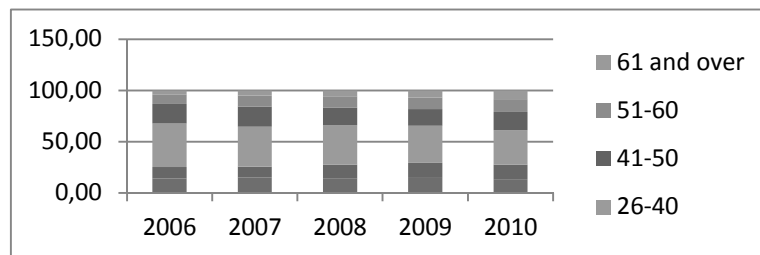
**Figure 2. The structure of the emigration flow, according to gender (%)**

*Source: Own representation based on data from the National Institute of Statistics (2011)*

By dividing the number of males and females that immigrated into Romania between 2006 and 2010 to the total number of males and females in Romania at the 1<sup>st</sup> of July of each year from the analyzed period, it was outlined the fact that male immigrants have a higher share in the total of males in Romania than the one females immigrants have. In case of emigration, females have a higher share. Thus, in the analyzed period, Romanian females emigrated more than Romanian males.

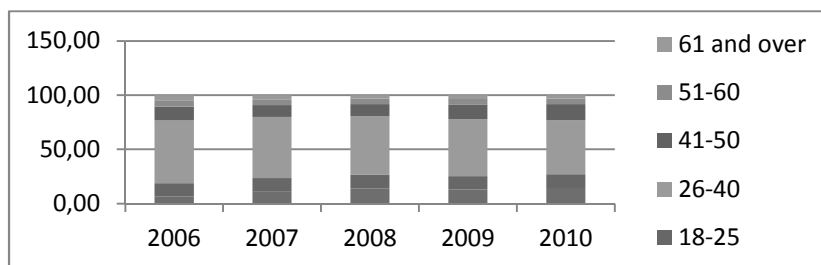
This situation can be similar to the one outlined by Constable (1997) cited in Curran, Shafer, Donato and Garip (2006), leading to the idea according to which Romanian females were more advantaged to migrate, thus facilitating subsequent migration of men.

Considering another criterion for the analysis of the international migration phenomenon in Romania, respectively age, figures 3 and 4 highlight the fact that in all the years afferent to the analyzed period, persons aged between 26 and 40 had the highest share in the total of immigrants in and emigrants from Romania. This is not a surprising fact as, according to Ravenstein (1889) cited in Constantin, Vasile, Preda & Nicolescu (2004), migration usually occurs in early working life, respectively between 20 and 49. Also, this category presents a special interest for the labour market (Ministerul Administrației și Internelor/ Ministry of the Interior and Administration, 2007) and, according to Constantin, Vasile, Preda & Nicolescu (2004) it represents a category of already trained persons, with high working and innovation potentials, easily adaptable, and extremely flexible.



**Figure 3. The structure of the immigration flow, according to age (%)**

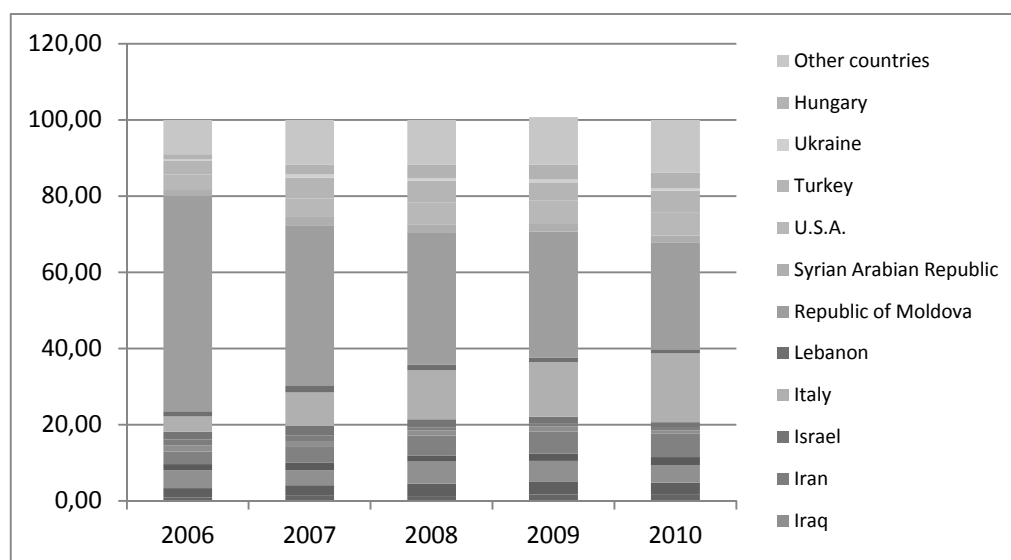
Source: Own representation based on data from the National Institute of Statistics (2011)



**Figure 4. The structure of the emigration flow, according to age (%)**

Source: Own representation based on data from the National Institute of Statistics (2011)

Taking into consideration another criterion for the analysis of the immigration flows into Romania in the analyzed period, respectively the country of origin, the results have outlined the fact that persons from the Republic of Moldova had the highest share in the total number of immigrants; in 2006 they represented 56.38% of the total of immigrants (figure 5). This situation can be explained by the fact that the mobility process between Romania and the Republic of Moldova were improved by adopting the Law of Romanian citizenship no. 21/1991 that defined the migration of Moldavian citizens as a form of repatriation, specifying that the descendants of ex-Romanian citizens can obtain the Romanian citizenship even without establishing their residence in Romania (Iordachi (2003) cited in Horváth, 2007).

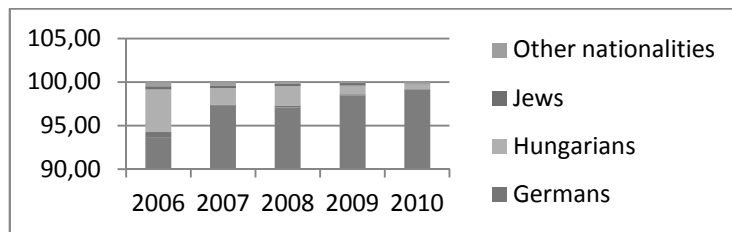


**Figure 5. The structure of the immigration flow, according to the country of origin (%)**

*Source: Own representation based on data from the National Institute of Statistics (2011)*

The descriptive analysis of emigration flows from Romania between 2006 and 2010 by the nationality of emigrants revealed the fact that in all the years of the analyzed period Romanians had the highest share in the total number of emigrants from Romania; annually, they represented over 93% out of the total of emigrants. Furthermore, in 2010, their share reached the level of 99.09% (figure 6). Another remarkable category in the total of emigrants from Romania in the analyzed period, are persons of Hungarian nationality that in 2006 represented almost 5%. They and the Germans had important shares in the total of emigrants from Romania in the period following the fall of the communist regime (Petrescu, Bâc and Zgură, 2011). Nevertheless, in what concerns the flows of Hungarian emigrants from Romania

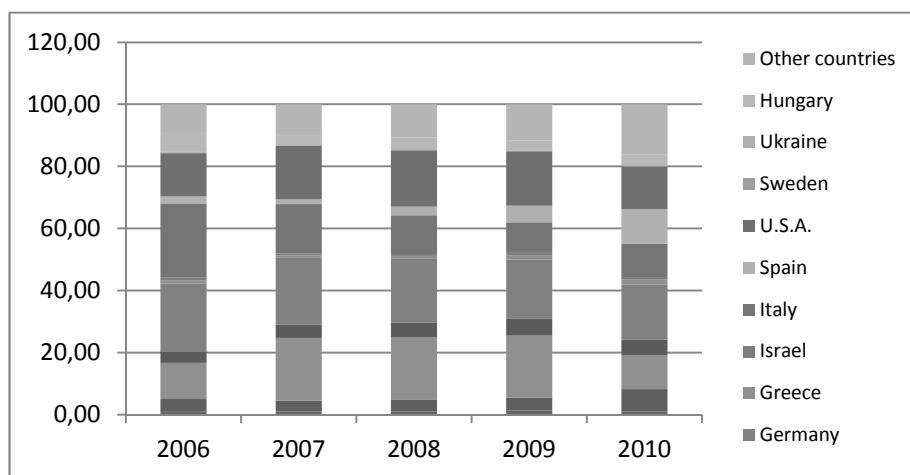
towards Hungary, according to Drbohlav, Hárs and Grabowska-Lusińska (2009) – even in recent times – the main migrants towards Hungary are represented by Hungarians coming from the neighbouring countries, especially from Romania; Romania represents the main source of immigrants for Hungary.



**Figure 6. The structure of the emigration flow, according to nationality (%)**

*Source: Own representation based on data from the National Institute of Statistics (2011)*

The in-depth analysis of the international migration phenomenon in Romania ended with the investigation of the emigration flows from Romania between 2006 and 2010, by the country of destination. The results illustrated in figure 7 reveal the fact that in the vast majority of the years associated to the analyzed period, Germany was the main country of destination preferred by Romanians. The exceptions to the mentioned situation include the years 2006 and 2009 when the main countries for destination were Italy and Canada. If until 2006, in general, Italy was the most preferred country of destination by Romanian emigrants (Petrescu, Bâc & Zgură, 2011), a reorientation towards other destination after 2007 is noticeable. A factor that can explain this situation could be represented by the campaigns and manifestations against immigrants from Italy (Constantin, Nicolescu & Goschin, 2008). Furthermore, the effects of the economic crisis in Italy could have contributed to the determination of Romanians decided to emigrate to reorient their decisions of emigration towards other countries less affected by the crisis.



**Figure 7. The structure of the emigration flow, by the country of destination (%)**

*Source: Own representation based on data from the National Institute of Statistics (2011)*

Even if Spain does not appear among the main destinations for permanent migration from Romania, it is important to mention the fact that it, along with Italy, represents the most important receiver of temporary emigration from Romania (OECD, 2006; Constantin, Nicolescu & Goschin, 2008; OECD, 2008a, 2008b). Furthermore, from another perspective, according to the data provided by the Instituto Nacional de Estadística (2011), in the analyzed period Romania represents the main provider of immigrants for Spain.

### 3. Main Conclusions and Limitations

The paper presented a descriptive analysis of the international migration phenomenon in the EU members, with a special focus on Romania, between 2006 and 2010. Romania, along with the Czech Republic, Denmark, Germany, Ireland, Spain, Latvia, Lithuania, Austria, Portugal, and Slovenia, represents one of the EU members that registered an oscillatory evolution of the number of immigrants with a negatively oriented trend that shows a decrease in the number of immigrants in the analyzed period. The same evolution was registered by Romania also in case of emigration showing that in the analyzed period the general trend was of decreasing in the number of emigrants from our country. However, in this situation, the EU members in the same category with Romania were Denmark, Germany, Estonia, Austria, Finland, and the United Kingdom. Nevertheless, according to the investigation of the international migration balances in the analyzed period, Romania, along with Bulgaria, Estonia, Latvia, Lithuania, and Poland, remains an important provider of immigrants among the EU members.



The in-depth analysis of the international migration phenomenon in Romania between 2006 and 2010 revealed a structure of emigration dominated by females, and one of immigration dominated by males. The age criterion did not create any differences between the structures of the two components of international migration. Thus, persons aged between 26 and 40 represented the vast majority among both immigrants in and emigrants from Romania. Considering the emigration from Romania, in the analyzed period, emigrants were mainly of Romanian nationality and they preferred Germany as main country of destination. On the other hand, the main provider of immigrants for Romania in the analyzed period was the Republic of Moldova. Thus, considering all the previously outlined aspects, a general profile of the legal and permanent immigrant in Romania in the analyzed period can be represented by male aged between 26 and 40, mainly coming from the Republic of Moldova. On the other hand, the general profile of the legal and permanent emigrant from Romania in the analyzed period refers to female of Romanian nationality aged between 26 and 40 that mainly preferred Germany as country of destination.

Nevertheless, it is mandatory to outline the fact that the descriptive analysis of the international migration phenomenon in Romania was based on data that referred only to legal permanent migration, resulting in an analysis that does not reflect the real dimension of the phenomenon. The same difficulty was also encountered in:

- Constantin, Nicolescu & Goschin (2008, p. 34): “The real amplitude of the migratory flows is difficult to be estimated in case of Romania; statistics are only available on permanent migration. The official data reflect only a small part of the real dimension of the phenomenon.”
- OECD (2008a, p. 274): “The data on the migratory flows in Romania are difficult to obtain. [...] As in all the countries with a powerful emigration character, the official data associated to the emigration from Romania underestimate the real phenomenon, especially because emigrants do not necessarily report their situation to the authorities.”
- Siar (2008, p.17): “The statistical office registers as emigrants only persons that permanently changed their residence abroad. Thus, the number of emigrants is underestimated.”

However, the developed analysis reveal significant phenomena and present a complex image on the quantitative dimension of the international migration in the EU members, especially in Romania, representing an important basis for future research in the area.

#### 4. Acknowledgements

This article is mainly a result of the project POSDRU/88/1.5./S/55287 “Doctoral Programme in Economics at European Knowledge Standards (DOESEC)”. This project is co-funded by the European Social Fund through The Sectorial Operational Programme for Human Resources Development 2007-2013, coordinated by The Bucharest Academy of Economic Studies in partnership with West University of Timisoara.

#### 5. References

- Ailenei, D., Cristescu, A. & Vişan, C. (2012). Regional patterns of global economic crisis shocks propagation into Romanian economy. *Romanian Journal of Regional Science*, 6(1), pp. 41-52.
- Central Statistical Bureau of Latvia (2012). *Statistics Database*. [online] Available at: <http://www.csb.gov.lv/en/dati/statistics-database-30501.html>, Accessed 14 April 2012.
- Central Statistical Office, Poland (2011). *Branch Yearbooks – Demographic Yearbook of Poland*. [online] Warsaw: Central Statistical Office. Available at: [http://www.stat.gov.pl/cps/rde/xbcr/gus/PUBL\\_sy\\_demographic\\_yearbook\\_2011.pdf](http://www.stat.gov.pl/cps/rde/xbcr/gus/PUBL_sy_demographic_yearbook_2011.pdf), Accessed 14 April 2012.
- Constantin, D.L, Vasile, V., Preda, D. and Nicolescu, L. (2004). *Fenomenul migraţionist din perspectiva aderării României la Uniunea Europeană/Migration phenomenon from the perspective of Romania's accession to the European Union*. [online] Bucharest: Institutul European din România. Available at: [http://www.ier.ro/documente/studiideimpactPaisII\\_ro/Pais2\\_studiu\\_5\\_ro.pdf](http://www.ier.ro/documente/studiideimpactPaisII_ro/Pais2_studiu_5_ro.pdf), Accessed 9 March 2011.
- Constantin, D.L., Nicolescu, L. & Goschin, Z. (2008). *Perspective europene de abordare a azilului și migrației/ European perspective of approaching asylum and migration*. [online] Bucharest: Institutul European din România. Available at: [http://www.ier.ro/documente/spos2008\\_ro/Studiul\\_4\\_-\\_Migratie\\_RO.pdf](http://www.ier.ro/documente/spos2008_ro/Studiul_4_-_Migratie_RO.pdf), Accessed 9 March 2011.
- Curran, S.R., Shafer, S., Donato, K.M. & Garip, F. (2006). Mapping Gender and Migration in Sociological Scholarship: Is It Segregation or Integration?. *International Migration Review*, 40(1), pp. 199–223.
- Drbohlav, D., Hárs, Á. & Grabowska-Lusińska, I. (2009). Experiencing immigration: Comparative analysis of the Czech Republic, Hungary and Poland. *IDEA Working Papers, No. 14*. [online] Available at: [http://www.idea6fp.uw.edu.pl/pliki/WP14\\_Experiencing\\_immigration.pdf](http://www.idea6fp.uw.edu.pl/pliki/WP14_Experiencing_immigration.pdf), Accessed 12 February 2011.
- Europa (200-). *Istoria Uniunii Europene/History of the European Union*. [online] Available at: [http://europa.eu/abc/history/index\\_ro.htm](http://europa.eu/abc/history/index_ro.htm), Accessed 28 February 2011.
- Eurostat (2011). *Glossary: Migration*. [online] Available at: [http://epp.eurostat.ec.europa.eu/statistics\\_explained/index.php/Glossary:Emigrant](http://epp.eurostat.ec.europa.eu/statistics_explained/index.php/Glossary:Emigrant), Accessed 29 April 2012.
- Eurostat (2012a). *Immigration by sex, age group and citizenship*. [online] Available at: <http://epp.eurostat.ec.europa.eu/portal/page/portal/population/data/database>, Accessed 14 April 2012.

- Eurostat (2012b). *Emigration by sex, age group and citizenship*. [online] Available at: <http://epp.eurostat.ec.europa.eu/portal/page/portal/population/data/database>, Accessed 14 April 2012.
- Hellenic Statistical Authority (2008). *Statistical databases*. [online] Available at: <http://www.statistics.gr/portal/page/portal/ESYE/PAGE-database>, Accessed 14 April 2012.
- Herm, A. (2008). *Recent migration trends: citizens of EU-27 Member States become ever more mobile while EU remains attractive to non-EU citizens*. [online] Available at: [http://epp.eurostat.ec.europa.eu/cache/ITY\\_OFFPUB/KS-SF-08-098/EN/KS-SF-08-098-EN.PDF](http://epp.eurostat.ec.europa.eu/cache/ITY_OFFPUB/KS-SF-08-098/EN/KS-SF-08-098-EN.PDF), Accessed 27 February 2011.
- Horváth, I. (2007). *Focus Migration. Country Profile: Romania*. [online] Hamburg: Hamburg Institute of International Economics (HWWI). Available at: [http://focus-migration.hwwi.de/typo3\\_upload/groups/3/focus\\_Migration\\_Publikationen/Laenderprofile/CP\\_09\\_Romania.pdf](http://focus-migration.hwwi.de/typo3_upload/groups/3/focus_Migration_Publikationen/Laenderprofile/CP_09_Romania.pdf), Accessed 16 March 2011.
- Hungarian Central Statistical Office (2012). *Population and vital events*. [online] Available at: <http://www.ksh.hu/?lang=en>, Accessed 14 April 2012.
- Instituto Nacional de Estadística (2011). *Migraciones. Estadística de variaciones residenciales/Migration. Residential Variation Statistics*. [online] Available at: <http://www.ine.es/jaxi/menu.do?type=pcaxis&path=%2Ft20%2Fp307&file=inebase&L=>, Accessed 13 February 2011.
- Lăzăroiu, S. & Alexandru, M. (2008). Romania. In: E. Honekopp și H. Mattila, eds. 2008. *Permanent or circular migration? Policy choices to address demographic decline and labour shortages in Europe*. Budapest: International Organization for Migration, pp. 215-258.
- Ministerul Administrației și Internelor/Ministry of Interior and Administration (2007). *Imigrația și azilul în România – anul 2006/Immigration and Asylum in Romania - in 2006 -*. [online] Bucharest: Ministerul Administrației și Internelor, Available at: [http://www.mai.gov.ro/Documente/Prima%20Pagina/STUDIU\\_migratie\\_2006\\_ultima\\_forma.pdf](http://www.mai.gov.ro/Documente/Prima%20Pagina/STUDIU_migratie_2006_ultima_forma.pdf), Accessed 13 March 2011.
- Ministerul Afacerilor Externe și Integrării Europene al Republicii Moldova/Ministry of Foreign Affairs and European Integration of Moldova (200-). *Etapele de constituire și afirmare a Uniunii Europene/Stages of formation and affirmation of the European Union*. [online] Available at: <http://www.mfa.gov.md/etape-istorice-ue>, Accessed 28 February 2011.
- National Institute of Statistics (2010). *Statistical Yearbook of Romania 2009*. Bucharest: National Institute of Statistics.
- National Institute of Statistics (2011). *Statistical Yearbook of Romania 2010*. Bucharest: National Institute of Statistics.
- National Institute of Statistics and Economic Studies, France (2012). *Foreigners – Immigrants*. [online] Available at: [http://www.insee.fr/en/themes/theme.asp?theme=2&sous\\_theme=5](http://www.insee.fr/en/themes/theme.asp?theme=2&sous_theme=5), Accessed 14 April 2012.
- National Statistical Institute, Bulgaria (2012). *Population – table data*. [online] Available at: <http://www.nsi.bg/otrasalen.php?otr=53>, Accessed 14 April 2012.
- Oblak Flander, A. (2011). *Immigration to EU Member States down by 6% and emigration up by 13% in 2008*. [online] Available at: [http://epp.eurostat.ec.europa.eu/cache/ITY\\_OFFPUB/KS-SF-11-001/EN/KS-SF-11-001-EN.PDF](http://epp.eurostat.ec.europa.eu/cache/ITY_OFFPUB/KS-SF-11-001/EN/KS-SF-11-001-EN.PDF), Accessed 17 February 2011.

OECD (2006). *International Migration Outlook 2006*. [online] Paris: OECD. Available at: [http://www.istat.it/istat/eventi/2006/ocse/ocse\\_migration\\_report\\_2006.pdf](http://www.istat.it/istat/eventi/2006/ocse/ocse_migration_report_2006.pdf), Accessed 10 February 2011].

OECD (2008a). *International Migration Outlook 2008. Country notes – Romania*. [online] Paris: OECD. Available at: <http://www.oecd.org/dataoecd/57/39/41256175.pdf>, Accessed 27 February 2011.

OECD (2008b). *International Migration Outlook 2008. Country notes – Spain*. [online] Paris: OECD. Available at: <http://www.oecd.org/dataoecd/57/29/41256399.pdf>, Accessed 27 February 2011.

Petrescu, R.M., Bâc, D. & Zgură, I.D. (2011). Descriptive analysis of the international migration phenomenon in Romania between 1991 and 2008. *Analele Universității din Oradea, Științe Economice/Oradea University Annals, Economic Sciences, Vol. XX, 1<sup>st</sup> Issue/July*, pp. 288-294.

Săseanu, A.S., Neagu, E.C. & Petrescu, R.M. (2010). Globalization effects on population migration – challenges for the Romanian business environment. *Calitatea – acces la succes/Quality - access to success*, 11(116), pp. 777-783.

Siar, S. ed. (2008). *Migration in Romania: A Country profile 2008*. [online] Geneva: International Organization for Migration. Available at: [http://publications.iom.int/bookstore/free/Romania\\_Profile2008.pdf](http://publications.iom.int/bookstore/free/Romania_Profile2008.pdf), Accessed 17 March 2011.

Statistical Service, Cyprus (2012). *Population and social conditions*. [online] Available at: [http://www.mof.gov.cy/mof/cystat/statistics.nsf/populationcondition\\_21main\\_en/populationcondition\\_21main\\_en?OpenForm&sub=1&sel=1](http://www.mof.gov.cy/mof/cystat/statistics.nsf/populationcondition_21main_en/populationcondition_21main_en?OpenForm&sub=1&sel=1), Accessed 14 April 2012.

Statistics Belgium (2010). *Statistics & Figures*. [online] Available at: <http://statbel.fgov.be/en/statistics/figures/>, Accessed 14 April 2012.

Statistics Netherlands (2012). *Migration*. [online] Available at: <http://www.cbs.nl/en-GB/menu/themas/bevolking/cijfers/extra/mappingworld-1.htm>, Accessed 14 April 2012.

## EU's Enlargement vs Global Crisis

Romeo-Victor Ionescu<sup>1</sup>

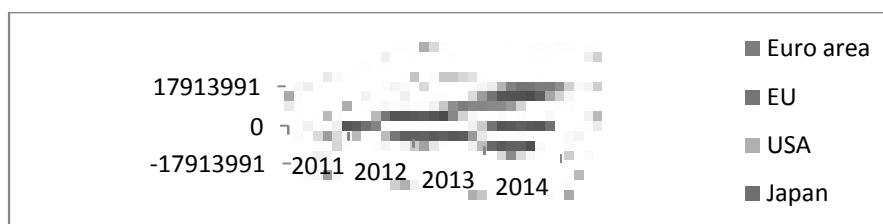
**Abstract:** The paper deals with the idea that the global economic crisis' challenges for the EU economy are too powerful and the enlargement process has to be very carefully managed. Even that there are five candidate countries and an acceding country, the socio-economic situation across the EU27 and, especially, across the Euro area are not able to support new entrances as Member States. The analysis in the paper is based on the latest official data and is supported by pertinent statistical tables and diagrams. The main conclusion of this analysis is a pessimistic one. We consider that the main objective of the EU27 is to survive and to support a real economic recovery, nowadays. The enlargement has to continue only after the above objectives' achievement.

**Keywords:** economic recovery; global crisis; macroeconomic forecasts

**JEL Classification:** O52; O57; R11

### 1. Introduction

The economic recovery process continued across the EU in 2012. During the first semester of 2012, the domestic demand decreased as a result of the global economy's slowed down. The same processes continued in the second semester of that year. Moreover, the unemployment and the regional disparities increased, as well. The official forecasts talk about a small economic growth in 2013 (0.4% in the EU and 0.1% in Euro area), which will be far away from the world average (3.3%). Even that the forecasted economic growth rates will increase in the EU and the Euro area in 2014, the difference from the world average will maintain high (see Figure 1).



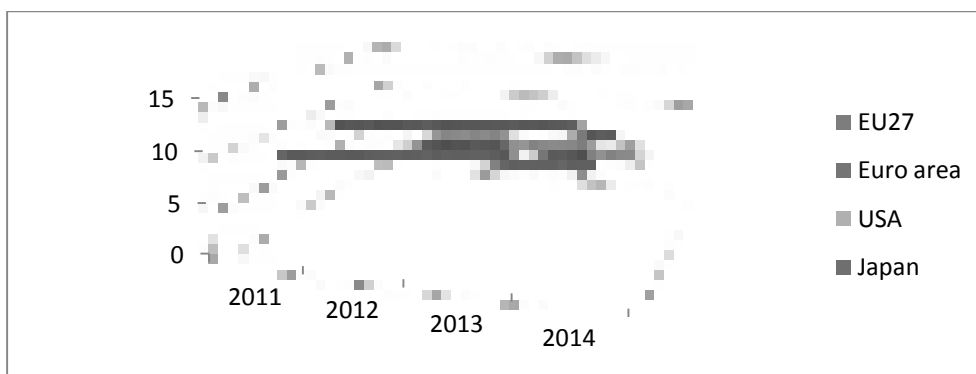
**Figure 1. Forecasted economic growth rates in the world (%)**

*Source: Personal contribution using Eurostat, 2012*

<sup>1</sup>Professor, PhD, Faculty of Economic Sciences, Danubius University of Galati, Romania, Address: 3 Galati Blvd, Galati, Romania, Tel.: +40372 361 102, fax: +40372 361 290, Corresponding author: romeo.v.ionescu@univ-danubius.ro.

Unfortunately, the main global competitors of the EU will achieve higher growth rates during the period of forecasting.

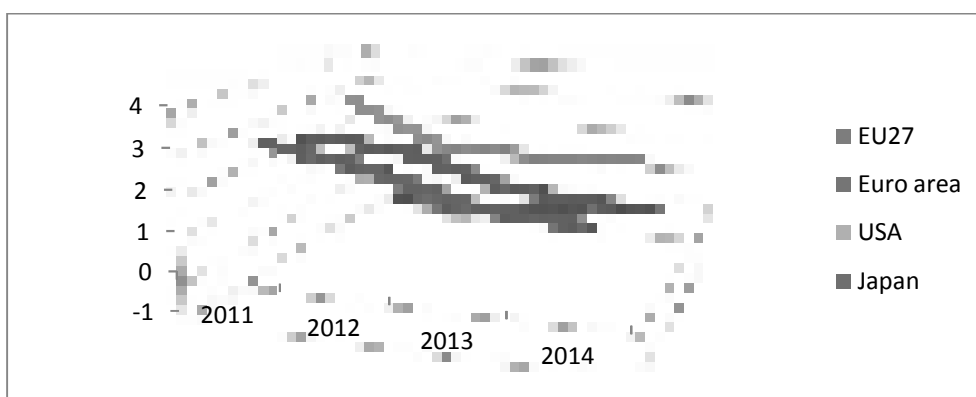
The worst situation is that connected with the unemployment rate, which will persist to be two marks across the EU27 and the Euro area during 2012-2014. USA and Japan will face with unemployment rates less than 8% (the first) or 5% (the second) during the same time period (see Figure 2).



**Figure 2. Forecasted unemployment rates in the world (%)**

*Source: Personal contribution using Eurostat, 2012*

According to the inflation rate, a better situation will be achieved in the Euro area, where the annual average rates will be lower than in the EU27 during 2012-2014. USA will face with average annual inflation rates of about 2%, while Japan will face with disinflation or very little inflation rates (see Figure 3).



**Figure 3. Forecasted inflation rates in the world (%)**

*Source: Personal contribution using Eurostat, 2012*

## **2. Other Researches in this Topic Area**

The latest researches in this topic area can be divided into two great components. First is that connected to the economic distortions across the European economy. A very important economic dilemma is that connected to the internal and external imbalances, especial in the Euro area. In order to solve this problem, are necessary great efforts, even that some progresses were achieved. These progresses were focused on the imbalances' reduction (Vogel, 2011).

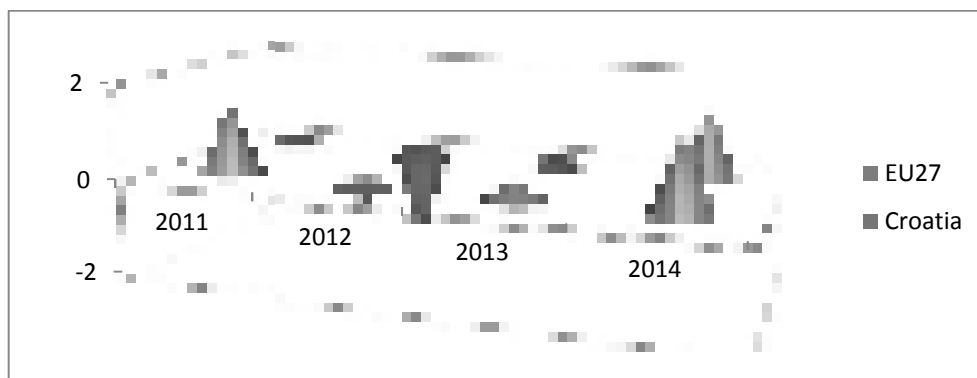
The main economic instruments used to decrease the imbalances are the wages and the unit labour costs' decreases. These measures had a good impact on current-account deficits if they were followed by an increase in the labour productivity (Darvas, 2012). As a result of the global crisis impact, the price competitiveness support a change of the resources' uses (Ruscher, Wolff, 2012). Moreover, the increase of the unemployment and the contraction of the output will have a negative impact on the wages and prices' trends (Dong, 2012).

Some specialists are more pessimistic and consider that a real economic recovery will start at the beginning of 2015. They use as argue the fact that a lot of the Member States' economies are more vulnerable to the crisis' challenges (Bech, Gambacorta & Kharroubi, 2012).

The second component of this specific research area is that which analyses the economies of the candidate countries. An interesting approach is that connected to the evolving legal practice of EU enlargement. It is focused on the latest two Member States as well as to the candidate states from the Western Balkans and Turkey. A distinct part of this analysis covers Croatia, which is waiting to sign its adhering treaty (Inglis, 2010). The importance of the economic stability in the acceding and candidate countries represents the theme of an important study of the European Central Bank. This study covers Croatia, Iceland, the Former Yugoslav Republic of Macedonia, Montenegro and Turkey. The main conclusion of the study is: "While economic activity remained robust in most EU candidate countries, challenges for the bank-based financial sectors stemmed from (i) high or rising credit risk (ii) unhedged borrowing in foreign currencies and (iii) strains related to the euro area debt crisis which is impacting the EU candidate countries via a number of channels" (ECB, 2012).

### 3. The Economies of the Acceding and Candidate Countries under the Global Crisis' Impact

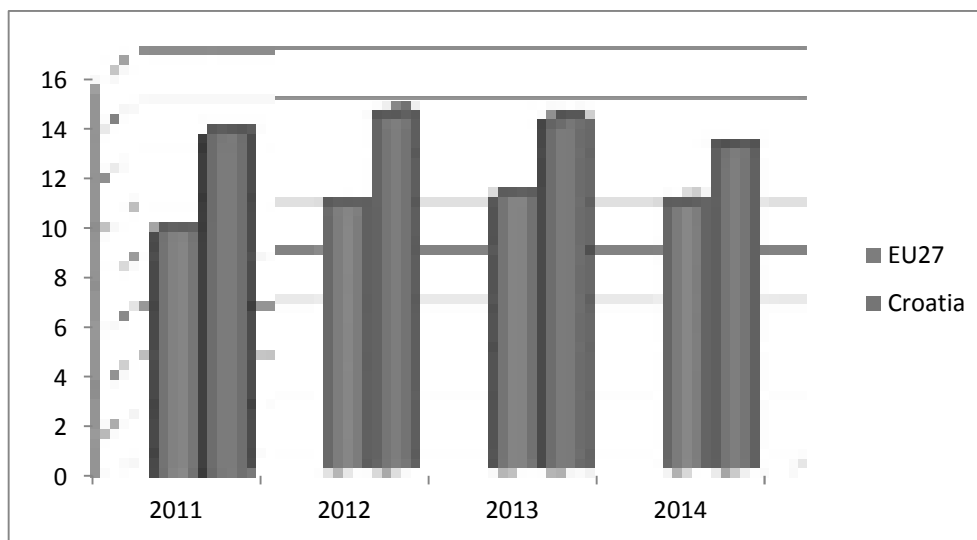
Croatia is the only acceding economy to the EU on short time. This means that its economic indicators are closed to the EU average. Using the GDP growth rate, we can observe that Croatia achieved lower rates than the EU27 during 2011-2012. Moreover, the forecast talk about lower rates in 2013 and 2014 (see Figure 4).



**Figure 4. GDP growth rates in the EU27 and Croatia (%)**

*Source: Personal contribution using Eurostat, 2012*

Moreover, the unemployment rate is another indicator which has negative trend. During 2011-2012 and the forecasted period, the unemployment rate is higher than the EU27 average (see Figure 5).

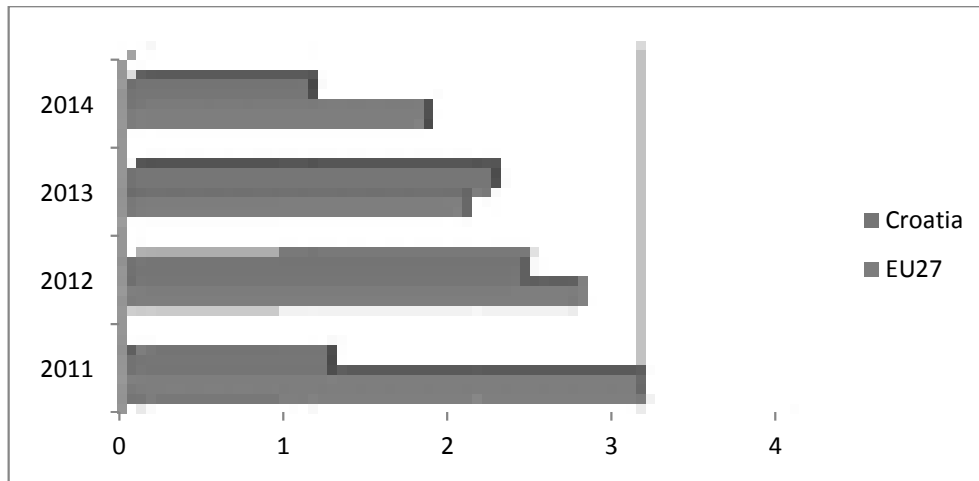


**Figure 5. Unemployment rates in the EU27 and Croatia (%)**

*Source: Personal contribution using Eurostat, 2012*



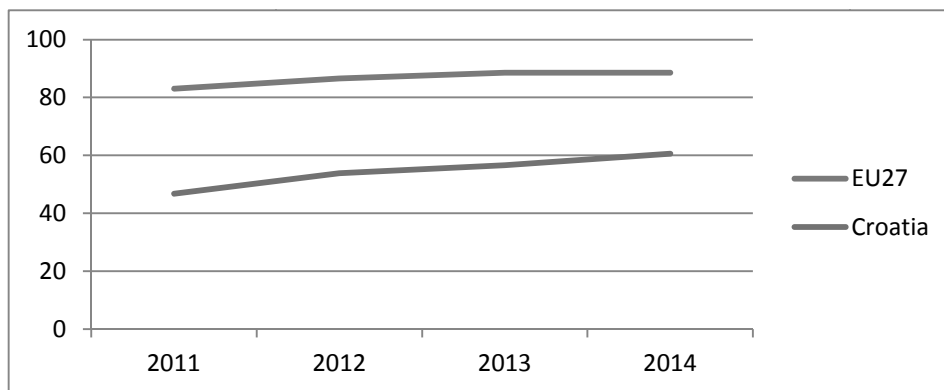
On the other hand, Croatia has better situation connected to the inflation rate and the government debt. The inflation rate increased during 2011-2012, but the forecasts show an important decrease for the next two years. As a result, the inflation rate in 2014 will be lower than in 2011 (see Figure 6).



**Figure 6. Inflation rates in the EU27 and Croatia (%)**

*Source: Personal contribution using Eurostat, 2012*

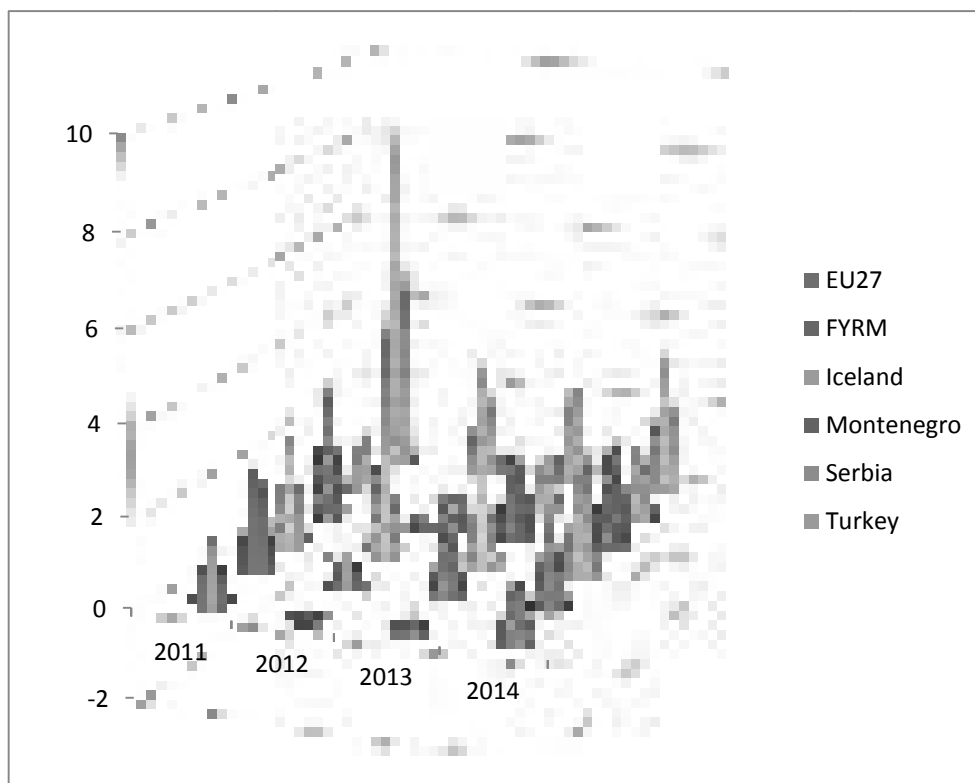
An element which is able to support the economic development in Croatia is the relative low government debt. Even that it increased during 2011-2012, and will increase in the next two years, its value as % of GDP is still acceptable (see figure 7).



**Figure 7. Government debts in the EU27 and Croatia (% GDP)**

*Source: Personal contribution using Eurostat, 2012*

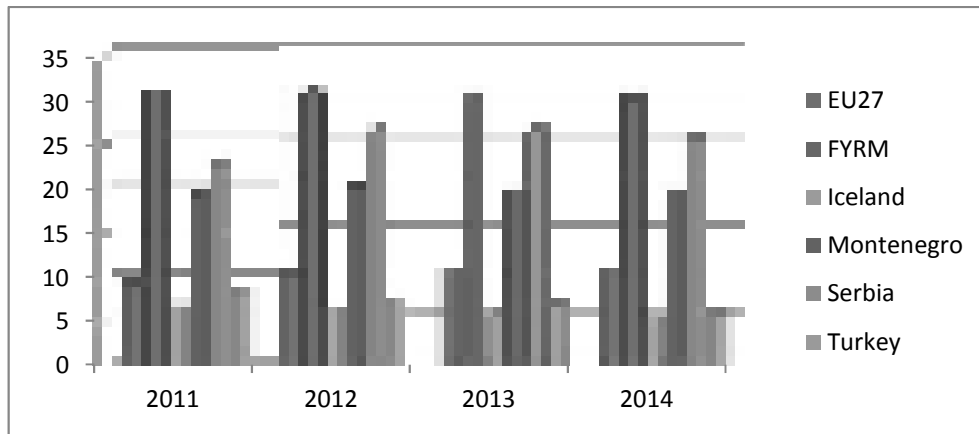
There are five candidate countries which succeeded to achieve GDP growth rates greater than the EU27 during 2011-2012, excepting Serbia in 2012. The forecasted growth rates are greater than the EU27 average, as well (see Figure 8).



**Figure 8. GDP growth rates in the EU27 and the candidate countries (%)**

*Source: Personal contribution using Eurostat, 2012*

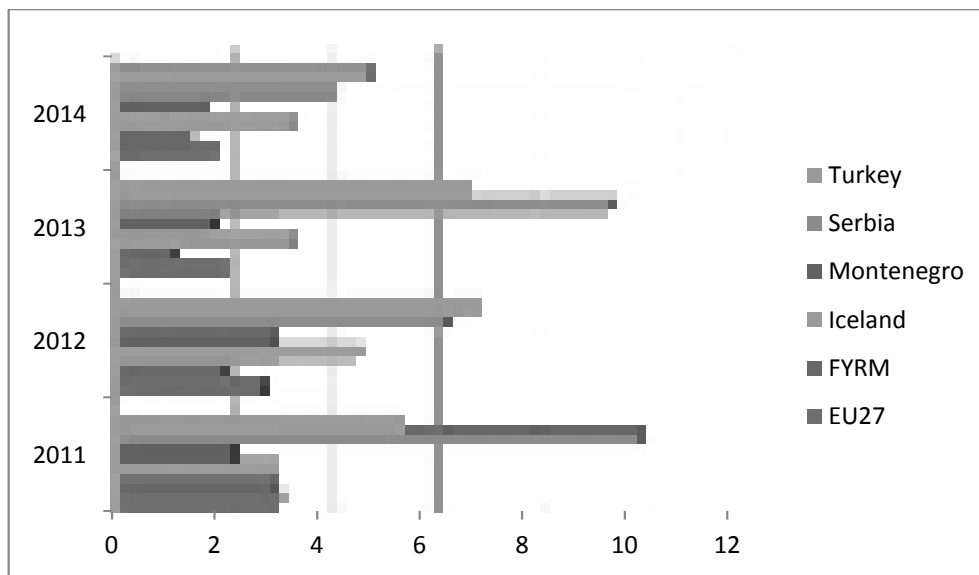
A different situation is that connected to the unemployment rate. Iceland and Turkey achieved unemployment rates lower than the EU27 average during 2011-2012. The same situation will be in 2013 and 2014. On the other hand, Serbia, Montenegro and FYRM have higher unemployment rates and are far away of a significant decrease (see Figure 9).



**Figure 9. Unemployment rates in the EU27 and the candidate countries (%)**

*Source: Personal contribution using Eurostat, 2012*

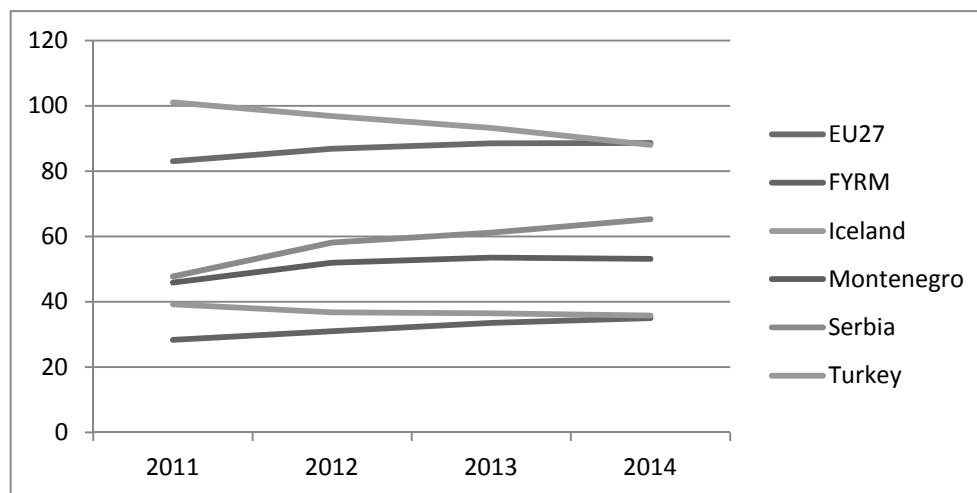
A similar situation is that connected to the inflation rate. Three candidate countries have higher inflation rates, while FYRM and Montenegro succeeded in achieving inflation rates lower than the EU27 average (see Figure 10).



**Figure 10. Inflation rates in the EU27 and the candidate countries (%)**

*Source: Personal contribution using Eurostat, 2012*

An interesting situation is that connected to the government debt. Iceland is the only candidate country which will achieve the same government debt as the EU27 average in 2014. The other four candidate countries had and will have lower government debts than the EU27 average during 2011-2014 (see Figure 11).

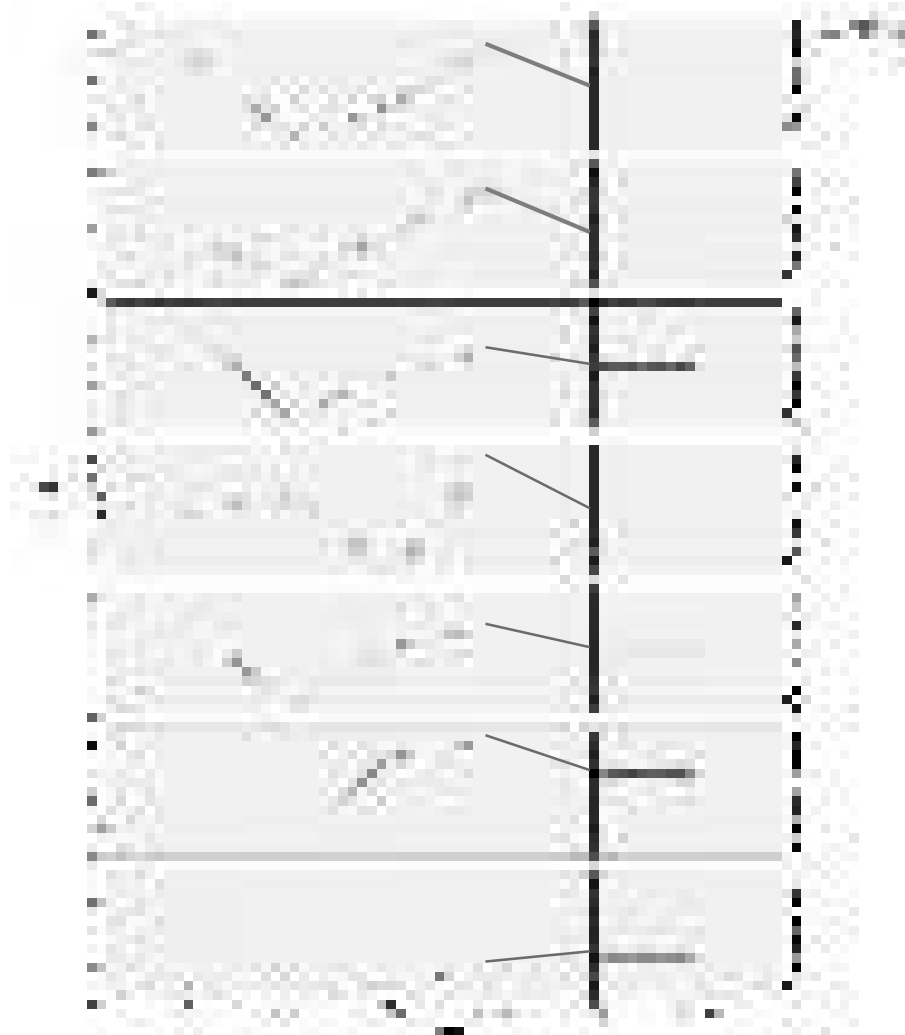


**Figure 11. Government debts in the EU27 and the candidate countries (% GDP)**

*Source: Personal contribution using Eurostat, 2012*

#### **4. Is Cohesion a Realistic Target on Short and Medium Terms for the Candidate Countries?**

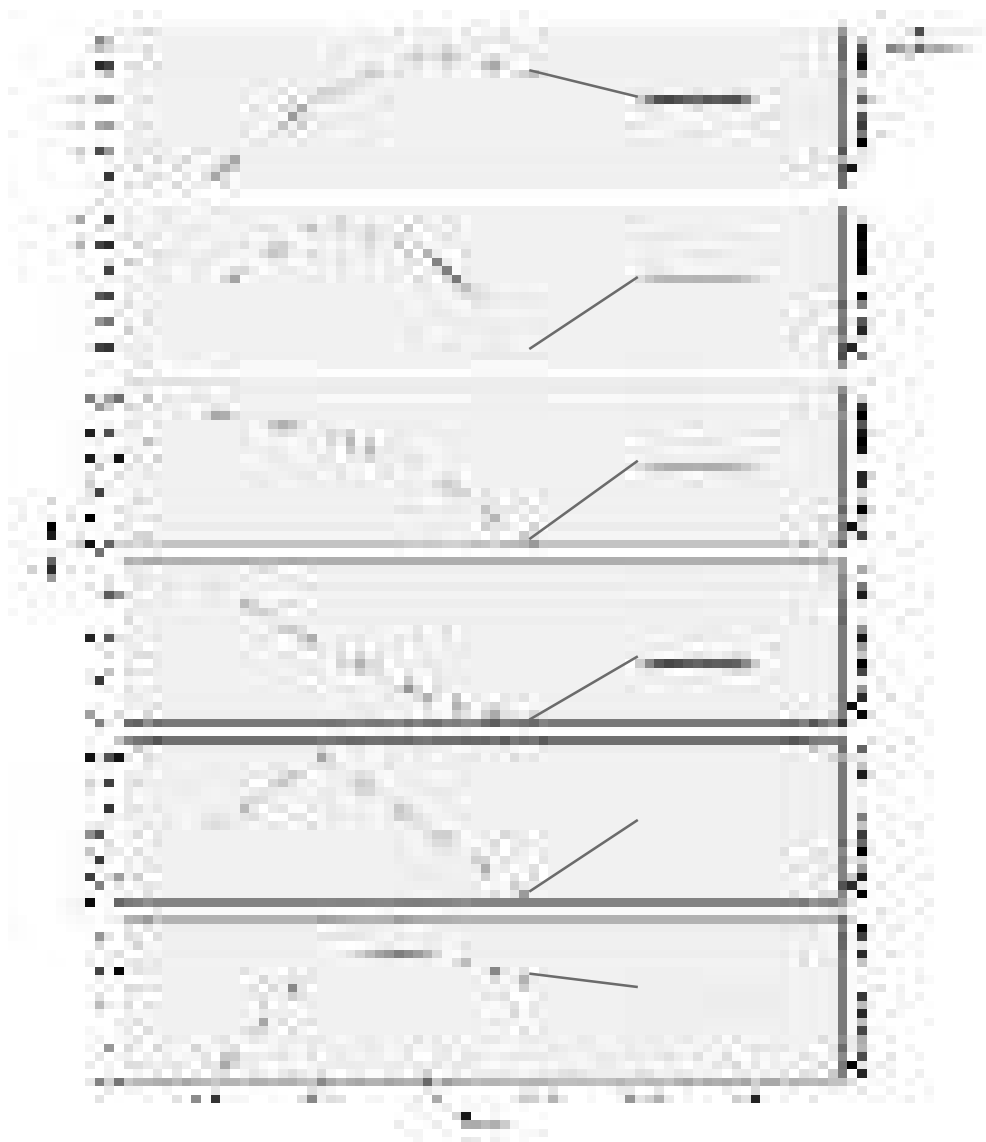
A new step in this analysis is to realise a new forecast, in order to observe if the cohesion process can be achieved by the candidate countries. As a result, we used a dedicated soft (SPSS19) and ARIMA model in order to forecast the main macroeconomic indicators during 2015-2016. According to GDP, the forecast is positive only for four candidate countries, which will be able to achieve annual growth rates greater than the EU average (FYRM, Iceland, Montenegro and Turkey). Even that Croatia is the acceding country, it will not be able to realise high economic growth rates (see Figure 12).



**Figure 12. GDP growth rate forecast (%)**

*Source: Personal contribution*

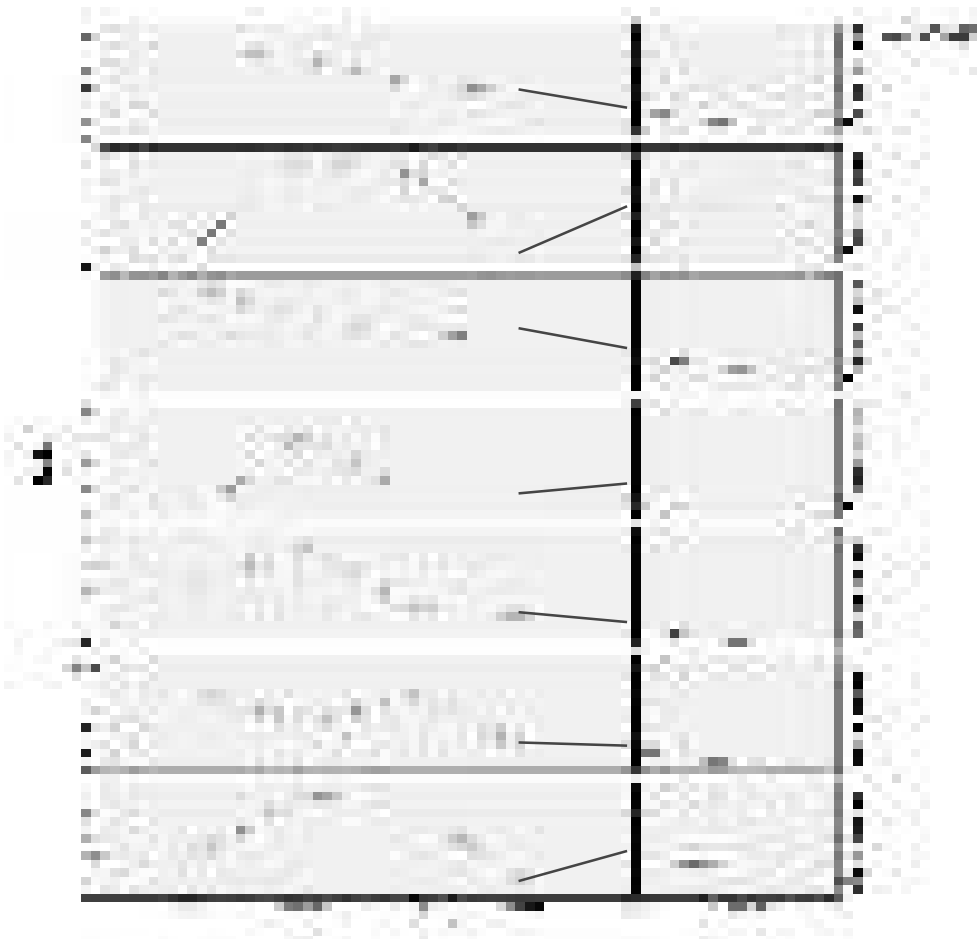
There are great disparities connected to the forecasted unemployment rates in the candidate countries, as well. A single candidate country will be able to obtain annual unemployment rates lower than the EU average (Iceland) (see Figure 13).



**Figure 13. Unemployment rate forecast (%)**

*Source: Personal contribution*

Only FYRM will have a lower inflation rate than the EU average during 2015-2016. Some candidate countries will maintain high inflation rates: Iceland and Turkey. Another group will face with average inflation rates of about 1-2% (see Figure 14).



**Figure 14. Inflation rate forecast (%)**

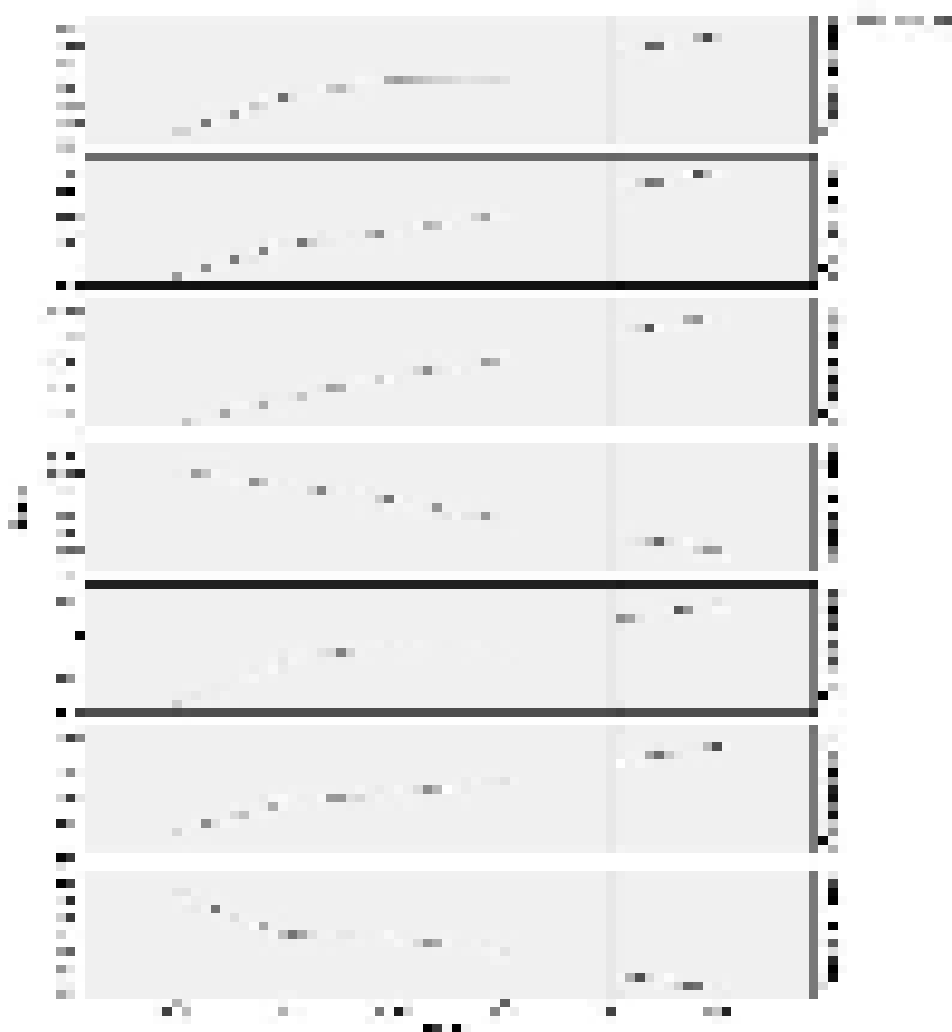
*Source: Personal contribution*

Last but not the least, the government debt is a very important indicator to describe the potential resources of economic growth. A high government debt has a restrictive impact on the future economic growth. The good news is that all candidate countries will achieve lower government debts than the EU average. Turkey will have the best position, with a government debt of only 33.5% of GDP (see Figure 15).

## 5. Conclusions

EU economy as a whole is far away to a sustainable development model. There are great disparities between the Member States and at regional level. The disparities

are greater across the Euro area. The official forecasts talk about a small recovery process during 2015-2016.



**Figure 15. Government debt forecast (%)**

*Source: Personal contribution*

The acceding and candidate countries present greater disparities, as well. There is not a single country which will be able to achieve the same economic development as EU at the end of the forecasted period.



Moreover, the disparities between this group of countries and the EU average will increase. This is why the enlargement of the EU on short and medium term is not a good solution.

EU needs time in order to finish its economic recovery and to return to sustainable economic growth. The enlargement has to be realised after these.

## 6. References

- Bech, M.L., Gambacorta, L. & Kharroubi, E. (2012). Monetary policy in a downturn: Are financial crises special?. *BIS Working Papers*, No. 388, September.
- Darvas, Z. (2012). Compositional effects on productivity, labour cost and export adjustment. *Bruegel Policy Contribution* 11, June.
- Dong, W. (2012). The role of expenditure switching in the global imbalance adjustment. *Journal of International Economics*, Vol. 86, No. 2, March, pp. 237-251.
- European Central Bank (2012). Financial stability challenges for EU acceding and candidate countries. Making financial systems more resilient in a challenging environment. *Occasional Paper Series*, No. 136 / September.
- Kirstyn, Inglis (2010). *Evolving Practice in EU Enlargement with Case Studies in Agri-Food and Environment Law*. The Netherlands: Brill.
- Ruscher, E. & G. Wolff (2012). Corporate balance sheet adjustment: Stylised facts, causes and consequences, European Economy. *Economic Papers*, No. 449, February.
- Vogel, L. (2011). Structural reforms and external rebalancing in the euro area: A model-based analysis, European Economy. *Economic Papers*, No. 443, July.

## Evaluating Methodology of Community Regional Funds

Daniela Antonescu<sup>1</sup>

**Abstract:** The evaluation process is a basic element of modern public sector management practice. If this process is well conducted, it can contribute to improved public interventions, increased transparency, accountability and cost-effectiveness. In the European Union, old Member States have a relatively long record of conducting evaluations and acting on their results, especially regarding Structural Funds. For Romania and other new Member States, this process is being introduced increasingly, in particular, after integration. The study has a major key-objective: to present the main categories of evaluation used for assessing the Structural Fund expenditure and the logical framework process and to examine how the evaluation co-financed public programmes is organized and conducted in the EU.

**Keywords:** evaluation; public intervention; regions

**JEL Classification:** R11; R12

### 1. Introduction

Evaluation of public programmes and policies is a long-standing activity within the European Union, but also at world level many countries resorting to this control form for public funds spending.

Within the EU, after 1996, evaluation turns into the key-element at the basis of improving management culture, being compulsory for all programmes financed by Structural Funds, irrespective of the reference field (regional, environment, transport, etc.) and their implementation moment (ex-ante, interim and ex-post).

According to the European Commission, evaluation is regarded as a process of “*judging the value of public intervention based on explicit criteria and standards* (for instance, relevance, efficiency, sustainability, equity, etc.)”<sup>2</sup>. Evaluation contributes to the achievement of responsible governance through the feedback

---

<sup>1</sup> PhD, Institute of National Economy – Romanian Academy, Romania, Address: 6 Piața Romana Bucharest 010374, Romania, Tel.: +40213191900, Corresponding author: daniela.antonescu25@gmail.com.

<sup>2</sup> European Commission – DG Regio webpage:

[http://ec.europa.eu/regional\\_policy/sources/docgener/evaluation/evalsed/index\\_en.htm](http://ec.europa.eu/regional_policy/sources/docgener/evaluation/evalsed/index_en.htm)

provided about efficiency, effectiveness, and performances of public policies, organizations, or programmes<sup>1</sup>.

## 2. Objectives and Structure

The general objective of the present paper is to analyze from the theoretical and practical viewpoint the way in which the evaluation process for a public intervention financed by EU structural funds develops.

The specific objectives pursued by the present research paper are the following:

- Synthetic presentation of the evaluation typology and of the corresponding logic framework;
- Good practice examples in the field of evaluation in some member-states.

## 3. Evaluation – Typology, Logical Framework and Indicators

According to currently enforced EU legislation, evaluation aims *to improve the quality, effectiveness and consistency of the assistance from Structural Funds and the strategy and implementation of operational programmes with respect to the specific structural problems affecting the Member States and regions concerned, while taking account of the objective of sustainable development and of the relevant Community legislation concerning environmental impact and strategic environmental assessment*<sup>2</sup>.

From the perspective of the theoretical approach, it can be stated that there are several evaluation categories which use and implement a series of specific indicators selected within a logical framework substantiated by the identified needs and the impact analysis. Hereunder is synthetically presented the typology, the logical framework and indicators used in evaluating public interventions.

### 3.1. Typology

By evaluation can be identified the particular contribution of some public interventions considering the following aspects:

- efficiency of allotting public resources with limited character;

---

<sup>1</sup> Public Management Service (PUMA) within OECD “Public Policy Brief no. 5 – Best Practice Guidelines for Evaluation” <http://www.oecd.org/dataoecd/11/56/1902965.pdf>.

<sup>2</sup> Council Regulation (EC) No. 1083/2006 of the Council from 11 July 2006 laying down general provisions on the European Regional Development Fund, the European Social Fund and the Cohesion Fund and repealing Regulation (EC) No. 1260/1999.

- setting up and reaching some clearly established objectives through the intervention and the analysis of impact;
- improving performances and effectiveness of public intervention;
- improving and developing the ability of stakeholders to realize and implement programmes and projects.

By and large, evaluation is regarded as a multifunctional instrument available to those interested (public local and central authorities, beneficiaries of funds, etc.) used for:

- analysis of public intervention development as compared with national priorities established and the ones agreed on at Community level (*strategic evaluation*);
- supporting by data and provided information the monitoring process (*operational, ongoing evaluation*);
- optimizing resources allotted by intervention (programme, project) and improving the quality of the programming process as a whole already from starting-up implementation (*ex-ante evaluation*); within this process are identified disparities, lacks and the development potential, the objectives to be attained, the provisioned outcomes, the quantified objectives, the coherence of regional strategy, the Community value added, the integration degree of priorities, conclusions of the preceding programming and quality of implementation, monitoring and evaluation procedures, as well as of the financial management;
- examining the use degree of resources, the effectiveness and efficiency of Structural Funds programming and of the socio-economic impact at the end of the implementation period (*ex-post evaluation*). During this stage are reviewed the factors contributing to the success or failure of public intervention implementation and the identification of best practice examples

Within the European Union, at the level of Member-States, there are various ways of practically approaching evaluation, from among which the following could be identified:

- (1) *Evaluation of resource allocation*—focuses on efficiency of using resources, both from the planning perspective but also in retrospective,
- (2) *Standard evaluation* or based on established targets —refers to judgments of performances and of the success by applying various criteria,
- (3) *Explanatory evaluation* —focuses on explaining the impact of the programme, of the success and reasons leading to obtained outcomes,

(4) *Formative evaluation* or change-oriented –delivers complex feedback of own monitoring and self-corrections during programme’s implementation,

(5) *Participatory evaluation* - aims to developing some networks, communities and territories by participative methods of the *bottom-up* type.

Public interventions supported by structural funds are focused on certain fields with impact on the economic and social development, the majority displaying a complex, sectoral and territorial character. For several of these fields, the evaluation represents a true challenge in the attempt to analyse not only the contribution of each element, but also the synergy between them or the matrix of cross-sectional impact. Each intervention brings with it a certain particularity regarding traditional evaluation and very often the difficulty of being combined with other types of interventions.

Next to the specificity of evaluated public intervention there are a series of factors with significant impact on the quality of the evaluation process as a whole, from among which as most important we consider the following:

1. *Factor no. 1 – decentralized management* - some public interventions promoted by regional or local agencies lead to different information used for evaluation;
2. *Factor no. 2 – quality of evaluators* involved in the process and their independence, objectivity, professional training, experience degree, etc.;
3. *Factor no. 3- receptiveness of management authorities* and of other institutional categories involved in the implementation process of public interventions to the recommendations made as result of the evaluation;
4. *Factor no. 4 - financial resources used for evaluation, etc.*

As already mentioned previously, evaluation pursues the relevance, efficiency, effectiveness, usefulness and sustainability of the programme, applying general or specific techniques and methods depending on the existence of the economic and social context and the perspectives considered<sup>1</sup>. The main aspect characterizing the methods used in evaluation is that they can contribute to proper understanding and interpreting of the information resulting from implementing a public intervention with territorial impact. Also, the methods highlight and focus mainly on the relevant (significant) effects of the intervention, the selection of one technique or another depending a lot on the aptitudes of the evaluator and the way in which the latter can present, synthetically, the obtained outcomes and conclusions. The evaluation of the impact of a public intervention aims to the entire change obtained as result of implementing the measures with the purpose of attaining the

1

[http://ec.europa.eu/regional\\_policy/sources/docgener/evaluation/evalsed/guide/annex\\_a/progr\\_cycles\\_en.htm](http://ec.europa.eu/regional_policy/sources/docgener/evaluation/evalsed/guide/annex_a/progr_cycles_en.htm)

established objectives (for instance, diminishing inter- and intra-regional disparities, balanced economic and social development, increasing jobs' number, output and consumption, improving social, transport, environmental, tourism, educational infrastructure, etc.). The impact of a regional level intervention can be found both at the microeconomic level (increasing output, innovation, etc.) and at macroeconomic level (contributions to reaching economic cohesion, etc.), as the evaluation has as task to identify and quantify.

### 3.2. Logical Framework

By definition, the logical framework presents the way in which are defined the main elements of a project and the relationships between provisioned entries, planned activities, and expected outcomes. The logical framework can be used both during initial planning of the intervention and during the time of its implementation.

In any logical framework, public interventions (or development projects) are regarded as causality links between events taking place at various levels (entries, activities, outputs, objectives). The relationships and causality links at the basis of any evaluation process can be reflected with the help of the logical framework and of its basic elements (Nagarajan & Vanheukelen, 1997, p. 25):

**Needs → [Objectives → Inputs → Activities → Outputs → ] Outcomes → Effects**

The relational system between needs, objectives, inputs/outputs, outcomes and effects substantiates the evaluation process of the programme impact, the notified differences being sensibly affected by the specifics of the observed field and the of the corresponding economic and social issues. When the objectives set up by the programme are expressed in terms of outcomes, the efficiency can be measured as relationship between outputs (exits) and inputs (entries), costs and benefits, etc.

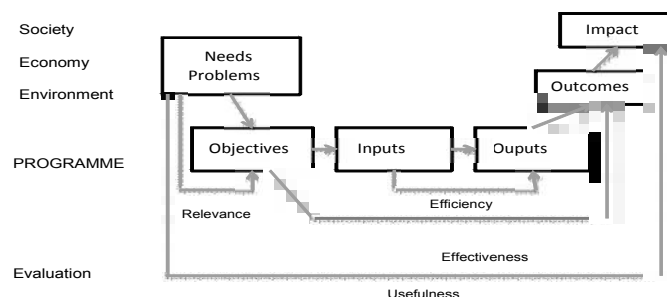
Evaluation contributes to improving efficiency and effectiveness of intervention by diminishing the initial asymmetry of existing information at the level of the financier and at the one of the one benefitting from the funds or realizing the implementation.

The most important element of evaluation – impact – can be regarded in terms of:

1. **results** (outputs – physical immediate results);
2. **effects** (outcomes, effects on long term on the beneficiaries).

In the practice of evaluating public interventions financed from structural funds, the initial impact is known as output of implementing the programme, while the impact on long term is regarded as sustainable outcome. During evaluation is also taken into account the usefulness of the programme, the way in which outputs meet

economic and social needs, the obtained outcomes on long-term, etc. Depending on the impact categories considered, the objectives of the programme can be established which are regarded as operational (*output*), specific (*results*) or general (*outcome*) (Figure 1).



**Figure 1. Logical framework of evaluating a public intervention (development programme)**

*Source: MEANS, 1999, p. 32*

Irrespective of its nature, the evaluation of a public intervention (development programme, project, etc.) presupposes a logical framework built-up on relationships and/or links between the inputs and outputs obtained as result of implementing it. In this relational context, evaluation intervenes at one or another moment with the purpose of some information completion (against the time of reference) regarding implementation and, eventually, possible deviations so as to remedy them.

### 3.3. Indicators

An important place within the logical framework of the evaluation process without which it could not be developed is held by the used system of indicators, which contributes to:

- (1) knowing the economic, social and environmental situation (state of affairs) and the starting point of needs' analysis.
- (2) forecasting effects and efforts on types of public interventions,
- (3) delivering information required for setting-up targets,
- (4) the reference framework for monitoring progress, etc.

The indicators used for evaluation must meet a series of quality criteria, such as:

1. to overlap with the needs identified by the programme, as this must be equal to or higher than three-quarters from planned expenditures;

2. to be simple and easy understandable (for instance, number of jobs, no. of km. of modernized public roads, number of hospitals, etc);
3. between the output, input, outcome and impact indicators a certain balance should be given;
4. to present significant implications of the decisional process;
5. to be found/searchable within national or regional statistics.

The data and information used within the evaluation process are, as a rule, delivered by the monitoring system of the public intervention, including the ones regarding physical outputs and outcome indicators.

The system of indicators is the most important instrument of an evaluation. Still, the difficulties encountered as result of some context changes lead to the impossibility of identifying some impact data as sources for the outcome indicators. It is necessary to establish already at the beginning of intervention's implementation some basic indicators that, subsequently, should be followed-up during the entire programming period and also within other subsequent evaluations.

There are several categories of indicators; the most used being the following<sup>1</sup>:

- partial, complete, complex indicators;
- derived, composite indicators;
- specific, generic indicators and key-indicators;
- context and programme indicators;
- resource indicators;
- indicators of immediate results;
- outcome indicators;
- impact indicators;
- relevance, efficiency, effectiveness, and performance indicators.

On evaluation are taken into consideration, predominantly, resource (input) indicators, of immediate results (outputs/exits), of outcome and impact.

1. *Resource indicators* (inputs) are important as they provide information on the entirety of means used in implementing the programme (financial, human, material, etc.). Most of the indicators are quantitatively determined by the monitoring system. Examples: number of employees working in implementing the programme; number of involved organizations, etc.

---

<sup>1</sup> European Commission "Common Guidelines for Monitoring and Evaluation", 1995, Luxembourg: OPOCE.



2. *Indicators of immediate results (outputs/exits)* present the situation obtained as result of spending public resources. Examples: kilometres of roads built, progress rate of constructing a road, rehabilitated hectares of disaffected urban land, capacity of purifying systems, etc. Output indicators refer to operations supported by public intervention.

3. *Outcome indicators* show the immediate advantages obtained by the direct beneficiaries. The outcomes can be observed entirely when the operator has concluded the activity and ceased payments. Also, information are provided on changes occurred which are aimed at the direct beneficiaries, such as, for instance time saved by those using a certain road; low tariffs for phone calls; qualifications obtained by those taking part in trainings; new tourist activities developed by a farmer; use of a new production capacity created by a certain company; and the satisfaction of companies receiving consulting services.

4. *Impact indicators* show the change attributed to a public intervention. There are several categories of impact: (a) *specific impact* – focusing on the effects on direct beneficiaries of the programme that occur or last up to a medium-term for instance (ex. created sustainable jobs) (b) a second category refers to total consequences on short- and medium-term on indirect beneficiaries (for instance, improving quality of living standard among people living in the neighbourhood of an industrial disaffected land). Depending on the effects' propagation mechanism, the impact can have effect on the market or not. These indicators are occasionally quantified, in general, during evaluation.

Next to quantitative indicators, in evaluation are used also qualitative analyses (qualitative findings) and combined analyses – quantitative and qualitative -, as well with the aid of which the performances of implemented measures can be interpreted.

As a rule, the quality of an evaluation process depends, firstly, on the availability and quality of processed data and information, and on the selected evaluation methodology (evaluation techniques and methods). Hence, it is necessary to know the inputs to the system for evaluating the efficiency of the programme. Still, this activity cannot develop separately from other categories of interventions included into a regional policy. From the methodological viewpoint, econometric approaches are preferred that test the statistical importance of the impact of some independent variables on dependent variables. For this purpose, the independent key-variables are the variables of regional policy, and the dependent ones can be selected from among the impact indicators of the policy, for instance, the number of created jobs. The impact of the policy is determined by using the econometric estimated coefficients on the policy variables computed as diminishment effect of these variables to zero.

For evaluating the impact and progresses registered in implementing the various public interventions, at EU level (Regulation 1083/2005 – Art. 37) a certain number of indicators was set-up. Thus, 41 key-indicators are identified and used in evaluating the programmes financed by the European Regional Development Fund and the Cohesion Fund that should present a basic value (usually zero) and a target-value. The characteristics of used indicators may be shown by using the acronym SMART (S-specific, M-measurable, A-available, R-relevant, T-timely), the quality of the evaluation being directly influenced by the quality of existing and analyzed data and information.

#### **4. Evaluation of Public Interventions in European Union – Tradition and Experiences**

This chapter presents synthetically some relevant practices in the field of impact evaluation for public interventions financed by Structural Funds in the European Union. Thus, the experience and tradition related to evaluating public interventions are directly influenced by the volume of allocations from structural and cohesion funds.

During the first programming stages, EU left at the latitude of member states the selection of the various evaluation categories, without imposing conditions and requirements regarding this process. Currently the evaluation of public interventions is compulsory in all member states, as it is regarded as correction means for possible details identified during local, regional and national programmes' and projects implementation

##### **4.1. Different Perspectives on Evaluation**

Regarding the practice of evaluation, at community level, between member states, major approach differences can be found, as countries with an important tradition in the field can be identified, but also states less familiarized with evaluation (especially countries from South-eastern Europe). In countries with tradition, evaluation is regarded as an important component of the public policy, and considered as an interactive process.

The evaluation of the impact of public interventions financed by structural funds turned compulsory during the programming period 1989-2003 being gradually implemented in all EU Member States. The initial difficulties were determined by the lack of data, of indicators and of target-objectives, and of the monitoring system coherence, in particular at regional level.

Subsequently, many of the above mentioned deficiencies were improved with the help of the suggestions and conclusions of the programme MEANS<sup>1</sup>, by which it was attempted to promote a “European evaluation culture” with the purpose of increasing awareness about the importance of this process. The outcomes of this programme were visible as of the programming period 1994-2000, the member state adjusting own regulations to the requirements imposed at Community level. One of these rules is the one regarding the obligation of member states to evaluate strategies, programmes and projects financed by structural funds in various stages of their implementation, this turning into the common item of all sectoral or regional policies.

Public interventions implemented at regional level are periodically evaluated for the following main considerations:

1. firstly, outputs and outcomes are evaluated of individual schemes provided by private companies at regional level;
2. Secondly, the aggregated outcomes of public interventions are evaluated with the purpose of identifying regional economic performances.

The experiences regarding implementation of public interventions are influenced decisively by the quality of the evaluation process. Thus, clear evidence can be identified about the change of the evaluation process from a static and punctual one into a more active, but also compulsory one, both in terms of benefits and regarding the answer of involved beneficiaries (Table 1).

**Table 1. Evaluation in some EU Member states before implementing compulsiveness**

<i>Member State</i>	<i>Experience in the field of evaluation</i>
Austria	Austria has low experience in evaluation, yet there are some measures taken for the evaluation of regional policy in the last years.
Belgium	There were no periodical evaluations of the regional policy (neither in Flanders nor in Wallonia). The evaluation studies influenced a series of measures taken subsequently.
Denmark	In Denmark there were no regional policies up to 1992, therefore the evaluation was not possible. Thereafter, the country adjusted to new regulations and uses efficiently this instrument.
Finland	Periodically evaluates regional policy and the industrial ones, in particular the effect of subventions granted by government to individual companies.
France	A certain tradition exists in evaluating public policy measures, especially after the nineties.
Germany	Theoretically, evaluation is a component of the public policies system only if regional aid is involved. Frequent actions take place of evaluating measures of regional policy.

<sup>1</sup> European Commission - Evaluation Methods for Actions of a Structural Nature, 1995.

Greece	No constant evaluation of regional policy took place, even though there were some academic evaluations of the regional policy measures in the eighties.
Ireland	There is a relatively moderate tradition in the field of evaluation, even if there were some studies during the '70s which applied a mix of models and interviews/questionnaires. The interest increase for evaluating Structural Funds took place after the '90s, and one of the involved bodies was the Institute of Economic and Social Research.
Italy	No tradition in evaluating regional policy financed by Structural Funds. The set-up of some evaluation units at the level of all national and regional administrative authorities led to a process change.
Luxembourg	Inconsistent evaluation process, correlated with the drafting stage of the regional policy.
Netherlands	There are regular periodical evaluations, taking place each 4 to 5 years with the purpose of revising regional policy legislation. The methods involved in evaluating efficiency and effectiveness are econometric models and surveys.
Portugal	No tradition in evaluating regional policy with respect to Structural Funds.
Spain	No tradition in evaluating regional policy financed by Structural Funds. Still, there were some evaluations in the '70s which were based on evaluation methods similar to the ones from Great Britain.
Sweden	There is an important tradition in evaluating regional policy, especially by using surveys for companies benefitting of governmental subventions/grants.
Great Britain	Regional policy evaluation has a relatively long tradition, already as of the '70s, as evaluation methods regarding the efficiency of spending structural funds were applied.

*Source: Methodologies used in the Evaluation of the Effectiveness of European Structural Funds, European Policies Research Centre, Fraser of Allander Institute*

For the above analyzed countries an own perspective and different approach is found regarding the evaluation process of public interventions at regional level. Thus, some member states had already from the beginning an important evaluation culture for spent public funds, whereas in other states evaluation was inexistent. Still, it can be said, that where evaluation was not part of the public policy ad-hoc studies and analyses were realized which were politically dictated or as a requirement of economic policy. In other member-states evaluation is regarded as a critical instrument for measuring performances of regional policies (from draft to implementation and up to outcomes delivery).

At EU level, depending on the perspective on the evaluation process, we can identify the following groups of member states:

- states regarding evaluation as an institutionalized part of enforcing a policy;
- states regarding evaluation as an occasional exercise;

- states regarding the evaluation as a limited exercise and irrelevant of the implementation practice of regional policy.

In the countries newly accessing the EU, the evaluation of the programmes financed by structural funds is in an incipient stage, its importance being found in the efficiency of spending resources. In general, a more positive attitude is found on evaluation in countries from the north-western European Union. For instance, Germany, the Netherlands, Sweden and Great Britain regard evaluation as part of a political culture and not just as a simple department of regional policy. A similar outlook can be found in countries such as Austria and Ireland. In all these countries there is a systematic evaluation process, it being part of the decisional process within the regional policy (Table 2).

**Table 2. Evaluation in some EU member countries during the current programming period**

ITALY	<p>In Italy there are 15 administrative regions and five autonomous regions. The regional policy is implemented by:</p> <ul style="list-style-type: none"> <li>• five ROP within the Convergence objective,</li> <li>• 16 Regional Operational Programmes under the Regional Competitiveness and Employment objective</li> <li>• seven Transborder OP under the Territorial Cooperation objective</li> </ul> <p>The Regional Programmes are implemented under the responsibility of the regions. The Regional Government is Management Authority. The Regions deliver part of the co-financing (approx. 25%).</p>	<p><i>Key aspects, strengths, weaknesses</i></p> <ul style="list-style-type: none"> <li>• National authorities tend to coordinate the performances of regional governments</li> <li>• Specific regional interests are predominant;</li> <li>• Project implementation is difficult when involving several regions simultaneously (for instance for a highway or railway crossing over three regions).</li> <li>• Their decentralized system allows for creating a small number of management units and control units being more efficient and closer to the territory.</li> </ul> <p><i>Evaluation and approval of projects is done only at regional level.</i></p>
SPAIN	<p>17 autonomous communities and 19 Operational Programmes financed by ERDF both for the Convergence and for the Regional Competitiveness and Employment objective. Also, there are four multi-regional programmes and three CBC operational programmes. The Ministry of Economy and Finances by the State Sub-unit for ERDF Management is the Management Authority (MA). This Ministry is responsible with managing all programmes co-financed by the European Regional Development Fund. This MA takes into account the management and control of funds.</p>	<p><i>Key aspects, strengths, weaknesses</i></p> <p>There are significant regional disparities. The monitoring system is still ineffective and incapable of delivering relevant information regarding obtained results.</p> <p><i>Evaluation of regional policies</i></p> <p>Evaluation culture needs to be strengthened both within national authorities and regional authorities. Still no complete system of monitoring the indicators. Evaluation capacity needs to be developed.</p>

	In a region three authorities are involved in evaluation. The Management Authority, the Certification Authority and the Audit Authority.	
CZECH R.	<p>Territorial organization is formed out of 14 large autonomous units. From these, 13 are regions, and one is the city Prague.</p> <p>For accessing European funds eight cohesion regions were drawn up, shaped from one or two autonomous regions. Within the institutional frameworks ROP is ensured MA-ROP – Regional Council, the Payments and Certification Authority – Ministry of Finances, and the Audit Authority – Ministry of Finances.</p> <p>The Ministry of Regional Development has the role of National Coordination Authority, next to the Budget Department (decides on financing).</p>	<p><i>Key aspects, strengths, weaknesses</i></p> <p>Regional development in the Czech R. has a trans-sectoral character and a multi-sectoral nature, in this process being involved almost all ministries managing activities with territorial impact and which might contribute to diminishing disparities between regions.</p> <p>Evaluation is realized by the Ministry of Regional Development in cooperation with the other ministries (Ministry of Agriculture, Ministry of Industry, and Trade, etc.).</p>
POLAND	<p>From the viewpoint of administrative-territorial organization, Poland is constituted of 16 regions. The regional development is supported by a multi-regional programme managed at national level (integrated regional programme) by 16 Regional Operational Programmes and seven European Territorial Cooperation programmes, and additionally a Technical Assistance programme.</p> <p>The programmes implemented at regional level have absorption of 24.6% (16 bill. Euro) from the total allocation of funds for the period 2007-2013.</p> <p>The regions are involved in implementing sectoral programmes.</p> <p>ROP are managed by the regional authorities (25% of the funds).</p>	<p><i>Key aspects, strengths, weaknesses</i></p> <p>Structural Funds are managed by the Regional Authorities in partnership with the central ones.</p> <p>The government is not involved in managing Regional Operational Programmes, only imposes the guidelines.</p> <p>The issue which persists is determined by the existence of low financial resources of the regional authorities.</p> <p>In the period 2007-2013 was introduced a new approach regarding the performance increase of regional programmes, that is setting-up management by objectives, including by determining the minimum annual sums certified by the EU.</p>

*Source: Evaluation the administrative capacity of the regions in the field of regional development, Project co-financed by ERDF by ROP 2007-2013, Contract No. 61/25.02.2011, Evaluation Report (Summary December 2011)*

The experiences of the member-states with respect to evaluation have undergone process of adjustment and change, especially as result of the requirements imposed by the regulations of Community funds. Thus, the co-financing granted by the European Union and the complexity of the evaluation process determined member states to expand their evaluation capacities also to other public interventions, not only for those financed by structural funds. The general trend noticed is that of the member states presenting a wide variety of policy approaches with respect to evaluation but, during the last programming period is found an improvement

phenomenon of this process, even if an harmonization of evaluation is still not in place from the organizational and methodological viewpoint.

#### 4.2. Compulsiveness of Evaluation Public Programmes and Policies

Evaluation of public interventions by and large, and of the ones financed from structural funds in particular, became compulsory within the European Union as of the programming period 1998-2004. Thus, up to the reform of Structural Funds (1989), the evaluation of public interventions financed at the level of the member states was regarded as an attribute of central and regional governments, the involvement of the Commission being minimal. This fact triggered, frequently, controversies with respect to spending Community public funds and to obtained impact. The process of setting-up the institutional structures necessary to evaluating public interventions was a relatively slow one, the greatest difficulties being identified in obtaining data and information for quantifying the proposed indicators (targets), but also as result of some major variations between various regional statistical systems. Implementing compulsiveness in evaluating public interventions financed by structural funds changed significantly the attitude of member states on this process and, especially, of the countries that did not have a minimal evaluation culture (for instance, France, Italy, Spain, Portugal, Greece, etc.). Contributing to co-financing the evaluation process from structural funds, the Commission determines the member-states to revise the attitude against the process. The compulsiveness of evaluation was regulated by various regulations of the Council (EC) and Working Papers of the Commission<sup>1</sup>, and it was established that for public interventions financed by structural and cohesion funds are required evaluations at different time intervals (before implementation, during and at finalizing implementation), from which the impact and obtained outcomes should result. As a rule, evaluation of some major public interventions (for instance, certain policies or territorial or sectoral programmes) are very costly, therefore, next to compulsory standard evaluations (ex-ante, intermediary, ex-post) are regarded as more useful the punctual (ad-hoc) evaluations or the financing of some institutional arrangements that meet simultaneously the conditions:

1. to contain departments/agencies involved in the economic development at all levels (national, regional, and local);

<sup>1</sup>Regulation no. 1083/2006 which was the basis of Gov. Res. 457/2008 regarding the institutional framework of coordinating and managing structural instruments; by this Gov. Res. are established the role and responsibilities in the field of evaluation; *Working paper no. 1*: Indicative Guidelines on Evaluation Methods: ex-ante evaluation; *Working paper no. 2*: Indicative Guidelines on Evaluation Methods: monitoring and evaluation indicators; *Working paper no. 3*: the methodological paper of the Commission delivering the guidelines regarding the calculation of public expenditures or structural expenditures with the purpose of complying with the principle of additionality; *Working paper no. 5*: Indicative guidelines regarding the evaluation methods: evaluation during the programming period.

2. to be able to combine resources intended for evaluation with the ones regarding the monitoring, but also with the financing of existing expertise;
3. to contribute to understanding efficiency and effectiveness of interventions of regional (territorial) nature.

## 5. Conclusions

The present paper intended to present a theoretic image on the evaluation process in European Union. Thus, evaluation is a process pursuing the improvement of the quality, efficiency and coherence of interventions from structural funds, of the strategy and operational programmes. From the viewpoint of existing typologies, for evaluating the interventions from structural funds are used three important categories that take into account the moment of implementation: the ex-ante, intermediary and ex-post evaluation. Also, the consecrated indicators used for evaluation and present within the logical framework for substantiating needs are: context and programme, resource, immediate output, outcome, and impact indicators, along with relevance, efficiency, effectiveness and performance indicators. With respect to the experience of member-states regarding evaluation, these underwent an adjustment and change process, in particular as result of the requirements imposed by the regulations of Community funds. The co-financing granted by the European Union and the complexity of the evaluation process have determined member-states to develop their evaluation capacity also for other public interventions, not only for those financed by structural funds. The general trend noticed is that the member-state have a large variety of political approaches with respect to evaluation but, during the last programming period, a phenomenon of improving this process is found, even if not yet of harmonization of evaluation from the organizational and methodological viewpoint.

## 6. Acknowledgements

This paper has been developed within the project „Economic scientific research, support of the welfare and human development in the European context”, funded by the European Union and the Government of Romania from the European Social Fund through the Operational Programme Human Resources Development 2007-2013, the grant agreement no. POSDRU/89/1.5/S/62988.

## 7. Bibliography

- Antonescu, D. (2011). *Dezvoltarea regională – tendințe, mecanisme, instituții/Regional development - trends, mechanisms, institutions*. Bucharest: Top Form.
- Antonescu, D. (2013). *Regional policy in Romania in post-integration period*. Postdoctoral Research. INCE. [www.ince.ro](http://www.ince.ro).



- Bachtler, J. & Taylor, S. (1999). *Objective 2: Experience, Lessons and Policy Implications, Report to the Commission of the European Communities (DG XVI)*. EPRC, University of Strathclyde.
- Bachtler, J. & Michie, R. (1995). A New Era in EU Regional Policy Evaluation? The Appraisal of the Structural Funds. *Regional Studies*, 29 (8), pp. 745-751.
- Eskelinen, H.; Kokkonen, M. & Virkkala, S. (1997). Appraisal of the Finnish Objective 2 Programme: Reflections on the EU Approach to Regional Policy. *Regional Studies*, 31 (2), pp. 167-172.
- Bachtler, J & Michie, R. (1993). The Restructuring of Regional Policy in the European Community. *Regional Studies*, 27 (8), pp. 719-725.
- Reiner, Martin (1998). Regional Incentive Spending for European Regions. *Regional Studies*, 32:6, pp. 527-536, <http://www.tandfonline/loi/cres20>.
- (1997). Evaluation EU expenditure programmes: A guide, Ex post and Intermediate Evaluation XIX/02 - Budgetary overview and evaluation Directorate-General XIX – Budgets European Commission, First edition, January, [http://ec.europa.eu/dgs/information\\_society/evaluation/data/pdf/lib\\_master/eur\\_budg\\_guide\\_ex\\_post\\_and\\_intermediate.pdf](http://ec.europa.eu/dgs/information_society/evaluation/data/pdf/lib_master/eur_budg_guide_ex_post_and_intermediate.pdf).
- Breakwell, Glynis M. & Lynne, Millward (1995). *Basic evaluation methods. Analysing performance, practice and procedure*. Leicester: British Psychological Society.
- Conseil scientifique de l'évaluation/ Scientific Council assessment (1996). *Petit guide de l'évaluation des politiques publiques/A short guide to the evaluation of public policies*. March. Paris: CSE.
- European Commission (1993). *Project cycle management. Integrated approach and logical framework*. Directorate-General for Development.
- European Commission (1995). Common guide for monitoring an interim evaluation. *Structural Funds*.
- HM Treasury (1988). *Policy evaluation: a guide for managers*. London: Her Majesty's Stationary Office.
- Joint Committee on Standards for Educational Evaluation (1994). *The programme evaluation standards*. Second edition. Thousand Oaks, CA: Sage.
- Manualul pentru evaluarea dezvoltării socio-economice Institutul Tavistock în colaborare cu GHK și IRS/ Assessment manual for socio-economic development, Tavistock Institute in cooperation with GHK and IRS*, [http://www.evaluare-structurale.ro/images/stories/Documente/resurse/evalsed\\_ro.pdf](http://www.evaluare-structurale.ro/images/stories/Documente/resurse/evalsed_ro.pdf).
- MEANS (1995). Auditing, monitoring and evaluation of European structural policies. *Should they be separated or integrated?* October. Lyon: European Commission and C3E.
- MEANS Handbook No. 1. *Organising intermediate evaluation in the context of partnerships*. Lyon: European Commission and C3E.
- MEANS Handbook No. 4. *Applying the multi-criteria method to the evaluation of structural programmes*. Lyon: European Commission and C3E.
- Methodologies used in the Evaluation of the Effectiveness of European Structural Funds. *European Policies Research Centre*, Fraser of Allander Institute.
- Patton, Michael Quinn (1986). *Utilization-focused evaluation*. 2nd Edition. Beverly Hills: CA: Sage.
- Rossi, Peter H. & Freeman, Howard E. (1993). *Evaluation. A systematic approach*. 5th edition. Newbury Park, CA: Sage.
- Viveret, Patrick (1989). *L'évaluation des politiques et des actions publiques, rapport au Premier ministre/The evaluation of public policies and actions, report to the Prime Minister*. Paris: La Documentation française.
- Yin, Robert K. (1994). *Case study research. Design and methods*. 2nd Edition. Newbury Park, CA: Sage.

## Universities, Entrepreneurship and Regional Networks Chances for a Welfare

Claudia Ionescu<sup>1</sup>

**Abstract:** Entrepreneurship has been recognized as an engine of both growth and economic development. Small and Medium Enterprises (SMEs) account for 99,8% of all businesses in Europe and their role in the economic growth and job creation has been recognized at the regional, national and European level. This leads the policy makers at all levels to look for measures enhancing the firm creation activity and in the same time they have to harmonize with Universities Curricula. In the Information Era network is a current tool that build bridges and develop business and people's knowledge.

**Keywords:** entrepreneur; development; region

**JEL Classification:** M2

### 1. Introduction

Communication<sup>2</sup> is necessary for every interaction. We communicate with each other all day. Working together can provide us with a wider audience, more political strength and more knowledge and experience. Therefore we need communication, and we need to improve it all the time. Communication and networking go together. The meaning of the word 'networking' may not be very clear at first, but it is something we all do. Networking is making contacts, maintaining contacts and using contacts. For all of these forms of communication networking is important.

### 2. Networking

The term "network" can refer to any interconnected group or system. Networks connect everyone to everyone, contrary to hierarchies, which do not; rather they create formal channels of communication and authority. Networks operate informally with few rules, they depend on trust.

---

<sup>1</sup> Senior Lecturer, The Bucharest Ilfov Regional Development Agency, Address: 163-165 Mihai Eminescu, Str., 2nd District, Bucharest, Romania, Tel.: 0040213138099, Corresponding author: [adrbinvest@yahoo.com](mailto:adrbinvest@yahoo.com).

<sup>2</sup> <http://www.unitedagainstracism.org/pages/info10.htm>.

They are formed because people need one another to reach common goals. Mutual help, assistance, and reciprocity are common to all functioning networks, which are not only self organizing but also self-regulating. Networking is the most powerful way to build professional relationships, actively foster contacts and disseminate information. Networks<sup>1</sup> can actively contribute to strengthening the communication power on the territory and thus helping to close the gap between EU Institutions and the people by improving the communications flow among the different bodies.

In general, a network does not work if you wait for others to take action, even if they have promised to do so. You need to **take the initiative**. You will have to keep taking the initiative for a while. You will have to GIVE a long time before you can RECEIVE.

Networking functions only partially on a rational level. Part of the communication is based on **personal and emotional relationships**. While it is not totally impossible to work with people you dislike, it is much easier to build a network with people you like. Be aware of your own emotional response to people.

Every country from EU has one or more managing authorities or organizations that are responsible for distributing information on activities within the various EU programmes. The information officers in these organizations are easy to identify, and they have a clear remit and access to central information and communications from the EU. Creating a national communicators network is therefore an important stage in providing integrated and consistent information about the Structural Funds and the EU. Such a network can, for example, consist of representatives from all the Operational Programmes within one country during a programming period.

Participation in the network can be compulsory or voluntary, depending on the organizational arrangements in a given country. The practice shows that usually participants cover their own travel and subsistence expenses, whereas the institution organizing the meeting covers the organizational costs, including the venue, refreshments or possible experts' fees.

---

<sup>1</sup> **INFORM network** is open to EU communication officers who want to *inform* others about their experiences with the *information* on the ERDF, Cohesion Fund and EU Cohesion Policy, who want to be *informed* about inspiring ideas and communication projects developed in other Member States or regions, who want to meet other communication officers and learn from each other in formal and *informal* ways. It is coordinated by the Information and Communication unit of the European Commission's Directorate General for Regional Policy.

The network aims to foster the exchange of good ideas, learning from the experiences of others and creating common tools, where needed. Its composition is two-fold: the core group comprises one representative per Member State, usually from the central body responsible for coordinating ERDF/Cohesion Policy. The core group's key tasks involve conveying information about publicity and communication activities in the Member States as well as sharing the latest communication tools and exchanging information gathered from meetings held with the national networks of communication officers in each country. The general group includes communication officers from the ERDF and Cohesion Fund programmes.

### How to Build a Good Network

1. **Giving information:** Start with giving information about your own activities, your own organization by *building a mailing list and mailing regularly*, using e-mail and news groups or a web site, sending out invitations for your activities.
2. **Showing interest:** Phone around regularly, visit activities of other people and organizations, send them a post card when you feel like it, try to remember personal interests.
3. **Organizing meeting points:** To build a good network you need to meet people personally, do not wait until you meet them accidentally but invite them to a conference, organize a seminar or a social gathering.
4. **Common actions/activities:** The best way to get to know people is to work with them, the network links are strengthened and you are stronger as a result. You should be sure to involve people in ALL stages of the project, from planning stage to the evaluation.

### 3. Information is the Heart of Structural Funds Programs

Applicants and beneficiaries (e.g. public authorities, SMS, NGO etc) need guidance in order to submit good quality projects and to implement their projects in line with the regulatory obligations. The dissemination of information and the transparency of programmes is a vital element of an Operational Programme activity. As a result, the contractual partnership (Ionescu & Toders, 2007, p. 111) between managing authorities and beneficiaries is a close-knit relationship as it affects the very success of the programme. Two-way communication here is a strong priority: beneficiaries need to understand what can and cannot be done with the Structural Funds co-financing and programme managers require information on the programme's progress to make strategic decisions.

To be effective, communication must be centered on the beneficiaries' needs, taking into account their degree of familiarity with regional policy jargon and procedures. It is widely acknowledged that beneficiaries and project implementers often ignore their information and publicity obligations and lack the necessary resources, skills and experience to design and implement their publicity measures. Since beneficiaries have a binding obligation to publish the Structural Fund contribution to their activities, it is essential for Managing Authorities. One effective way of doing this is by *building a network relationship* between the appointed Managing Authority Information Officer and the information officers of the beneficiaries. With *the establishment of an effective channel for dialogue and interaction*, a Managing Authority can ultimately ensure compliance and consistent communication by beneficiaries.

The detailed requirements have been addressed by Articles 2 to 10 of the Commission Regulation 1828/2006<sup>1</sup>. These articles encompass the spirit of the Legislation which is to inform the public, create a positive identity and ultimately to make them aware of activities and keep them up to date on the policies of the European Union. Transparency could be the cornerstone of any EU activity as it is imperative for the successful use of the funds. Therefore it is obligatory to publish the list of beneficiaries. By doing so this removes any veil of mystery about the destination of funding and makes it clear to all citizens that the EU can deliver positively to their locality be it in the form of a new motorway or additional childcare places.

Articles 2 to 10 stipulate precisely the responsibilities that rest with Managing Authorities in relation to information and publicity measures, while also detailing the correct use of the EU emblem on billboards, plaques and other information materials. Beneficiaries also have a special role to play in this process. They can and should show through their projects, developed with the cohesion policy assistance, that the European Union is indeed present around us and supports the regions' economic development and improves people's lives. By fulfilling their responsibilities as laid out in these articles, the Managing Authorities and other responsible bodies can go a long way in ensuring that the success of EU structural funds is properly communicated in their respective regions.

The following principles justify the need to involve the regional and local authorities in the formulation of European policies:

- **Openness**

Improved information and ownership of the Community's policy position are needed. Since they are democratically elected and close to the ground, the regional and local authorities are well placed to provide the citizen with information.

- **Participation**

The White Paper on governance affirms the need for the European and national associations of regional and local authorities to be involved with due regard for the institutional architecture of the Union and the Member States' internal organization.

- **Coherence**

The Commission acknowledges the need for better assessment of the impact at regional and local level of Community policies in areas such as transport, energy and the environment. Analyzing the impact of measures proposed at Community level will contribute to informing the different actors of the effects of these measures and guide them in their implementation tasks.

---

<sup>1</sup> [http://eur-lex.europa.eu/LexUriServ/site/en/oj/2006/l\\_371/l\\_37120061227en00010163.pdf](http://eur-lex.europa.eu/LexUriServ/site/en/oj/2006/l_371/l_37120061227en00010163.pdf).

- **Effectiveness**

Some Community policies are implemented and/or have the greatest effect at regional and local level. Local government authorities are ideally placed therefore to assess the coherence and effectiveness of Community policies.

The purpose of national regional aid is to support investment and job creation and encourage firms to set up new establishments in Europe's most disadvantaged regions. In order to support economic development in these regions during the period 2007-2013, these guidelines introduce criteria to assess the compatibility of national regional aid with the internal market under Article 87(3)(a) and (c) of the Treaty establishing the European Community (EC).

#### 4. Business Networking<sup>1</sup>

Business networking is leveraging your business and personal connections to bring you a regular supply of new business. The concept sounds simple, doesn't it? Don't let that fool you, though. Because it involves relationship building, it can be a deceptively complex process. Think about it. How many people do you know? How many of these people truly understand what you do? How many of these folks have directed prospects to you as referrals? And how many of those referrals have actually turned into business?

Business networking is much more than showing up at networking functions, shaking a lot of hands and collecting a bunch of cards. **Networking for business growth must be strategic and focused.** Not everyone you meet can help move your business forward--but everything you do can be driven by the intention to grow your business. You have total control over whom you meet, where you meet them and how you develop and leverage relationships for mutual benefit.

**Networking your business means you have to be proactive.** The core of networking is doing something specific each week that is focused on networking for business growth. Make a plan, focus and be consistent. When you understand exactly what business networking is and step up to the challenge, you'll find avenues of opportunity that you may have otherwise never discovered, and you will be making an invaluable investment in the steady growth of your business<sup>2</sup>.

**Networking is about interacting with people and engaging them for mutual benefit.** It can help you establish a new business or grow an existing one. You can also use networking as a tool for finding investors, customers, staff, suppliers and business partners with minimal cost to your business. We can network face-to-face

<sup>1</sup> <http://www.entrepreneur.com/article/196758>.

<sup>2</sup> <http://www.business.qld.gov.au/business/running/managing-business-relationships/networking-in-business>.

at social events, conferences and through industry associations. You can also network online, through sites such as LinkedIn and Facebook. The more ways you can network, the more your business will benefit. It's common for people to feel apprehensive about networking, but it's a skill you can develop with practice. The more networking you do, the easier it will become. If you own a small business, networking can be an inexpensive way to promote your business. Through networking, you can discover new opportunities, build your customer base and find new suppliers and staff. You may also find investors and business partners. Networking is particularly important if you're running a home business because it can connect you with peers and help you overcome potential issues associated with being isolated.

***Networking options are broad and continually changing.*** You may need to research networking trends to work out which ones best suit your business. Once you begin networking, it's likely you'll start to receive invitations to more events from people you meet. Before you know it, your networking group will be growing. Joining networking groups will give you a chance to meet people from a wide range of small- to medium-sized businesses. Contact your industry association and business contacts or search online to find out a networking group that suits you. Connecting with your industry online will help you keep up to date with events. You can also sign up to online newsletters from industry associations and other businesses and receive regular updates about events and opportunities.

***Networking through friends and family can be a great way to establish strong business relationships.*** You might meet someone who could be useful for your business or someone whose business you can help, at a social event. If you develop a rapport with them and exchange contact details, you can follow up with them later. It's a good idea to make networking a regular part of running your business. Plan your networking activities and devote a certain amount of time and money to them. Spending money on networking can be more effective than spending it on advertising, as it is more personal and targeted. Effective business networking is the linking together of individuals who, through trust and relationship building, become walking, talking advertisements for one another.

## 5. Universities Networks

“Universities exist for a simple yet profound reason: to create new knowledge through research and discovery and to pass on knowledge to the next generation. It is also the duty of every university to prepare its students to become engaged and contributing citizens. In the 21st century, this task takes on new meaning”<sup>1</sup>. The great compression of our world—a consequence of the spread of technology and

---

<sup>1</sup> <http://www.nyu.edu/global/the-global-network-university.html>.

information, the interdependence of economies, the transnational nature of major human challenges, and an increasing embrace of diversity—will only accelerate. We already see evidence of the emergence of a set of global “idea capitals,” magnets for talents and creativity. Under the umbrella of Arts and Science, the Global Liberal Studies Program<sup>1</sup> merges liberal studies curriculum with experiential learning and an intensive intellectual experience abroad. The Business and Political Economy Program<sup>2</sup> at the Leonard N. Stern School of Business combines course work in business, politics, and economics with integrated study at NYU campuses in three of the world's most important global marketplaces—New York, London, and Shanghai.

## 6. Conclusions

Working with networks as being part of them we can interact with very diverse people that can inspire us to develop our activity in a more efficient way. A regional network that has in its structure universities and entrepreneurs could provide good working places and efficient jobs.

## 7. Bibliography

Ionescu, C. & Toderaş, N. (2007). *Politica de Dezvoltare regională/Regional development policy*. Bucharest: Tritonic.

### *Online Sources*

<http://www.nyu.edu/global/the-global-network-university.html>.

<http://www.nyu.edu/admissions/undergraduate-admissions/learn-at-nyu/academic-programs.html>.

[www.stern.nyu.edu/programs-admissions/undergraduate/index.htm](http://www.stern.nyu.edu/programs-admissions/undergraduate/index.htm).

<http://www.entrepreneur.com/article/196758>.

<http://www.business.qld.gov.au/business/running/managing-business-relationships/networking-in-business>.

<http://www.unitedagainstracism.org/pages/info10.htm>.

[http://eur-lex.europa.eu/LexUriServ/site/en/oj/2006/l\\_371/l\\_37120061227en00010163.pdf](http://eur-lex.europa.eu/LexUriServ/site/en/oj/2006/l_371/l_37120061227en00010163.pdf).

---

<sup>1</sup> <http://www.nyu.edu/admissions/undergraduate-admissions/learn-at-nyu/academic-programs.html>.

<sup>2</sup> [www.stern.nyu.edu/programs-admissions/undergraduate/index.htm](http://www.stern.nyu.edu/programs-admissions/undergraduate/index.htm).



## **Transfer Pricing and FDI**

**Patricia-Sabina Macelaru<sup>1</sup>**

**Abstract:** FDI analysis is usually performed within the frame of the win-win hypothesis. However, we believe that certain circumstances (MNEs following their own business objectives, lack of appropriate regulations, non-observance of the arm's length principle) may generate disproportionate advantages at the level of FDI stakeholders. The disequilibrium between reinvested profits and repatriated profits may be viewed as a proof of such disproportionate advantages of stakeholders involved in FDI. In addition to figures showing the comparison between reinvested and repatriated profits, as well as the way in which such indicators vary e.g. in case of abnormal business conditions (global economy collapse), we try to show that lack/misuse of transfer pricing regulations may generate even more disequilibrium, the MNEs using intra-group transactions as an additional way of repatriating non-taxable/low tax profits.

**Keywords:** foreign direct investment; tax; transfer pricing; multinational enterprises; profit repatriation

**JEL Classification:** F21; F23; H25; K34

### **1. Introduction**

The present paper investigates potential correlations between profit repatriation, transfer pricing regulations and the level of corporate income tax collection by the government of the host country, with focus on Romania.

To begin with, we have presented an overview of the transfer pricing regulations worldwide, following which we have described the transfer pricing principles adopted in the Romanian legislation. The paper contains also an analysis of figures representing profits reinvested and repatriated during the period 2007-2011 in relation to Romanian FDI entities. To conclude, we have shown how MNEs may attempt to repatriate non-taxable/low tax profits by non-observance of the transfer pricing regulations and how the host country may secure the appropriate collection of tax.

---

<sup>1</sup> PhD Candidate, Academy of Economic Studies, Romania, Address: 6 Piața Romana Bucharest 010374, Romania, Tel.: +4 021 319 1900, Corresponding author: sabina\_patricia@yahoo.fr.

## 2. Transfer Pricing Regulations

### *Overview of Existing Transfer Pricing Regulations Worldwide*

In the frame of an increased integration of national economies and technological progress, particularly communication, an increasing role of multinational enterprises (“MNEs” hereinafter) in international trade has been recorded. In such context, practical difficulties arise for tax administrations regarding the allocation of profits between different tax jurisdictions particularly when referring to highly integrated group operations. On a related note, practical difficulties arise also at the level of MNEs, the latter being liable to comply with diverse and complex tax administrative requirements, leading most frequently to a greater administrative burden and higher compliance costs. Regarding the taxation of MNEs, governments’ major point of concern regards nowadays the proper adoption/application of transfer pricing regulations in the domestic tax legislation. In case of EU member states, the intention is to align, for now at least under a non-formal way, the transfer pricing regulations and related documentation requirements.

Transfer pricing refers in principle to a set of tax regulations regarding profit allocation methods used in order to split income and expenses, and therefore profits (or losses, as applicable) between entities characterized by an affiliation relationship. The concept of transfer prices refers to the prices applied under controlled commercial and financial circumstances between related (controlled) parties. Companies falling under the related party definition are most likely linked either by a significant share capital holding or control by one company in the other or by such a holding/control exercised by a third person (the holding/control must not be exercised directly). Branches and subsidiaries are a common example of entities considered under the control of a single corporation, the parent company. Certain tax jurisdictions consider entities to be under common control if they share family members on their boards of directors. Under the OECD doctrine, as a consequence of such holding/control relationship, conditions may be imposed or made in the commercial and financial relations between affiliated enterprises so that they would differ from those applicable in case of independent entities, thus conducting to a non-justifiable allocation of profits between the entities involved (in case of MNEs, between various tax jurisdictions).

Transfer pricing is a matter that concerns both entities residing in the same tax jurisdiction as well as taxpayers from different tax jurisdiction. In the first case, tax authorities may consider appropriate to limit any abuse of shifting profits/losses between domestic taxpayers (it is acknowledged that potential tax advantages may be obtained by domestic groups e.g. by shifting the group’s profits towards the losses carrying entities). In case of transactions between related parties operating in different tax jurisdictions, even more complex tax implications may arise since

MNEs e.g. may be tempted to repatriate profits by means of transfer pricing (to be explained more in detail in the following sections of this paper).

Transfer pricing refers to the price setting between related parties, analysis of the prices applied, documentation of the prices applied and potential adjustment of charges made between related parties for physical goods or intangible property.

A significant number of governments<sup>1</sup> have adopted transfer pricing regulations in their domestic tax legislation. In most countries, transfer pricing regulations adopted adhere to the arm's length principle – according to which related parties transactions should be established by reference to prices applied in case of comparable transactions between two or more unrelated parties dealing at arm's length. OECD has published guidelines on applying the arm's length principle<sup>2</sup>, which are followed, in whole or in part, by many tax jurisdictions (not only by those of the OECD members). The United States and Canadian transfer pricing rules are similar in many respects to the OECD guidelines, with certain points of material difference. There are however certain countries (e.g. Brazil and Kazakhstan) which implemented rules that are materially different overall.

Transfer pricing regulations are not meant in principle at imposing at what prices should transactions be carried out by taxpayers. However, such rules offer the tax authorities the instruments necessary in order to adjust (only for tax purposes, at least as regards Romania) the profits taxable in Romania so to be in line with the arm's length principle. Moreover, from the perspective of the taxpayer, transfer pricing aims at determining what constitutes arm's length prices and how to set intra-group transfer pricing policies so that the prices applied fall within the arm's length range. A complex analysis should normally be performed by taxpayers with the view of comparing prices actually charged between related parties with prices or relevant profitability derived by independent entities from similar/comparable transactions. The rules generally require that functions, risks, tangible and intangible assets and terms of conducting unrelated party transactions or activities be reasonably comparable to such items with respect to the related party transactions or profitability being tested.

In order to test intra-group transfer pricing applied, one of the following methods, where appropriate and supported by reliable data, may be applied: the comparable uncontrolled price method, the cost-plus method, the resale price method and profitability based methods (profit split and transactional net margin method). Different methods may be imposed by domestic legislations when testing goods by difference to those applied for services or use of property due to inherent differences in business aspects of such broad types of transactions. Specific

---

<sup>1</sup> According to <http://www.tpanalytics.com>, about 60 countries worldwide have adopted transfer pricing regulations

<sup>2</sup> OECD Transfer Pricing Guidelines for Multinational Enterprises and Tax Administrations

mechanisms for sharing or allocation of costs may also be particularly imposed when performed between related parties in order to reduce tax controversy.

As regards the relationship between different tax jurisdictions, the treaties for the avoidance of double taxation normally provide for specific provisions regarding the cooperation of tax authorities in the tax field as well as on mechanisms for avoidance of double taxation in case of taxpayers. Also, advance pricing agreements between the taxpayer and the tax authority in its jurisdiction as well as between the taxpayer and tax authorities in various tax jurisdictions may be obtained in order to secure the transfer pricing policy applied.

Transfer pricing documentations sustaining the application of the arm's length principle in case of intra-group transactions may be required to be prepared either in advance, together with the submission of annual tax returns or upon tax authorities' specific request. Administrative fines may be applied for non-compliance, in addition to assessment of supplementary profits tax and late payment charges. As an alternative to the arm's length principle, the global formulary apportionment, in substance accounting profit allocation method between the sub-national jurisdictions of the United States and Canada, may be used for the assessments of profits taxable between different tax jurisdictions. Advocates of such system sustain that under the formulary apportionment firms would no longer have an artificial tax incentive to shift income to low-tax locations.

#### *Overview of the Romanian Transfer Pricing Regulations*

Transfer pricing regulations were introduced in the Romanian Fiscal Code<sup>1</sup> starting 2005, however the focus of law makers and tax authorities on transfer pricing matters increased only starting 2008.

According to the Romanian rules, in principle, in case of transactions between a Romanian taxpayer and related parties, the Romanian tax authorities may adjust the amount of income or expenses as necessary, in order to reflect the market value of the goods or services provided in the transactions and the arm's length profits taxable in Romania. Subsequent law amendments were meant at clarifying that the transfer pricing regulations apply also in case of intra-group transactions carried out between domestic taxpayers.

According to the Romanian Fiscal Code, an affiliation relationship is defined by at least one of the following cases:

- two individuals qualify as related parties if such persons are spouses or relatives up to the third degree, inclusive;

---

<sup>1</sup> Law 571/2003 regarding the Fiscal Code

- an individual is related with a legal entity if the individual owns, directly or indirectly, including holdings of related parties, a minimum of 25%, by value or by number, of the shares/units or voting rights in the legal entity, or effectively controls the legal entity;
- two legal entities are related if at least:
  - (i) the first legal entity holds, directly or indirectly, including holdings of related parties, a minimum of 25% of the value/number of shares/units or voting rights in the other legal entity or controls the legal entity;
  - (ii) the second legal entity holds, directly or indirectly, including holdings of related parties, a minimum of 25% of the value/number of shares/units or voting rights in the first legal entity;
  - (iii) a third party legal entity holds, directly or indirectly, including holdings of related parties, a minimum of 25% of the value/number of shares/units or voting rights both in the first and in the second legal entity.

Romanian taxpayers are required to prepare a transfer pricing documentation to demonstrate that intra-group pricing complies with the arm's length principle. The Romanian transfer pricing provisions have become effectively applicable by both tax authorities and taxpayers as of 2008 when Order 222/2008 on the content of the transfer pricing documentation file was adopted.

The transfer pricing documentation file should comprise information regarding the taxpayer, the group and the related party transactions (including an analysis of functions performed and risks assumed by the related parties), as well as information on the transfer pricing method used for determining the value of related party transactions and a set of relevant statistical comparables (benchmarking analysis).

The five transfer pricing methods specified in the OECD Guidelines are also accepted for Romanian transfer pricing purposes. The choice of the most appropriate transfer pricing method should be performed on a case-by-case basis, depending on inter-alia the nature of the controlled transaction analyzed, as established further to a functional analysis, the availability of reliable information on comparable uncontrolled transactions and the degree of comparability between controlled and uncontrolled transactions, including the reliability of comparability adjustments that may need to be performed. Subject to the availability of reliable comparable data, traditional transaction methods are preferred in practice to profit-based methods. Local comparables are preferred, but Pan-European comparable sets are accepted in lack of domestic comparables.

Romanian entities performing transactions with related parties should make available upon request of tax authorities and within a required term, a file

comprising the transfer pricing documentation for such transactions. The deadline for the submission of the transfer pricing documentation file to the tax authorities cannot exceed three months. Upon taxpayer's written request, this deadline may be extended only once for a period equal to the one initially established.

Non-submission or submission of an incomplete transfer pricing documentation file within the set deadline further to two consecutive requests from the tax authorities triggers the estimation by authorities of the transfer prices for the related party transactions (this is beside a fine for non-compliance of up to RON 14,000). The corresponding adjustments made after the estimation of the prices by the tax authorities may result in additional profits taxable at a rate of 16% and late payment charges/penalties. According to Government Decision no. 529/2007 regarding the approval of advance pricing agreements and advance tax ruling, taxpayers engaged in transactions with affiliates can request the issuance of a unilateral, bilateral or multilateral advance pricing agreement ("APA"), subject to fees of either EUR 10,000 or EUR 20,000, depending on the type of APA requested. In a similar manner, the official term for issuing an APA is either of 12 or 18 months, the longer period being provided in case of bilateral and multilateral agreements. APAs are mandatory against tax authorities only if their terms and conditions have been observed by the taxpayer.

Taxpayers that entered into APAs for related party transactions are not required to prepare and submit a transfer pricing documentation file for the periods and transactions covered by such agreements. The statute of limitation period on assessment of transfer pricing adjustments is currently five years, except for tax evasion or fraud, cases in which the statute of limitation period extends to 10 years. The Romanian Fiscal Code stipulates that the tax authority should consider the OECD Guidelines when analyzing the prices applied in related-party transactions. In addition, the legislation on transfer pricing documentation requirements is aligned to the EU Code of Conduct on transfer pricing documentation.

#### *Practical Considerations*

As a general remark, Romanian tax authorities are currently little sophisticated as regards transfer pricing matters. However, an increased focus on transfer pricing audits may be observed and would likely continue in the future given the increased complexity and spread of operations carried out by MNEs. One practical point of discussion concerns the current definition of related parties according to the Romanian transfer pricing regulations, which is not fully aligned to the OECD recommendations, law interpretation difficulties arising as regards the assessment of affiliation relationships between legal entities by means of common control held by a natural person. Although tax authorities frequently adopt an aggressive approach during tax audits, the definition itself as currently included in the law

apparently establishes an affiliation relationship between legal related parties only in case of holding/control exercised by a legal entity (thus excluding the case of common control by an individual). The Ministry of Finance, the public authority competent with tax law adoption and interpretation does not provide a clear interpretation of such matter, even if, any potential law interpretation issued would still remain unbinding towards the National Agency for Tax Administration, the public institution having the competency to perform transfer pricing audits.

Separately from the above, the duly application of transfer pricing provisions by taxpayers recording losses may be scrutinized by tax authorities during tax audits since a history of losses may be a sign of inadequate allocation of profits e.g. between the non-resident mother company and the domestic subsidiary/branch. On a related note, during tax reimbursement audits, transfer pricing documentation requirements may be invoked by the tax authorities solely with the intention of delaying tax reimbursements.

On the other hand, the Romanian subsidiaries of non-resident MNEs perform various inter-company transactions with their mother companies, the pricing applied in such cases being frequently not at all transparent or obviously arm's length compliant. The nature of such transactions is not always easy to connect with the nature of the core business activities performed, especially when they involve numerous services renderings or interest/royalties payments. The concern in this respect is whether such payments for services rendered or intangible property is not in substance a way of low-tax profits repatriation, under the relevant international treaties for the avoidance of double taxation.

### **3. Foreign Direct Investment**

Literature usually provides for an analysis of FDI from a win-win perspective for all stakeholders involved in the investing process. However, a correct evaluation of the social and economic efficiency of FDI should scrutinize the benefits, gains and costs generated by FDI for each participant on various time frames (meaning, on the short, medium and long run).

In the following, the paper presents situations when the win-win hypothesis is no longer applicable in case of FDI participants as a consequence of misuse of transfer pricing practices.

*Profit Repatriation*

The profitability and the revenues derived by MNEs further to FDI carried out in Romania are matters of interest not only to the MNE itself, seeking for new marketplaces or cheap but instructed labour force, but also for the host economy, hoping for positive spillover effects generated by the FDI.

Certain particularities should be observed as regards the business behaviour of Romanian subsidiaries of foreign MNEs. As such, even if in theory the legal and tax regulations should not imply discrimination between local and foreign companies (even if at least the tax practice has proved the contrary in several cases), we may note certain differences as regards the level of profitability and the utilization of profits derived, i.e. either by reinvestment in the host-country or by repatriation to the home country.

As a non-deniable rule, the level of the profits repatriated by MNEs are exceeding the level of profits reinvested in the host country at least on a medium and long run, which, even if may trigger the conclusion that the foreign investors derive higher benefits further to running FDI, the facts are supported by the inner motivation of foreign investors, respectively of deriving profits (developing a business in a foreign country would likely qualify as circumstantial facts).

There are certain facts supported with empirical evidence that should be mentioned. Thus, it is obvious for example that the host country may not influence in any way the level of the reinvested/repatriated profits by foreign MNEs. It cannot be denied that certain incentives may be granted as regards reinvested profits (e.g. as applicable up to 31 December 2010, Romanian tax law provided for tax exemption of profits reinvested in acquisition of new equipments) as an attempt for limiting profits repatriation, however, on the long run, the foreign investors seek for full recovery of their investment (including any reinvested profits).

**Table 1. The reinvested and repatriated profits in/from Romania by FDI entities during 2007 – 2011**

Formula	FDI indicator	2007	2008	2009	2010	2011
(a)	Net FDI profits		6.412	4.496	4.222	4.710
(b)	Net FDI losses		4.108	4.277	4.495	5.132
(c) = (a) – (b)	Net share capital participation	4.084	2.304	219	- 273	-422
(d)	Net interest income	266	634	475	764	833
(e) = (c)+(d)	Net income of foreign investors	4.350	2.938	694	491	411



(f)	Distributed dividends	2.757	2.696	1.608	1.970	2.075
(g)=(c)-(f)	Reinvested profits	1.327	-392	-1.389	-2.243	-2.497
(h)=(d)+(g)	Repatriated profits	3.023	2.546	2.083	2.734	2.908

*Source: BNR (www.bnr.ro)*

Based on the figures presented in the above table, certain conclusions can be easily drawn. First of all, under normal business conditions (i.e. 2007, before the economic crisis), the level of repatriated profits was up to three times higher than the level of reinvested profits. During the period 2008 – 2011, we can observe a significant drop of the net income derived by foreign investors from FDI run in Romania, in line with the global economy collapse, however, in 2011 repatriated profits slowly redressed up to the level recorded in 2007 (based on massive domestic disinvestments and increase of interest income from intra-group financing).

Based on the above figures, the behaviour of foreign investors regarding Romanian FDI can be characterized by the following:

- significantly higher levels of repatriated profits (up to three times) in comparison to reinvested profits;
- a continuous drop of net share capital participation as a result of scarce financial liquidities;
- an increased level of net interest income paid by Romanian FDI to foreign investors as a result of disinvestment and inter-company funding;
- a decreasing net income of foreign investors from Romanian FDI given the two components mentioned above;
- levels of distributed dividends and repatriated profits tending to equalize after the crisis overcome;
- an accelerated disinvestment process proven by the negative levels of reinvested profits starting 2008.

The empirical data presented above sustains the ideas presented earlier according to which the various stakeholders obtain disproportionate advantages further to FDI performance, especially since FDI is fully controlled by foreign investors, acting solely with the view of deriving satisfactory profits from host countries to be subsequently repatriated.

*Transfer Pricing and FDI*

The figures presented in the above table represent in principle the accounting figures (profits) declared by Romanian FDI entities under statistical analysis by the National Bank of Romania and the National Statistics Institute. However, the accounting figures of host country FDI entities may sometimes reflect the result of controlled transactions. Irrespective of the key drivers based on which MNEs chose Romania as a location for implementing FDI, the group's activities are often structured so that almost all transactions involving the domestic company be carried out with related parties (e.g. in case of manufacturing activities, acquisition of raw materials and sale of finished products, as core transactions, are carried out with group companies). Under such conditions, it may not be the MNEs interest to allocate a significant/justifiable portion of profits to the Romanian partner since such profits would normally be taxable herein both at company as well as shareholders' level. As such, domestic FDI entities may find themselves acquiring e.g. raw materials at significantly higher prices and selling finished products under market price to group companies (we have seen in practice situations when raw materials price before processing by the Romanian FDI entity was higher than the actual product sale price).

Such behavior of MNEs may be convenient since, in the end, the intention, as already proved, would be to repatriate profits (under such example Romanian taxes being evaded). Similar examples may be given as regards services renderings by mother companies to Romanian FDI entities (in particular management, consultancy but also administrative services) and royalties payments in relation to brand, know-how, intangibles in general at prices higher than the actual market price. There could be cases where the services would not actually be rendered by the mother company or the services would not have been acquired under normal business conditions by the Romanian FDI entity. The above would likely generate non-justifiable expenses at the level of the Romanian FDI entity with a direct impact on the accounting and tax profit. In the light of the above, the transfer pricing regulations should give the Romanian tax authorities the means and the powers to adjust the tax position of the Romanian FDI entity so that, at least, the right amount of profits be taxed in Romania.

The Romanian tax authorities are yet little sophisticated on transfer pricing matters while intra-group transactions are increasingly complex. There is currently an increased interest on transfer pricing matters given the estimated tax collection involved. The control of the tax authorities on non-observance of transfer pricing principles should nonetheless have no accounting impact at the level of the Romanian FDI entity and on the level of the profits repatriated.

#### 4. Conclusion

Empirical evidence proves that under normal business operations, MNEs repatriate a large amount of profits derived from host countries. Under the same pattern, MNEs involve in significant disinvestment in case of economy collapse and scarce financial liquidities, however the repatriated profits remain positive (mostly as a consequence of the interest income derived from intra-group financing). What statistical data available showed may not be the actual level of profits repatriated by MNEs.

A category of intra-group transactions carried out by MNEs in host countries may only aim at affecting the accounting and tax position of the local FDI entity (profits are repatriated if such transactions are carried out other than at arm's length). Services renderings (especially management, consultancy, administration), royalty payments, but also transactions involving tangible goods are carried out at financial and commercial conditions imposed by MNEs. Transfer pricing regulations do not have nor intend to have the power to constraint the MNEs on how to use their profits (reinvestment versus repatriation), however, such rules try to assure that the appropriate amount of tax is collected in Romania in relation to MNEs host country operations.

Romanian tax authorities increased focus on transfer pricing matters has conducted to transfer pricing adjustments in 2010 of EUR 8.5m, while the single highest adjustment performed by the tax authorities in 2011 amounted to as much as EUR 30m. The collected tax further to transfer pricing audits is likely to further increase in the future. Transfer pricing regulations are one of host countries means of reducing the apparent disproportionate advantages derived by MNEs further to carrying out FDI.

#### 5. Bibliography

Brackman, S. & Garretsen, H. (2008). *Foreign direct investment and the multinational enterprise*. Massachusetts: Institute of technology.

Cohen, Stephen D. (2007). *Multinational corporations and foreign direct investment*. New York: Oxford University Press.

Ernst & Young (2012). *Transfer pricing global reference guide (February 2012)* – available online at <http://www.ey.com>.

OECD, *OECD Transfer Pricing Guidelines for Multinational Enterprises and Tax Administrations*, available online at [www.oecd.org](http://www.oecd.org).

Zaman, G. (2012). Impactul investitiilor straine directe (ISD) asupra exporturilor si dezvoltarii durabile in Romania/The impact of foreign direct investment (FDI) on exports and sustainable development in Romania. *Studii de istorie economica si istoria gandirii economice/Studies of economic history and the history of economic thought*. Bucharest: Academia Romana.

Zaman, G. (2012). Ways of improving foreign direct investment (FDI) contribution to Romania's sustainable development. *Annales Universitatis Apulensis Series Oeconomica*, 14(2).

Zaman, G., Vasile, V., Matei, M., Croitoru, C. & Enescu, G. (2011). Some challenging (macro)economic aspects of FDI in Romania. *Revista romana de economie/Romanian Journal of Economy*.

Weiner, Joann Martens (March 2005). Formulary Apportionment and Group Taxation in the European Union: Insights from the United States and Canada. *Working Papers No. 8*, Taxation and Customs Union, European Commission.

Walsh, J. P. & Yu, J. (2010). Determinants of Foreign Direct Investment: A Sectoral and Institutional Approach. *IMF Working Paper 10/187*.

## **Analysis of Regional Disparities in the Development of Human Settlements in Vâlcea County**

**Raluca-Mirela Antonescu<sup>1</sup>**

**Abstract:** This paper aims at analyzing the level and nature of regional disparities in Vâlcea County. The main objectives of the paper are: to present the most relevant aspects of Vâlcea County, to individualize different types of territorial disparities after the rank of county localities (cities, towns and villages), using mainly the statistical analysis method and the graphic method, to identify the advantaged and disadvantaged geographic areas in Vâlcea County and to propose solutions to reduce the identified disparities in accordance with the trends set in the European Union (Strategy 2020).

**Keywords:** regional disparities; concentration; development

**JEL Classification:** R11; R12

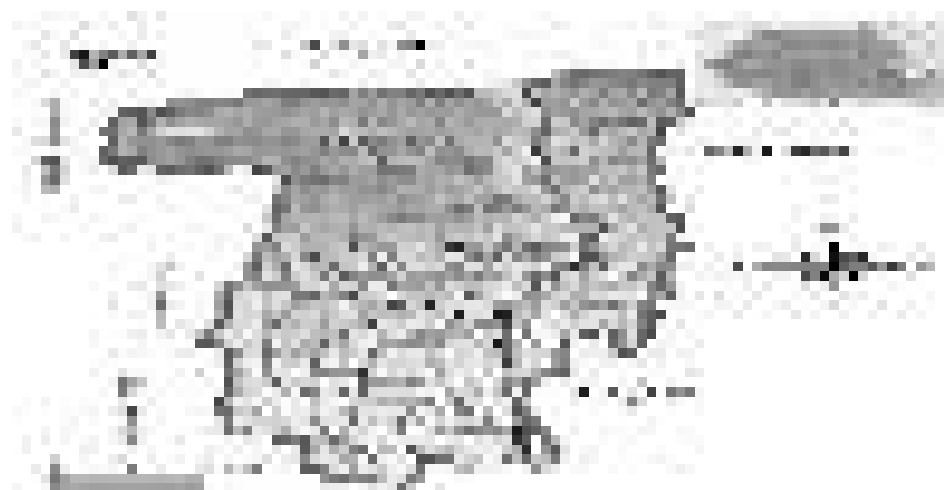
### **1. Introduction**

Located in the central-southern Romania, Vâlcea County is bordered on the north by Sibiu and Alba County, on the north-west by Hunedoara County, on the west by Gorj County, on the south and south-west by Dolj County, on the south and south-east by Olt County and on the east by Argeş County (Map 1). It is part of the South West-Oltenia development region, presenting a diverse landscape, with predominance of the mountain.

The territory of Vâlcea County includes two municipalities, one of which is the county seat – Râmnicu Vâlcea and Drăgăşani, nine cities - Băbeni, Băile Govora, Băile Olăneşti, Bălceşti, Berbeşti, Brezoi, Călimăneşti, Horezu and Ocnele Mari, 78 municipalities (Voineasa, Vaideeni, and so on.) and 560 villages (according to Romanian Statistical Yearbook, 2010), each with different developmental potential and level.

---

<sup>1</sup> Student, Faculty of Geography, University of Bucharest, Romania, Address: 36-46 Mihail Kogalniceanu Blvd, Bucharest 050107, District 5, Romania, Tel.: +402130773 00, Fax: +40213131760, Corresponding author: antonescu\_ralu@yahoo.com.



**Map 1. Vâlcea County**

*Source: processing after <http://www.comvis.ro/valcea%20turistica/index.html>*

Vâlcea County holds the 23th place among Romanian counties in terms of area (5.765 km<sup>2</sup>), the 18th place in terms of total population (407.764 habitants - 1,89% of the total population of Romania) and the 15th place in terms of population density (70,7 habitant/km<sup>2</sup>).

Life expectancy at birth is 75 years, higher than the national average. The migratory movement of population in Vâlcea County shows a high percentage of immigrants at the regional level (33.93%) and a lower percentage of migrants (18.45%), meaning that there are more people arriving than leaving this region.

The unemployment rate in Vâlcea County is 7.9%, being just above the national average (7.8%) and well below the regional average (10.4%). Other indicators of quality of life and infrastructure, showing the place of Vâlcea County at national and regional level, are: the number of county hospitals (9), representing 20.93% of the regional total (43 hospitals) and only 1.89% of the national total (474 hospitals); the share of pupils and students in the county (71.147 students), which represent 17.03% at regional level and only 1.70% at national level; the length of urban roads in the county (in total 681 km), which means 25.63% of the regional total (2.657 km) and 2.55% of the national total (26.606 km), etc.

## **2. Methodology**

The identification and individualization of territorial disparities in the development of human settlements in Vâlcea County was performed using a system of indicators, classified into four major categories according to the rank of localities

(cities, towns, municipalities and villages). This classification helps to identify the developed and disadvantaged areas in the county and to find solutions and proposals in order to reduce disparities.

The indicators used to characterize the level of socio-economic development and to highlight the various disparities that exist within a territory, has several classifications and hierarchies based on the level to which we refer (national or international) and based on the various institutions concerned with defining a common system of indicators in Romania.

For this analysis the indicators were grouped into four categories: socio-demographic indicators (total population, births, natural increase, and marriages), economic indicators (employees, unemployed, turnover), infrastructure indicators (total length of streets, sewer network, and number of dwellings) and quality of life indicators (living space, number of hospital beds, number of teachers, and so on).

### **3. Analysis Results**

After analyzing the statistical indicators in Vâlcea County I have identified the following categories of disparities:

- The most important socio-demographic disparities are between Râmnicu Vâlcea city and Drăgășani city, given that the first one is the seat of Vâlcea County.
- The economic disparities are given by the total number of employees (higher in Râmnicu Vâlcea city than the other localities). Employment in Râmnicu Vâlcea is mainly in industry, followed by services, trade, construction and health and social care. The lowest number of employees is in information and communications (376 employees). In the next city, Drăgășani (municipality), the population is occupied approximately in the same areas, but with much lower values of employees. Also, the lowest number of employees is in information and communications (28 employees). The agricultural sector is under-represented in both cities, but with higher values in Râmnicu Vâlcea - 920 employees and in Drăgășani are only 80 employees in agriculture.
- Disparities in infrastructure indicate a much greater length of urban roads for Râmnicu Vâlcea city - 203 km, of which 154 km are modernized, compared to Drăgășani city, which has only 69 km of city streets, of which 55 km are modernized.
- Disparities regarding life quality in the two analyzed municipalities mark a higher total score of students enrolled in the schools and high schools from Râmnicu Vâlcea city (20.776 students) than in those from Drăgășani city (4.868 students). The only students from throughout the county are in Râmnicu Vâlcea city and reach a figure of 6.060 students. The teaching staff is obviously larger in

the county seat (1.657 teachers in Râmnicu Vâlcea) than in Drăgășani city (372 teachers). Finally, the number of medical staff, such an important indicator for measuring the quality of life in a city, is higher in Râmnicu Vâlcea city (428 doctors) than in Drăgășani city (52 doctors) and most doctors work in the public sector.

Thus, the territorial disparities found between the two cities are obvious. Râmnicu Vâlcea city, the seat of Vâlcea County, stands out far from Drăgășani city because it has recorded much higher values for all the indicators taken into account. Drăgășani has rather the features of a simple city than a developed one. However, both cities determine a strong influence on the surrounding communities, playing the role of local growth poles and Râmnicu Vâlcea even the role of a regional pole.

There are also regional disparities between the nine towns in Vâlcea County. The most obvious are those between the town with the highest level of development and which showed higher values for most indicators (Băbeni town – has recorded very high values for total population, employees, number of schools and enrolled students, the length of gas pipelines, and so on) and the most underdeveloped town, that has low values in many important indicators (Băile Govora town - has recorded low values in terms of area and total population, in urban infrastructure and technical facilities, number of employees, and so on). A relatively high level of development also presents Călimănești and Horezu towns and Ocnele Mari town is also poorly developed.

As regards the regional disparities among the 78 municipalities in Vâlcea County, the most developed village is Mihăești, which has recorded the highest values for four of the nine considered indicators (total population, housing, employees and doctors) and high values for the other indicators. Also, Voineasa village has recorded maximum values for total area and agricultural area and average values for the other indicators. At the opposite pole are: Mitrofani village, with minimum values for three of the analyzed indicators (housing, total area and agricultural area) and low values for the other indicators; Runcu village, with minimum values for teachers and total population; Fântârești village, with blank values (unregistered) for employees and doctors.

### **Identification of Developed and Disadvantaged Areas in Vâlcea County**

In Vâlcea County, developed areas include the two cities (Râmnicu Vâlcea and Drăgășani), of which stands out the county seat (Râmnicu Vâlcea), and the nine towns, which compared to rural settlements they are highly developed, but comparing them to each other they have different levels of development. Thus, it stands out Băbeni town, focused on industry and with the highest number of inhabitants and the resorts-towns Călimănești, Băile Olănești and Horezu.



In Vâlcea County we can individualize as disadvantaged areas the 78 municipalities, together with their villages, because they have poor living conditions, lack of infrastructure and utilities, they do not record substantial revenues, the population is predominantly employed in agriculture, the number of employees is small, the total population is small in number and the population density is low. However, there are some municipalities (Mihăești, Voineasa) which are slightly better in terms of total population, employees and infrastructure, but we can not say they are very developed.

In addition to rural areas, in Vâlcea County other disadvantaged areas are the mountain areas (in terms of limiting the use of agricultural land), according to the classification of disadvantaged areas in the National Rural Development Programme 2007-2013, Annex 4A ([http://www.madr.ro/pages/dezvoltare\\_rurala/PNDR-versiunea-VI\\_aprilie2011.pdf](http://www.madr.ro/pages/dezvoltare_rurala/PNDR-versiunea-VI_aprilie2011.pdf)).

In Vâlcea County there are 21 disadvantaged mountain areas: Băile Olănești, Bărbăești, Berislăvești, Boișoara, Brezoi, Căineni, Călimănești, Costești, Dăești, Golești, Horezu, Malaia, Muereasca, Perișani, Racovița, Runcu, Sălătrucel, Stoenești, Titești, Vaideeni, Voineasa.

In addition to developed urban areas and disadvantaged rural areas, in Vâlcea County we can also distinguish three areas with high development level and four areas with low levels of development, consisting generally of localities with higher and lower values for most analyzed indicators.

**Thus, Râmnicu Vâlcea – Băile Govora – Băbeni area, also called D1 area,** includes a total of nine localities, three of which are towns (Ocnele Mari, Băile Govora and Băbeni) and one is the seat of Vâlcea County (Râmnicu Vâlcea city). Also, this area includes the most developed village (Mihăești) and several villages which have recorded high values for the main analyzed indicators (Vlădești, Bunești). D1 development area includes a growth pole of regional importance (Râmnicu Vâlcea) and three potential concentration poles of local importance (Ocnele Mari, Băile Govora and Băbeni), which strongly contribute to socio-economic development of the area and influence the balanced development of rural surroundings.

The area is characterized by the predominance of services, trade and industry in the structure of economic activities. D1 area is the most developed of the three existing developed areas in the county because it has a total population of 146.775 inhabitants, spread over a relatively small and homogeneous surface – 32.609 ha.

**The second developed area in the county is Horezu - Călimănești - Brezoi area or D2 area,** which is the largest in area (177.739 ha) and somewhat discontinuous. It includes nine localities, four of which are towns (Brezoi, Călimănești, Băile Olănești and Horezu), and several fairly developed villages (Voineasa, Vaideeni, Costești). The total population of this area is 41.387 inhabitants, far lower than the

previous area population. Because this area occupies the mountain area of the county, the basic economic activity is tourism, practiced especially for mountain landscapes (Voineasa, Călimănești), spa treatments (Băile Olănești and Călimănești) and for the famous monasteries from Horezu. Besides tourism, there are also remarkable: business and commercial activities, information and communication.

The four towns have potential for local growth poles, particularly through their natural resources and financial capital obtained from tourism, which positively influences the development of neighboring villages (Costești, Muereasca).

**The last and the third developed area is Drăgășani area or D3 area**, located in the southeastern part of the county, on the lowest surface, compared to all other areas (17.203 ha). It has only five moderately developed localities, the four villages being strongly influenced by Drăgășani city, which also represents the local growth pole. The total population of the area is 33.196 inhabitants, of which Drăgășani city includes the largest part (20.331 inhabitants). The basic economic activities are industry and agriculture, the region being recognized for its vast vineyards.

With regard to the underdeveloped areas in Vâlcea County, they are four in number and are named after their geographical position in the county.

**The first underdeveloped area is the South-West area or S1 area**, which contains the largest number of localities of all existing areas (29). Of the 29 localities, two are the Bălcești and Berbești towns, that are a little more developed in comparison with the surrounding rural areas and they have some influence over them because many people are migrating to these two towns. S1 area is the largest of the four underdeveloped areas, with a total area of 148.297 hectares, stretching from the foothills area to the Subcarpathian hills and close to the Carpathian mountains (Bărbătești, Stoenesti villages). The total population is quite large (93.766 inhabitants), being the second most populated area, after D1 area. Population is employed more in agriculture, focusing on gardening, horticulture and animal husbandry, but also in industry, especially in the two towns. The two towns in S1 area could represent poles of attraction for other settlements in the neighborhood, especially because it offers more opportunities compared to those offered by rural municipalities.

**The second underdeveloped area is called Southern area or S2 area** and it has 19 localities, all represented by municipalities and villages. The surface of this area is 77.933 ha, being the second largest underdeveloped area, after S1 area. The total population is 45.500 inhabitants, with more people than even have some of the developed areas (D2 and D3). This area is among the poorest areas of the county, especially because there is no city/town - potential development pole in this area. Also, the area includes some of the poorest municipalities, which have very low

values for most important analyzed indicators (Mitrofani, Lalosu, Lungești, and so on).

The S2 area occupies most part of the piedmont plateau area, which leads to the predominance of the agricultural sector due to favorable conditions to practice these economic activities. The proximity to the developed areas D1 and D3, with the growth poles Băbeni and Drăgășani, and also the proximity to Bălcești town, could represent an opportunity for this area to grow more.

**The next underdeveloped area is the Eastern area or S3 area**, which includes a relatively small number of localities (9), all municipalities and villages, spread over a relatively small area (only 46.407 ha). The S3 area also records a small number of inhabitants (29.723 inhabitants), being the penultimate of the areas in this respect.

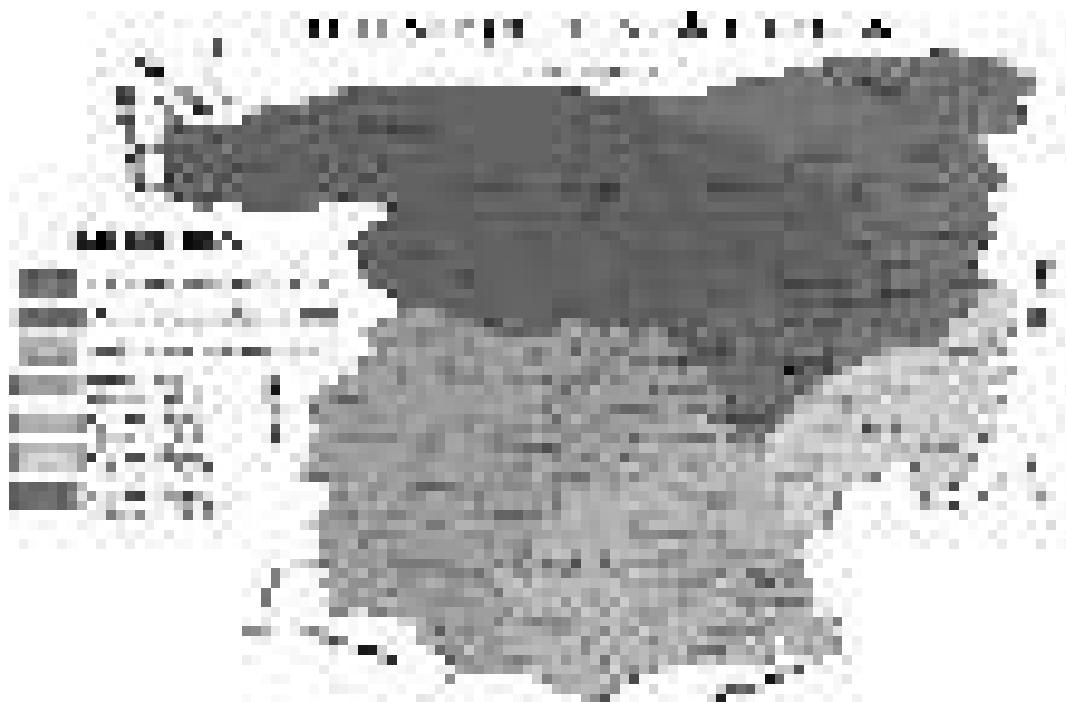
The S3 area has the advantage of proximity to the most developed area of the county (D1), the concentration poles Râmnicu Vâlcea - Băile Govora - Băbeni being able to influence the overall economic growth and development of this disadvantaged area.

**The last and the poorest of all areas of the county is the North-Eastern area or S4 area**, which is composed of nine localities, all municipalities and villages, like the previous area. The total population of 18.421 inhabitants, which represents the smallest population of all analyzed areas, is spread over an area of 76.289 ha, including much of the mountain area of the county.

The mountainous area offers the opportunity of tourism exploitation (especially in the villages Căineni, Boișoara and Titești), the population being employed both in tourism activities (employees in restaurants and tourist accommodation establishments, however, insufficient in number) and in agriculture, with emphasis on livestock. The quality of life of people in the area is very low.

The major advantage of this underdeveloped area is the proximity to the developed areas D1 and D2, which have important major growth poles, as Brezoi, Călimănești, Băile Olănești, Râmnicu Vâlcea and Ocnele Mari, based on very diverse economic activities (from tourism and industry to services, trade, constructions, etc.), which could help the North-Eastern area to grow faster.

So, Vâlcea County includes three developed areas, totaling 23 localities, and four underdeveloped areas, with 66 localities (Map 2), between which have been detected territorial disparities regarding the surface, the total population, number of employees, number of teachers, and so on, revealing differences in the level of development of each area.



**Map 2. Map of regional disparities in Vâlcea County - developed and underdeveloped areas**

*Source: processing map from the site <http://www.cjvalcea.ro/valcea.htm> in Corel Draw X4*

#### **Proposals to Mitigate Regional Disparities in Vâlcea County:**

- The application of polycentric development policy, meaning to develop or create more urban growth poles, which could positively influence the development of rural surrounding localities to acquire a territorial balance;
- The proposals (also found in the Social-Economic Development Strategy of Vâlcea County, 2009-2013) regarding the development of several strategic areas (natural resources and environmental protection, economics, business and technology, tourism, human resources and services, infrastructure) in order to obtain a balanced development of the entire county.

#### **4. Conclusions**

This paper is a summary of the diploma done in the year 2011, which proposed to individualize the regional disparities in Vâlcea County. Also, there were proposed possible solutions to reduce the gaps identified in the development of human settlements in the analyzed county.

The obtained results indicate that there are clear socio-economic disparities between urban and rural areas in Vâlcea County:

- The territorial disparities between the two cities (Râmnicu Vâlcea and Drăgășani) highlight the superiority of the seat of Vâlcea County (Râmnicu Vâlcea), which enjoys a high level of socio-economic-demographic development, being the only regional pole of influence in Vâlcea County;
- Regarding the nine towns, the results of the analysis showed that there are regional disparities between the most developed town - Băbeni and the less developed town - Băile Govora;
- In rural areas, most villages have a relatively low level of development, with little population, small number of employees, sometimes nonexistent infrastructure endowments, fewer schools and hospitals, and disparities show that the most developed village is Mihăești and Mitrofani is the least developed village.

This analysis could contribute to the consolidation of the regional development strategy for South-West Oltenia and of the Vâlcea County strategy, in terms of future regional policy and Europe 2020 Strategy.

## 5. References

- Aydalot, Ph. (1985). *Economie régionale et urbaine/Regional and Urban Economics*. Paris: Economica.
- Antonescu, D. (2003). *Dezvoltarea regională în România – Concept, mecanisme, instituții/Regional development in Romania - Concept, mechanisms, institutions*. Bucharest: Oscar Print.
- Antonescu D. (2009). *Studiu cu caracter prospectiv: Evoluția activităților economice și a forței de muncă în municipiul Râmnicu Vâlcea, Studiu de fundamentare pentru PATJ Vâlcea/Prospective study: The evolution of economic activities and employment in Râmnicu Vâlcea City, Fundamenting Study for PATJ*.
- Cârstea, Gh. & Constantinescu, D. et al. (1980). *Vâlcea. Monografie, Județele Patriei/Vâlcea. Monograph. County's districts*. Bucharest: Sport-Turism.
- Ianoș, I. (2000). *Sisteme teritoriale – O abordare geografică/Territorial Systems - A geographical approach*. Bucharest: Tehnică.
- Badea, L. Rusenescu, C. (1970). *Județul Vâlcea, Județele Patriei/Vâlcea District, County's districts*. Bucharest: Editura Academiei Republicii Socialiste România.
- Strategia de Dezvoltare durabilă a Municipiului Râmnicu Vâlcea 2008-2013/Sustainable Development Strategy 2008-2013 for Râmnicu Vâlcea City*. Consiliul Județean Vâlcea.
- Urban Proiect (2009). *Studiu cu caracter prospectiv: Metodologie privind dezvoltarea analizei economice în profil spațial; Criterii de analiză și tipologia indicatorilor/Prospective study: Methodology for development of economic analysis in spatial profile; Analysis criteria and typology of indicators*.

\*\*\*(2009). *Direcția Județeană de Statistică Vâlcea, Breviarul Statistic al Municipiului Râmnicu Vâlcea în cifre/Vâlcea County Statistics, Statistical Breviary of Râmnicu Vâlcea in figures.*

\*\*\*(2010). *Institutul Național de Statistică, Anuarul Statistic al României/National Institute of Statistics, Romanian Statistical Yearbook.*

\*\*\*(2009). *Direcția Județeană de Statistică Vâlcea, Fișa Localității/Valcea County Statistics. City Chart.*

**Online Sources**

[http://www.cicadit.ro/ro/projects\\_n2\\_1\\_2.html](http://www.cicadit.ro/ro/projects_n2_1_2.html).

[http://www.mdrl.ro/\\_documente/regiuni/4.SW\\_ro.pdf](http://www.mdrl.ro/_documente/regiuni/4.SW_ro.pdf).

[http://www.primariavl.ro/index.php?option=com\\_k2&view=item&layout=item&id=585:puz-pud-pug-autorizatii-si-certificate-de-urbanism&Itemid=136&dir=JSROOT%2FDezvoltare+Urbana%2FPUG/In+dezbatare](http://www.primariavl.ro/index.php?option=com_k2&view=item&layout=item&id=585:puz-pud-pug-autorizatii-si-certificate-de-urbanism&Itemid=136&dir=JSROOT%2FDezvoltare+Urbana%2FPUG/In+dezbatare).

<http://www.cjvalcea.ro/valcea.htm>.

<http://www.valceaturistica.ro/localitatea-ramnicu-valcea.html>.

[http://www.madr.ro/pages/dezvoltare\\_rurala/PNDR-versiunea-VI\\_aprilie2011.pdf](http://www.madr.ro/pages/dezvoltare_rurala/PNDR-versiunea-VI_aprilie2011.pdf).

## **Ensuring Security of Supply of Natural Gas in the European Union's Common Energy Policy**

**Andrei Teofil Postolachi<sup>1</sup>**

**Abstract:** The problematic of energy policy is nowadays widely disputed in the European Union community. In a global context characterized by highly and raising dependency of the economic activity on the energetic resources, the European authorities had launched a strategy in this sector which regards the problems of access to secure and affordable energy products. The aim of this paper is linked to the natural gas field of the European energetic concerns, and it assumes the high dependency of internal consumption on imports, more than half of the natural gas that is used in the 27 states comes from abroad. Ensuring a higher level of security in the supply is one of the goals that European Union wants to achieve on medium and long term. In these circumstances, actual measurements take into account different type of actions: stabilize relations with existing partner gas exporters (Russia, Algeria, Norway); diversification of transport routes coming from these countries, especially in the idea of trying to avoid transit countries (mainly Ukraine and Belarus); and finally opening discussions and investing in alternative routes which should transport the gas from new suppliers placed in the Caspian Sea or Central Asia region.

**Keywords:** energy policy; natural gas; security of supply; transit countries

**JEL Classification:** P48; Q4

### **1. Introduction**

Energy represents one of the main points taken into account when we are talking about economic and social development, and also it influences the improvement of live quality. Natural resources, the energetic ones in special, had influenced and still do, the entire human activity, in special the economic one, although we are talking about national or internal action plan, or at global level, being in the same time one of the core elements in global relationships among countries (here there are considered two main categories, the net exporters and importers, there are no cases worldwide of countries with perfect equilibrium between internal consumption and production of energy). The construction of the European Union in the form that it achieved in current time is the best example of good and deep cooperation between a large numbers of states. There is „desperate” need at EU

---

<sup>1</sup> PhD, Student, “Alexandru Ioan Cuza” University of Iasi, Doctoral School of Economics, Romania, Address: 11 Carol I 11 Blvd, Iasi, Romania, Tel.: +40232201030, Corresponding author: at.postolachi@gmail.com.

level on a common energy policy. In fact, is needed a „policy based on a vision”, which in turn contains three main components: first, it should be market oriented (competitive and efficient), secondly, it should be accompanied by sustainable savings in energy, and in the third plane it must ensure energy security, meaning here the supply across the entire community space (Glachant et. all, 2010, p. 2). These directions surprise summary but consistently the ideals of European authorities in energy, which, once achieved would contribute to a better cohesion on economic process itself.

## 2. Main Features in the European Union’s Energy Sector

It is well known that between the economic growth and the energy consumption of national states there is a direct dependency relationship, energy being considered “the main intermediate product that supports a country’s economic and social development”, alongside the capital and the labor force, becoming a key production factor (Tolon-Becerra, 2010, p. 7093).

Starting from the first and second industrial revolution emerged the possibility of developing new production facilities, which in turn suffered a wider diversification, thus leading to a bidirectional relationship. The use of wood and coal as the main resources of consumption was specific in the first half of the last century, but the technological innovations that appeared after the Second World War determined a raising demand for new types of fuels, such as oil and gas, a trend that is provisioned to be maintained or even it can lead in next 20-30 years to a deepened dependency.

**Table 1. The evolution of energy intensity for most developed economies from 1999 to 2010(TOE\*/millions EUR)**

	Global	USA	EU	Japan	Russia	China	India
1990	471	355	<b>233</b>	139	2943	2040	1543
1995	445	340	<b>209</b>	145	3401	1465	1452
2000	405	306	<b>187</b>	145	3074	1059	1295
2005	405	278	<b>181</b>	136	2433	1059	1086
2010	392	267	<b>169</b>	129	2171	981	1007

*Source: The European Commission, Energy Pocket Book 2010,*

[http://ec.europa.eu/energy/observatory/statistics/doc/2010\\_part\\_2\\_energy\\_pocket\\_book\\_2010.pdf](http://ec.europa.eu/energy/observatory/statistics/doc/2010_part_2_energy_pocket_book_2010.pdf)

*\*Tones of Oil Equivalent (unit of measurement equal to the chemical energy released by burning one tone of oil)*

The energy intensity is determined based on the ratio between the internal production, expressed in millions EUR, and the used energy quantity, measured in.



It can show an economy's degree of dependency towards the use of energetic resources. As we can see from Table 1, the situation in the developed states or regions, such the USA, Japan or the EU shows low levels by comparison to developing economies, such as China, Russia or India. The intensity indicator shows that for small values the economies are based on new technologies or services. Although at first glance, according to the chart below we can observe an increase in energy use, which together with the intensity leads to the conclusion that the European economy is becoming increasingly competitive, energy consumption growth leading to bigger increases of the productivity. The same chart shows the first three components of consumption, namely the three basic resources: coal (that shows a downward trend since 2005), natural gas, which has superior rise than oil. Beside the fact that globally the intensity is following downward trend, the quantitative measurements point out that in absolute value the consumption is increasing (roughly 15% in the last decade).

The resources procurement needed to satisfy the internal demand had been, and still is on the main topics of the national authorities. The European Union is now attempting to transfer this topic to the Community level, developing the idea of a unified community, which can be seen as a strong negotiating partner in the relationship with external suppliers of energy, due to the fact that if, for example we consider the natural gas, from 27 member states only Great Britain and Netherlands are capable to cover internal demand from domestic sources. The other 25 states enjoy different percentage of external dependence, based as we will confirm later on a relatively small number of suppliers.

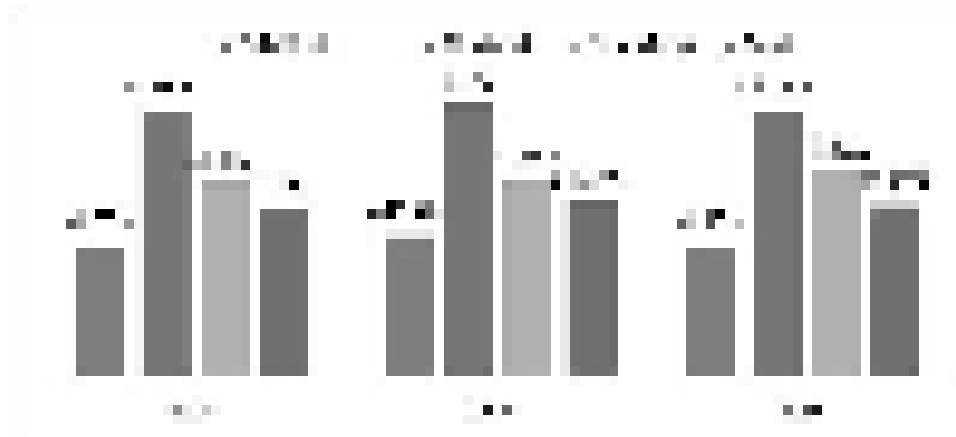


**Chart 1. The distribution of the EU domestic consumption per energy resources categories (millions toe)**

*Source: own processing based on data from Eurostat and BP (2011)*

The dependency on imports, showed in chart 2, captures best the overall feature of the European energy system. Lacking the capacity to provide the necessary resources, the EU resorts to external sources in percentages more than half higher

for the primary energy resources (with the exception of coal that is less than 50 % imported). It is important to mention that although oil is the main imported good, there is an increasing tendency towards the use of natural gas, it having values over 50 %. This is one of the main reasons for enacting an energetic policy within the European Community that needs to cover the issues of achieving a higher degree of security in the supply of the imported products.



**Chart 2. The evolution of EU's import dependency broken down by major energy resources**

*Source: Eurostat (online data codes: nrg\_100a, nrg\_101a, nrg\_102a and nrg\_103a)*

### 3. New Challenges for a Common Energy Policy

The availability of modern energy resources (renewable) and classic (fossil fuels) is considered a critical foundation for the future sustainable development. Within the international community there is an increasing debate on the topic of establishing a common goal on the “universal access to modern energy services”, based on a “political priority” that should become a matter on the national agendas of all member states (Brazilian et alli., 2010, pp. 1-3).

In fact no “energy system is not invulnerable to the possibility of interruptions arising from one or more suppliers or due to fluctuations in the demand” (Creti and Villeneuve, 2009, p. 106). The Russian gas crisis from 2006 or 2009 are also well known, moments when the Ukrainian influence as an intermediate in the EU gas transmission became a topic on the agenda, but at the same time we observed a decrease in the Russian total production of over 10%, which could be considered an additional cause of the temporarily supply interruption.

In order to meet energetic needs, the EU members depend, mostly, on imported fossil fuels; which raises important questions related to three issues:

- supply security;
- environmental policies;
- the decision-making process in the energy sector.

Of course, there is no doubt that any energy production or consumption process, in its various forms and uses, has a huge impact on the environment. In the EU, nearly 80% of total energy consumption comes from fossil fuels, which is the main source of emissions of greenhouse gases, which finally leads to climate changes. The energy-related emissions have environmental effects in the sense of air, water and soil pollution, thus presenting the risk of damaging human health but also affecting the nature or the biodiversity. Thus European intentions to reduce pollution find a rational explanation, especially maintaining a very productive environment but in the context of increasingly scarce harmful emissions. In this case the EU is supporting investments programs among member states in the development of the renewable sources, in order to achieve a 20% increase in energy consumption coming from these sources.

In their vast majority fossil fuels come from foreign sources, from outside the EU, thus the Union is becoming highly dependent on energetic imports. The dependency on a small number of countries that have sufficient natural sources of oil and gas, some of them being characterized by economic and political volatile environments (Russia or states near the Middle East), creates very unsafe trade relationships, often defined by uncertainty that comes from the exporting partners. Therefore, the reduction of greenhouse gas emissions and the assurance of a high security of supply became the main political commitments made in the Community that realized the need to change “the way we produce and consume energy” (Adelle et alli., 2009, p. 9).

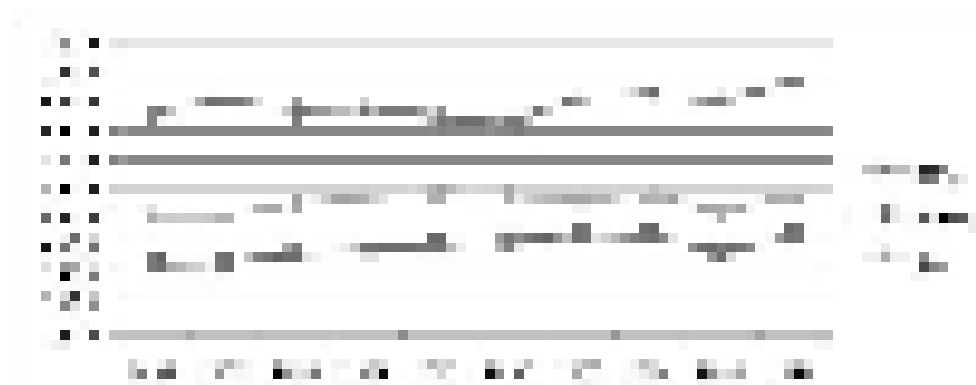
Recent developments in coal, natural gas and oil prices are signs announcing the “fundamental changes in the global energy market”, fueled mainly by the increased demand for fossil fuels in values higher than the supply capacities, especially in “regions / countries known for high levels of consumption” (de Jong, van der Linde, 2008, p.2). Thus the impossibility to meet the demand due to a variety of obstacles, that are “above ground” and not necessarily geological factors, which prevent the increase and stabilization of the supply. So another key aspect of the European energy policy is the subject of creating a single market in the energy sector. The energy products should also move freely within the Community as goods and capitals do, a single internal energy market can only be achieved by eliminating trade barriers and obstacles. It is also necessary the harmonization of national fiscal policies, especially those related to price formation, or legal norms on the environment. An internal energy market is one that may confer a healthy growth of the European economy, ensuring a high level of supply.

One of the main components of energy security is the security of supply, closely linked to economic development both at micro and macroeconomics. Imports and exports of energy products have a significant impact on the countries' balance of payments. Similarly, the state budget is particularly influenced by subsidies, taxation and the costs incurred by state-owned companies operating in the energetic sector, them having the market monopoly in most cases.

#### 4. Natural Gas Supply in the European Union

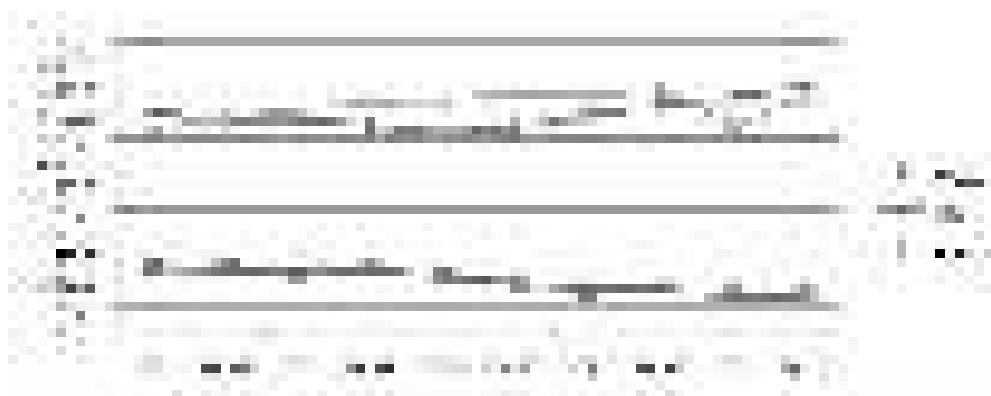
Comparing the existing situation in the EU for natural gas to the one in USA or in Russia, according to the graphs below we can see the superiority of U.S, in terms of a much higher domestic consumption and upward trends for all 3. The USA has operating capacities similar to Russia (with values more than double compared to the EU), but at the same time insufficient to satisfy the domestic demand.

Russia on the other hand ensures its domestic demand (approximately 400 billion m<sup>3</sup>) using only a part of the total production, that surpasses 550 billion m<sup>3</sup>, the gas excess being mostly exported to the EU. At the same time, Russia trades other fuels, but what is specific to the Russian natural gas is that it covers a high percentage of the EU final consumption, which emphasizes the dependence of the European energy sector on few suppliers.



**Chart 3. Natural gas consumption (billion cubic meters)**

*Source: own processing based on data from BP (2011)*



**Chart 4. Natural gas production (billion cubic meters)**

*Source: own processing based on data from BP (2011)*

The EU shows a contrary development of the two trends, the situation being characterized by increases in consumption that determine decrease in the production capacity. Unlike the EU, U.S. shows an increasing trend of gas production since 2005 due to the discovery of important deposits in the northern region, which began to be operated at the time. The diversification of the import relations strategy envisages structure of discovered and confirmed reserves, so that partnerships are usually signed based on a certainty regarding the delivery capacity. As the following statistics show, Russia has over a quarter of global natural gas capacities and therefore, in terms of proximity to the EU, it is one of the most attractive suppliers. An additional feature that must be pointed for this structure is the fact that among first 10 countries with largest reserves of gas discovered, there is no one from the European Union. This stresses out the inability of European space to cope with a raising demand because of the lower internal capacities.

**Table 2. The structure of the natural gas reserves discovered and exploited fully in 2010 (trillion cubic meters)**

Country	Absolute value	Percentage of total
Russia	47,57	25,0%
Iran	29,6	15,5%
Qatar	25,47	13,3%
Turkmenistan	7,5	3,9%
Saudi Arabia	7,46	3,9%
USA	6,9	3,6%
United Arab Emirates	6	3,19%
Nigeria	5,2	2,7%
Venezuela	4,9	2,6
Algeria	4,5	2,3%

*Source: Natural Gas Market Review, available at:  
<http://www.iea.org/publications/freepublications>*

The natural gas imports in the EU countries take place through pipes coming from the main producing closest areas: Algeria, Libya, Norway, Russia and Turkey. In the table below we find a summary of the main pipelines, both those already in use and also those under construction or at the project stage, with the specification that the considered capacity is the maximum, as follows:

- From Algeria the Trans-Med pipeline carrying gas to Italy via Tunisia and Sicily, and the Maghreb-Europe line that supplies Spain through Morocco;
- From Libya - to Italy via Sicily
- From Norway the Langeled pipeline starting at the Ormen Lange (the northern areas of Norway) and supplies the United Kingdom, plus a second high capacity pipe that connects to the North of the Netherlands
- From Turkey the interconnection with Greece that insures the distribution of resources from the Caspian area and the Middle East
- From Russia approximately 80% of the exported gas to the EU transits through Ukraine, where the transportation system is divided into two: a part of the pipes end in Slovakia, the Czech Republic, Germany and Austria; and the other half provides supply to Moldova, Romania and Bulgaria (Bilgin, 2011).

As we can see, Russia has an annual export capacity of 154 million cubic meters, which represents more than half of the total 307.5 that EU imports. Russia was a “reliable supplier” in the 40 years that it served as “the largest exporter to the EU”. Risks in bilateral relations appeared with the “endangering of the Russian situation due to problems arising in terms of transit”. The undermining of the delivery of Russian gas in January 2006 and 2009 to Bulgaria, Romania, Greece, Croatia or Serbia came as a result to the proposals from Ukraine, that, wanting to take advantage of the key position in the transport route, planed a renegotiation of its own price for the imported gas. Thus, the energy security issue is not just about its conceptual meaning accompanied by an implementation by member states or the European Commission, but rather is associated with a “pipeline policy” (Bilgin, 2011, pp. 1085 - 1086).

**Table 3. Natural gas pipelines and natural liquefied gas delivery points (billion cubic meters) in 2007**

	Existing	In Construction	Project stage	Total
<b>Natural gas source countries</b>				
Algeria	35,3	-	24	59,3
Libya	8,0	-	-	8,0
Norway	108,2	25,5	4,0	137,7
Russia	154,0	13,0	46,5	213,5
Turkey	2,0	-	28,0	30,0
Total	307,5	38,5	102,5	448,5

<b>Liquefied natural gas delivery points</b>				
Belgium	4,6	-	4,6	9,2
France	15,5	-	8,2	23,7
Greece	1,9	-	3,4	5,3
Italy	3,7	-	24,2	27,9
Portugal	4,1	-	-	4,1
Spain	26,7	9,4	3,6	39,7
Great Britain	-	14,8	25,9	40,7
<u>Total</u>	<u>56,5</u>	<u>24,2</u>	<u>69,9</u>	<u>150,6</u>
<b>Total</b>	<b>364,0</b>	<b>62,7</b>	<b>172,4</b>	<b>599,1</b>

Source: (Kjarstad, Johnsson, 2007, p. 879)

Due to the frictions that occurred lately in the relationship between Gazprom and Ukraine or Belarus, the Russian authorities are also interested in ensuring an increasing gas supply to the EU and therefore also have regard to the following: “the construction of new gas pipelines that will cross the Baltic Sea or the Black Sea; and the expansion of existing pipelines’ capacities up to more than 200 billion cubic meters per year through repairs and agreements signed with NaftoGaz Ukraine (national Ukrainian company similar to the Russian Gazprom)” (Sagen, Tsygankova, 2008, p. 872).

However Russia remains a reliable energy partner, yet the future of bidirectional relations between EU and Russia is concentrated in diversifying the transport routes and eliminate transitory countries in the supply activity (mainly Ukraine and Belarus). The major projects developed are concentrated in building two major pipelines: *South Stream* which should cross the Black Sea and reach the shore near Varna port in Bulgaria, from where the gas will be pumped to Serbia, Hungary, Slovenia and Italy; and the second major project is *Nord Stream*, which is already operational and it supplies Russian gas from Vyborg to Germany, crossing the Baltic Sea.

The new technologies for liquefying natural gas (process which increases the density about 2.5 times) that are part of the European plans for the next period are a way to enhance security. By liquefaction the traditional pipeline transportation is avoided opting for the road or rail transportation. This process is not an absolute novelty, the LNG (Liquefied Natural Gas) being used since the 1960s, albeit at a very small scale, in order to distribute the gas to “isolated markets” (especially Japan and South Korea) over long distances (Egging et. all, 2008).

The only problem with this technique is related to costs, manufacturing and transportation that cover distances under 3000 Km are higher than the classical pipeline solution. “In the 2000s the Europeans showed an exacerbated enthusiasm regarding the liquefaction of gas, identifying the benefits for companies concerning domestic transport on short distances and to occasional destinations”. This option

also shows advantages in relation with transit countries, meaning that any pipeline, in addition to the initial rather large investment, implies their permanent on national territory. Thus the political and commercial risk of interruption is quite high, whereas the liquefied form has the advantage that it can change the route to the user and be delivered in a very short time (Stern, Honore, 2009, p. 404). According to data available in Table 3 the percentage of LNG in total European imported gas is only 15%. This means that there is a reliable perspective on raising the usage of this technique, especially in the Central and Eastern part of the EU. The main users of LNG are countries in western part, mainly Great Britain, Germany or Spain.

Another security matter is related to the development minimum required facilities within the Community for stocking energy products (as regards to gas the storage in a liquefied form is easier, even if it requires some conversion costs). By this, the disturbing effects are much reduced, effects that might arise in the event of external supply disruption, due to the fact that these stocks would provide sufficient resources to industrial consumers for uninterrupted production process and also would avoid the discomfort for the household.

## **5. Conclusions**

Energy wealth is one of the main sources in creating geopolitical advantages for countries that hold important energetic resources (for example those in the Middle East, the Caspian region or Russia). This gives them the opportunity to exercise coercive pressure on country partners who import these resources. Precisely for this reason there is a need to implement a common strategy at EU level to develop the idea of a unified community, which can be seen as a single strong negotiating partner with the energy exporters. Undoubtedly energy policy is one of the key elements in the evolution of the integration process in the European Union. The high degree of dependence across mostly of the member states in the natural gas field leads to a greater concern on security of supply. In this context the EU proposes three broad categories of options: firstly it is taken into account the reconsideration of the relations with Russia by finding new transit routes that should avoid transit countries, secondly the Europeans are considering de diversification of supply through establishing new commercial agreement with other suppliers than Russia; and finally it is promoted a greater usage of the LNG, which should cover the supply from distant sources.



## 6. References

- Adelle, C., Pallemarts, M. & Chiavari, J. (2009). *Climate Change and Energy Security in Europe. Policy Integration and its Limits*, Swedish Institute for European Policy Studies, Report No. 4, available at: <http://www.sieps.se/sites/default/files/549-20094.pdf>.
- Bilgin, M. (2011). *Scenarios on European energy security: Outcomes of natural gas strategy in 2020*, Futures, Volume 43, Issue 10, pp. 1082-1090, available at: <http://www.sciencedirect.com/science/article/pii/S001632871100173X>.
- Brazilian, M., Nussbaumer, P., Cabraal, A., Centurelli, R., Detchon, R., Gielen, D., Howells, M., McMahon, H., Modi, V., O'Gallachoir, B., Radka, M., Rijal, K. & Takada, M. (2010). *Measuring energy access: supporting a global target*. New York: Columbia University, available at: [www.iaasm.net](http://www.iaasm.net).
- Creti, A., Villeneuve, B. (2009). *Gas Storage and Security of Supply*, in Creti, A. (ed). *The Economics of Natural Gas Storage: A European Perspective*. Springer-Verlag Berlin Heidelberg.
- de Jong, J., van der Linde, C. (2008). EU Energy Policy in a Supply-constrained World. *Swedish Institute for European Policy Studies, European Policy Analysis*, Issue 11, available at: [http://ts.clingendael.nl/publications/2008/20081123\\_epa\\_nr11\\_2008.pdf](http://ts.clingendael.nl/publications/2008/20081123_epa_nr11_2008.pdf).
- EGGING, R., GABRIEL, S., A., HOLZC, F., ZHUANG, J. (2008). *A complementarity model for the European natural gas market*. *Energy Policy*, No. 36, pp. 2385-2414, available at: [http://www.gis-larsen.org/Pdf/Steven\\_Gabriel.pdf](http://www.gis-larsen.org/Pdf/Steven_Gabriel.pdf).
- Glachant, J., M., de Jong, J., Hafner, M. (2010). Towards a Smart EU Energy Policy: Rationale and 22 Recommendations. EUI (European University Institute). *Working Papers RCAS 2010/52*, available at [http://eui.eu/RSCAS/Publications/20100412\\_CIEP\\_Misc.pdf](http://eui.eu/RSCAS/Publications/20100412_CIEP_Misc.pdf).
- Kjarstad, J., Johnsson, F. (2007). Prospects of the European gas market. *Energy Policy*, Volume 35, pp. 869-888, available at: <http://www.sciencedirect.com/science/article/pii/S0301421506000358>.
- Sagen, E., L., Tsygankova, M. (2008). Russian natural gas exports – will Russian gas price reforms improve the European security of supply? *Energy Policy*, No. 36, pp. 867-880, available at: <http://www.sciencedirect.com/science/article/pii/S0301421507004818>.
- Stern, J., Honore, A. (2009). *The Future of Gas Supply in Europe*. In Bauch, A., Schwenker, B. (eds). *Handbook Utility Management*. Springer-Verlag Berlin Heidelberg, available at: <http://www.springerlink.com/content/nj31073586553115/fulltext.pdf>.
- Tolon-Becerra, A., Lastra-Bravo, X., Botta, G., F. (2010). Methodological proposal for territorial distribution of the percentage reduction in gross inland energy consumption according to the EU energy policy strategic goal. *Energy Policy*, No. 38, pp. 7093-7105, available at: <http://ideas.repec.org/a/eee/enepol/v38y2010i1p7093-7105.html>.
- \*\*\*BP (2011). *Statistical Review of World Energy*, available at: <http://www.bp.com>.

## Valuation Bases and Accounting System Entries in Financial Analysis of the Municipal Real Property

Daniela Feschiyan<sup>1</sup>, Stela Raleva<sup>2</sup>

**Abstract:** The paper introduces a conceptual framework for an accounting of the municipal real property, and defines a respective system of indicators. The development of this framework is seen as an important prerequisite for the efficient property management. It aims to overcome the lack or poor accessibility of the information, and thus to ensure the successful municipal real property management in a strategic context. The developing of the applied approach implies that accounting indicators are divided into three main groups – values, revenues, and costs. Beside the above mentioned classification, the municipal revenues and costs are classified also as existing and proposed. The existing indicators are defined by International Accounting Standards in public sector, and some of them are considered as being appropriate for the inclusion in the financial analysis as accounting system entries. The proposed indicators are perceived as appropriate to carry out a detailed analysis of the municipal property at a lower level of desegregations. The first two paragraphs explain the main bases for the municipal property valuation - historical cost, current price, market value, present value, with a special emphasis on the use of the historical value, and the types of valuation respectively. The next three paragraphs are concentrated mainly on the accounting indicators for the municipal property assessment. The sixth paragraph represents several major accounting bases - an accounting value, a carrying value, a market value, an accumulated depreciation, revenues from the sale of assets and services, costs by economic elements, revenues from future periods and costs for future periods, and revenues from other events and costs for other events. The seventh section presents a brief comparative analysis of accounting systems of 6 municipalities in South-Eastern Europe and the last paragraph highlights the identified “good practices”.

**Keywords:** valuation bases; accounting indicators; financial analysis; municipal real property

**JEL Classification:** M41; G0; H82

---

<sup>1</sup> Associate Professor, PhD, University of National and World Economy, Bulgaria, Address: University of National and World Economy, Department of Accounting and Analysis, Sofia 1700, Bulgaria, Studentski grad, Corresponding author: d.feschiyan@gmail.com.

<sup>2</sup> University of National and World Economy, Bulgaria, Address: University of National and World Economy, Department of Accounting and Analysis, Sofia 1700, Bulgaria, Studentski grad, e-mail: stela.raleva@gmail.com.

## Introduction

Usually the municipalities do not pay sufficient attention to the usage and management of their real property. This fact can be explained by the lack of financing and political commitments as well as through putting more emphasis on administrative and social functions of the real estates, rather than on the economic criteria. At the same time the underestimation of the above issue has an adverse effect on municipal budgets, which in turn is associated with reduced quality of rendered public services. Hence, the solution of pointed out problems requires the development of the integrated Municipal real property (MRP) management system that incorporates MRP inventory, Geographical information system (GIS) and municipal accounting system. The aim of the accounting system is to provide reliable financial information concerning the performance of the municipal property. The availability of such information will contribute to the successful management of the municipal property in a strategic context, where setting the objectives and operational management of the real estate are closely related to its monitoring system, including the accounting system.

The paper introduces a conceptual framework for an accounting of the MRP. This conceptual framework is developed in accordance with the principles of International accounting standards (IAS) in the public sector and in the same time it takes into account the peculiarities of the municipal real estates. The paper presents also a brief comparative analysis of the existing accounting systems in 6 municipalities in South-Eastern Europe.<sup>1</sup>

## 1. Valuation Bases

The *valuation tool* comprises three major components:

- a) The object or event to be subject to valuation;
- b) The formation of a qualitative and/or a quantitative evaluation of the object;
- c) The scale or the gauge through which this valuation is arrived at.

The object or the event in this case is the components comprising the property of enterprise and the operations and processes taking part in it. These are the accounting objects that are to be valued.

---

<sup>1</sup> This analysis is based on the information collected under the project “PROMISE: Municipal PROperty Management in South-Eastern Cities” funded by South East Europe Program of EC. See <http://www.promise-project.net/>.

The formation of a qualitative or quantitative evaluation of the object is the process of determining its value. The scale or the gauges through which the valuation is determined in monetary terms represent the price measure. The evaluation is a gauge for measuring and presenting the objects of the price gauge. Through it the assets of the enterprise acquire monetary valuation.

According to the applicable accounting standards, valuation is a process of determining the monetary amounts by which the items of the financial statements in the balance sheet and the income statement are recognized and reported. This presupposes a choice of a specific basis of evaluation. The evaluation basis is the specific type of evaluation that is applied in the recognition of assets, equity capital, liabilities, revenues and expenditures. The *valuation bases* are as follows:

- Historical cost;
- Current price;
- Market value;
- Present value.

When *historical cost* is used as an evaluation basis, assets are recognized by the value of the money or the money equivalents paid for them, or by the real evaluation adopted upon their acquisition, while liabilities are recognized by the overall revenues collected in exchange for the liability, and, in some cases, by the sum which is expected to be paid in cash or cash equivalents in order to settle the debt in the normal course of business activity. According to the manner of acquisition or arising, the object that is to be reported at historical cost may be:

- Acquisition cost – it is applied to the evaluation of the assets acquired upon purchase. The acquisition cost includes the purchase price of the asset and all expenses on bringing it in an appropriate form to use, along with all refundable taxes, duties, and excise duties. For instance, if we acquire a machine, its purchase price will include the purchase /invoiced/ price, transportation costs, loading and discharge costs, and assembly costs. If the enterprise is registered under the Value Added Tax (VAT) Law, VAT is a refundable tax and is not included in the acquisition cost, but if it is not registered under the VAT Law, VAT is not a refundable tax and is included in the acquisition cost. The acquisition cost does not include costs on the training of the personnel that have used this asset. The acquisition cost of liabilities is the value of the acquired assets or the costs which have given rise to the liability.
- Prime cost – it is applied to the evaluation of assets which have been acquired as a result of the production activity of the enterprise. Prime cost is the set of the evaluations of the basic/direct/ production costs. These are the costs for consumables, external services, depreciation charges, salaries and social security contributions payable to the personnel engaged in the production of the product. This is the so-called shortened prime cost. The shortened prime cost does not

include the administrative and the management's costs, sales costs, financial or extraordinary costs. When liabilities are assessed by prime cost, the valuation is the value of the liability which arises for the enterprise and which corresponds to the arisen costs, such as the liabilities to the personnel on the occasion of the salaries or social security contributions, taxes, and so on.

- Fair value – it is by this value that donations or the surpluses established upon stock-taking are recognized, as well as the in-kind contributions of the founders /owners/. Fair value is the price at which an asset may be replaced or a debt settled in a direct transaction between knowledgeable buyer and seller, who are willing to effect the transaction. According to the applicable accounting standards, this may be the sale price, the commodity exchange price or the market price.

For instance, to date in Republic Bulgaria the assets are normally recognized when historical price is used as a valuation base. In some cases, however, other valuation bases apply.

In case *the current value* is used as a valuation base, assets are valued according to the sum total of money and money equivalents which would be paid if the same asset, or some other equivalent asset, is acquired at that moment. Liabilities are valued by the undiscounted cash or money equivalents, which would be needed to settle the debt. When *market value* is applied, the assets are evaluated by the sum total of money or money equivalents, which could be possibly received upon the normal sale of the asset, whereas liabilities are assessed according to the price of their settlement, that is, the undiscounted sums in cash or money equivalents which are expected to be paid to settle debts in the normal course of business activity. When *the present value* is applied, the assets are valued according to the present discounted value of future net cash inflows which are expected to be created in the specific line item in the normal course of business activity, whereas liabilities are reported by the present discounted value of future net cash flows which are expected to be needed to settle the debt in the normal course of business activity.

## 2. Types of Valuation

According to the moment of their application, valuations are current and periodic. *Current valuation* is applied in the acquisition of assets or the arising of liabilities. The base of current valuation which has been adopted in the national and international accounting standards is historical price.

*Periodic valuations* are applied at the end of certain periods of time. These are subsequent valuations of accounting objects. They are used to establish the real value of the property of the enterprise. Subsequent valuations are carried out in compliance with the applicable accounting standards. They are realized by

marketable value. As we have already pointed out, in relation to assets, this is the money or money equivalents which could be received upon the asset's sale. In relation to liabilities, this is the sum total of money or money equivalents, which would presumably be paid to settle the liabilities in the normal course of business activity.

Usually fixed assets are assessed upon their original acquisition by the purchase price from which the depreciation charges and the accumulated loss from devaluation are subtracted. This is the so called *Acquisition Price Model* (APM). Such assets may be represented also by *the revaluation model*. The latest amendments in the IAS consider these two models as equal APM. However, the revaluation model is applicable if the asset's fair value could be reliably determined. If this condition is met, the enterprise may report the assets by revaluation value, which is the fair value at the date of revaluation, reduced by the subsequently charged depreciation charges and devaluation loss.

In connection with the periodical evaluation of assets /non-current and current/ it is necessary to define the following concepts (classes) of value:

### 3. Municipal Property Values

- Depreciation – the process of systemic distribution of the depreciable value of the asset within its assumed useful life;
- Depreciable value – the value of the assets subject to depreciation within its assumed useful life. It is defined as the difference between the accounting value of the asset and its residual value;
- Depreciation quota – the part of its depreciable value which is distributed among the separate accounting periods;
- Accounting value – the value by which the enterprise reports the asset in its accounting statements. This may be the historical price of acquisition at which the asset has been entered (or its revaluated price /if it has been valued after its original accounting recognition);
- Carrying value - the value by which an asset is represented in the balance sheet. This may be the acquisition price, production cost or the fair value at the asset's recognition minus the depreciation charges and the devaluation loss;
- Recoverable value – the higher value between the net sale value of an asset and its value in use;
- Net transactional value – it's an assumed sale price in the normal course of business, reduced by the needed costs for the completion of the production cycle and the costs necessary for carrying out the transaction. If the accounting

value of materials (current assets) as of the date of the financial statement is higher than the net transactional value, then it is reduced to the net transactional value. The difference is recognized as cost from a subsequent valuation of assets;

- Loss from devaluation of an asset – the amount by which the asset’s carrying value exceeds its recoverable value;
- Residual value – the net amount that the enterprise expects to obtain for the asset upon the expiry of its useful life, after the expected costs related to its decommissioning are deducted.

#### **4. Municipal Property Revenues**

##### *a) Existing indicators*

The most important classification of revenues to meet the needs of financial and accounting analysis in the public sector falls into the following groups:

- Revenues from taxes and fees - this group of revenues has been included in the analysis since most of the properties in the public sector are financed through tax revenues;
- Revenues from the sale of assets and services, from participation and donations from abroad - this group of revenues includes revenues both from the sale of municipal property and from its acquisition by donation;
- Financial revenues - the group includes such revenues are the revenues which take the form of funding in foreign exchange for the acquisition of municipal property, from the revaluation of the currencies, and from the differences in the foreign exchange rates;
- Revenues from privatization and other financial operations, aid, transfers and transferred assets - for instance some of the revenues from the group are related to the transfer of property between the state and the municipalities;
- Revenues from transfers, donations and free funds - this group of revenues includes for example the donations of real estate to the municipality, made by the state and by internal and foreign persons;
- Revenues for future periods - this group of revenues contains prepaid rents for a usage of the municipal property and other types of prepayments received from the municipalities. They are formed with regard to the observance of the principle of comparability of revenues and expenditures. These are revenues obtained as cash flow during the current accounting period, but the expenditures for whose obtaining will arise over the next accounting periods;

- Revenues from other events (contingent revenues) – it includes revenues from shortfalls, liquidations and scrapping of the municipal property.

b) *Proposed indicators*

- Revenues connected with the object of analysis such as: rent by both preferential and market-oriented prices; rent received if the property could be utilized on the free real estate market (opportunity cost); rent saved (not paid) by the municipality due to the ownership (opportunity cost); leased payment; revenues from rent, paid by the tenants of land; revenues generated through the sales of goods and services; actual and potential revenues from the creation of the right of construction; revenues from granting concessions and from from the usage of technical infrastructure; income from dividends; fines and property penalties interest payable on outstanding debt; damages, etc.

## 5. Municipal Property Costs

a) *Existing indicators*

The most important classification of costs to meet the needs of financial and accounting analysis in the public sector falls into the following eight groups:

- Costs by economic elements - for instance, the costs for maintenance and repair of MRP;
- Accounting value of sold inventories, fixed assets, and property confiscated or acquired through mortgage - in case of sale of the municipal property, its carrying value is recognized as an expense included in this group;
- Financial costs - for instance, interests on leases, costs for other interests, costs for insurance, etc;
- Expenditures for pensions, social benefits, and compensations and subsidies - for example, this group contains costs as insurance expenses for workers, who repair the municipal administrative building;
- Capital expenditures – the group includes costs on the acquisition of assets, current repair and overhaul of the municipal property;
- Expenditures for provisions - such expenses are the costs for provisioning of receivables from MRP;
- Expenditures for future periods - the costs included are formed in connection with the observance of the principle of comparability of revenues and expenditures. These are expenditures covered during the current period whose effect will arise over the following accounting periods;



- Expenditures for other events (contingent expenditures) - they include written off costs for receivables, associated with the use of municipal property, the cost for shortages, as well as the costs for removal of the effects on MRP from fires, floods, etc.;

b) *Proposed indicators*

- Costs related to the object of analysis such as: costs for potential acquisition of MRP; transaction costs for the acquisition; costs for space configuration and for construction; costs for overhaul and reconstruction; costs for internal restructuring of premises and the change of their purpose; costs for repair of damage; costs for removal of fault/defect; rent paid; leased payment; payments on mortgage; expenses for insurance; expenses for security system and for guarding; expenses for information systems; expenses for salaries of MRP management; expenses for cleaning, sanitary and hygiene materials; expenses for electricity consumption; expenses for central heating; expenses for water supply; expenses for telephones and telecommunications; costs for internet; expenses for lifts, etc.

## 6. List of Accounting System Entries in the Financial Analysis

Among the above mentioned accounting bases for the analysis of the municipal property, the following indicators could be outlined as the most important ones:

- Accounting value;
- Accumulated depreciation;
- Carrying value;
- Market value;
- Revenues from the sale of assets and services, from participation and donations from abroad:
  - Revenues from rent (including revenues from the mantling of advertising facilities and information boards);
  - Revenues from sales;
  - Revenues from the creation of servitudes;
  - Revenues from dividends;
  - Revenues from concession fees;
  - Other revenues;
    - Revenues for future periods;

- Revenues from other events (contingent revenues);
- Costs by economic elements (expenses);
- Costs on consumables;
- Costs on external services - expenses for security and information systems, for salaries of the MP management, for electricity consumption, for central heating, for water supply, etc.;
- Depreciation charges;
- Costs on salaries and related pay – expenses for salaries of the MRP management, for repairs, made by own workers, etc;
- Costs on social security contributions and other social benefits – expenses for social security contributions of the respective groups;
- Other costs - for instance, for business trips of MRP management;
  - Expenditures for future periods;
  - Expenditures for other events (contingent expenditures).

The selection of these entries is consistent with:

a) the requirements of international accounting standards in the public sector, which are applied or will be applied in most of the countries in South and East Europe;

b) the characteristics of existing accounting systems in the municipalities, analyzed both through information gathered from consultations with the representatives of the accountant departments of some cities from different countries in the region.

The proposed entries allow the construction of derived indicators in the financial analysis, that will be used to assess the effectiveness of the use of municipal property and thus to contribute to making successful management decisions in its management and disposal.

## **7. Comparative Analysis of the Accounting Systems of Some Municipalities in South-Eastern Europe**

The analysis is based on the peculiarities of the existing accounting systems in six municipalities – Municipality of Athens, Municipality of Bucharest, Municipality of Sofia, Municipality of Zagreb, Municipality of Tirana and Municipality of Cajetina.

The data gathered show that all municipalities use “*double-entry*” accounting system as an obligation evolving from their national legislations. According to their

national law in most of the countries this kind of accounting system is applied to all of the corporate firms and public institutions, as well as to non-corporate firms with an annual turnover above a certain minimum size.

The accounting systems provide information for the assets and liabilities of the municipalities, as well as for their revenues and expenditures, related to the owned real estate. In addition to the presented characteristics of the accounting system, municipalities demonstrate a close similarity between the contents of their financial statements. They usually contain four documents: the balance sheet, the income statement, the cash flow statement, and the equity statement. Along with the common components, the financial statement of the Municipality of Tirana comprises also annexes, which contain a presentation of the accounting methods used and other explanatory text. Just like the Municipality of Tirana, Municipality of Bucharest also includes annexes as additional components in their financial statements. The purpose of these annexes is to make the description of accounting policies and to give some explanatory notes.

All of the studied municipalities register the real properties by applying the *code system*. The code systems in these cities have been organized by using different ways of the construction of the codes and different levels of the municipal property disaggregation. The code system in different municipalities has been organized in accordance with the diverse modes of the code's composition. The account numbers used in Municipality of Athens, Municipality of Tirana and Municipality of Bucharest have been composed of a few numbers of digits for the base categories and some extensions for given subcategories. The rest three municipalities demonstrate some resemblances in the composition of their code systems. Municipality of Sofia, City of Zagreb, and Municipality of Cajetina compose only one-figure codes for the respective assets and do not use any extensions in the structure of their account numbers. In this case it cannot be interpreted as an indicator showing that there is no desegregation at all.

Municipality of Athens uses 7-digits code - the first four digits describe the main groups of revenues and expenses, whereas the rest three digits represent an extension. The extensions of the revenues refer to the locations of the real estates, while the extensions of the expenses concern the locations of the property or the subdivision of the base expenses. The reported data refer to aggregations, but not to the individual objects. Municipality of Tirana also utilizes up to 7-digit code for its expenditures. The difference with the municipality of Athens is that the first three digits refer to the major groups of expenditures, while the extension of up to four characters displays the relevant subgroups. As regards the assets, the code consists of up to 6 characters – three for the main types of real estates, and from one to three digits for the respective subcategories. The practice in Greece shows that there is a possibility of adding second or even third extension in the code, related to the lower level of disaggregation. This example gives also an idea for inserting

costs for particular real estate as the last extension of the account number. Among the studied municipalities, the similar situation is observed in Bucharest, where the code of the assets comprises two extensions - each with two digits. It reflects the classification and the normal functioning life of the fixed assets, as the second extension shows the division of the municipal property into two main groups – public-law and private-law real estates. What concerns the code of the revenues, an information given does not show an existence of any extensions.

The account numbers in Cajetina consist of 6 digits. The first three digits correspond to the class, category and group of the property, and the rest digits are for the respective subgroups. Zagreb's codes are composed of 5 digits. The first digit relates to the main types of the municipal property, while the next parts of the code refer to subcategories of the four different levels of disaggregation. Despite of the fact that City of Zagreb does not apply any extensions in its account numbers, its code system may be assessed as being the most complex one among six municipalities in terms of the levels of property subdivision. The real estate in Municipality of Sofia is recorded in the accounting system using 4-digit code. Its first two characters represent the group of the long-term assets as a whole, the third digit describes the major subgroups, and the fourth component is related to the classes of municipal property included.

Most of the municipalities, and especially Sofia Municipality, City of Zagreb, and Municipality of Bucharest pay a special attention to *the potential of MRP to get revenues*, if this property could be utilized on the free real estate market. Municipality of Bucharest and Sofia municipality underline the importance in this respect of the comparison between revenues, generated by property and the revenues, generated by similar properties on the free market. Both Sofia municipality and Municipality of Bucharest use another classification of the property - according to their different functions, which is considered as being important for MRP management.

The code systems, applied in the municipalities under consideration are open ones and provide possibilities for creating new codes for specific purposes. City of Zagreb has a possibility to monitor and to manage the usage of *the individual properties*, because each property has prescribed code which is added to the code of the synthetic accounts. Such a correspondence between aggregated information and individual data is typical also for Municipality of Cajetina. Both Municipality of Athens and Sofia municipality show the inability to monitor the incomes from and the costs for the individual objects or groups of municipal facilities on the level of municipalities as a whole. Like the above two municipalities, Municipality of Bucharest accounts only aggregated financial data and it doesn't do that for individual objects. A specific characteristic of Municipality of Athens is its disposal of information for revenues and expenses by the location of the objects.

Data for individual objects in Athens is possessed by the MRP department, whereas in Sofia it is held by the local districts.

From the management point of view municipalities may introduce additional *classification of the municipal property revenue* as it has been done by Sofia municipality. In accordance with the given above criterion its total revenues are parcelled out to: financial income (from the sale of financial assets); property income (from the sales of property and land); other income (revenue from the sale of goods and services and concession). The municipal property related revenues in Municipality of Bucharest are included in a group of incomes, called “non-fiscal incomes”. It is developed analytically, grounded on the budget classification structure, and comprises: incomes from property, and incomes from the sale of assets and services.

The largest part of the municipal revenues in Bucharest comes from rents, which forms over 60% of the total revenues. The second place is occupied by revenues from concessions of the land, whereas the rest real estate’s related revenues are of relatively low importance. Buildings are the most important type of real estate with a relative share of 62,2%, within which the dominant contribution is due to the non-amortizable buildings. In terms of municipality’s revenues from various kinds of MRP in Sofia, empirical data shows that the first place belongs to the right of built, followed by the rents, the sale of land, and the concessions. The leading position among the buildings holds the group of administration buildings, while the second place is occupied by the residential ones. Other important components of the balance sheet assets in terms of their values are long-life assets, withdrawn from use, and plots of lands and forests, while the relative shares of the engineering infrastructure objects and the linear objects are relatively low.

*Costs* of real estate in Sofia municipality are divided into the following major groups: costs of expropriation of property; operational costs for the managed buildings (overheads); maintenance costs (including running repairs); capital expenditures (including expenditures for major repairs of buildings and for a construction of new buildings); acquisition costs of land, buildings and construction right.

## **8. Identified “Good Practices”**

The comparative analysis of the accounting systems for municipal property in the surveyed cities allows highlighting the following good practices;

- Recording municipal property by using a code system, which is usually an open one and which presents different levels of disaggregation;

- A valuation of the municipal property by utilizing as many valuation bases as possible;
- An application in the accounting system of a detailed structure of the municipal properties' values, costs and revenues, and a creation of different groups and subgroups;
- Monitoring and managing the usage of individual objects, and making correspondence between aggregated information and individual data;
- Provision of the governing bodies of the municipalities with information for the individual objects, that is supposed to be of much importance for the management decision making;
- Paying a special attention to the potential of the property to get revenues if this property could be utilized on the free real estate market;
- Separation and classification of the costs into as many categories as possible.

## 9. Conclusions

Efficient use and management of municipal property is possible only if there is a reliable and comprehensive accounting system for its reporting. Although currently existing accounting systems are not designed specifically to provide information to property management, they contain some opportunities for the realization of this goal. One of these opportunities may be related to finding ways for further disaggregation of accounting data to the individual property's level. This will enable establishing a close connection with a property inventory base as a prerequisite for a setting the property management in a strategic context. The next option concerns the application of the widest possible accounting bases for the assessment of the real estates, as well as to the specification and classification of both municipal revenues and costs into as many categories as possible.

## 10. References

- AICPA Special Committee on Financial Reporting (1994). *Improving Business Reporting*. American Institute of Certified Public Accountants.
- American Institute for Certified Public Accountants (1994). *Special Committee on Financial Reporting*. Improving Business Reporting.
- Bond, S. & Dent, P. (1998). Efficient management of Public Sector Assets: The Call for Correct Evaluation Criteria and Techniques. *Journal of Property Valuation & Investment*, 16(4), pp. 369-385.
- Caperchione, E. & Mussary, R. (2000). *Comparative Issues in Local Government Accounting*. Springer.

- Carpenter, A.; Corrigan, M., R.; Levitt, P. Stephen (2005). *Ten Principles for Creating Value from Local Government Property*. Washington: Urban Land Institute.
- Feschian, D. (2008). *Budgetary Accounting*. Stopanstvo, Sofia: University Publishing Company.
- Jones, R. & Pendlebury, M. (2000). *Public Sector Accounting*. 5th ed. Pearson Education Limited.
- Penman, S. (1992). Return to Fundamentals. *Journal of Accounting, Auditing and Finance*, Vol. 7.
- Watts, R. (1994). *Positive Research in Accounting*. New York: University of Rochester.
- Weatherhead, M. (1997). *Real Estate in Corporate Strategy*. London: Macmillian.
- European System of National Accounts (ESA 95).
- International Accounting Standards Committee (IASC) (2000). *International Accounting Standards*.
- International Accounting Standards Board (IASB) (2001). *International Financial Reporting Standards*.
- International Accounting Standards (IAS) in Public Sector (2010). *Institute for International Public Sector Accounting Standards (IPSAS)*. Online Available at: [http://www.ipsas.org/en/ipsas\\_standarts.htm](http://www.ipsas.org/en/ipsas_standarts.htm), Assessed at June, 2.
- System of National Accounts (1993). *United Nations (SNA 93)*.

## **A System of Indicators for Financial Analysis of the Municipal Real Property**

**Daniela Feschiyan<sup>1</sup>**

**Abstract:** The paper presents a system of financial indicators for the efficiency of use of municipal real property. Such a system must provide for meeting the information needs of a number of internal and external consumers and is of primary significance in the analysis of municipalities' overall financial condition. The following may be pointed out as the major aspects of the practical analysis: i) the analysis of the municipality's provision with immovable property; ii) the analysis of the efficient use of certain categories of municipal real property. The paper aims at clarifying the major moments in the analysis of the structure, composition, and effective use of municipal real property, and the determination of definite indicators to be applied to this analysis oriented towards its implementation. The wide variety of parameters is reduced to a system of 16 indicators: reporting value, depreciation, ratio of replacement, ratio of cost efficiency, ratio of revenue efficiency, return on total assets, return on revenues, return on expenses, ratio of the fitness, ratio of the repair, ratio of real energy provision, ratio of workload, present value of a series of regular cash flows, equivalent yield model, return on investment, return on investment. The paper presents the structure and content of the indicators of the analysis of the municipal real property, as well as the input of these indicators. The estimation (values) necessary to determine the indicators, the indicators themselves and their meaning make it possible to study the effectiveness of the operations (functioning) of the municipal real property in terms of description of its physical condition, structure, content, purpose and functions, which generates revenues or brings expenditures to the municipality. The system of indicators provides for decision making with a view to boosting the efficiency of public sector management and more specifically – the management of municipal real property.

**Keywords:** financial analysis; financial indicators; municipal real property

**JEL Classification:** G0; M41; H82

The financial analysis of the municipal real property is important element of the management in the public sector. It operates through a system of indicators, which are interrelated and therefore should be applied as a system.

The following main indicators have been selected: The reporting value of the fixed tangible assets /FTA/ at the end of the year (RVE); Depreciation of the FTA at the

---

<sup>1</sup> Associate Professor, PhD, University of National and World Economy, Bulgaria, Address: University of National and World Economy, Department of Accounting and Analysis, Sofia 1700, Bulgaria, Studentski grad, Corresponding author: d.feschiyan@gmail.com.



end of the year (De); Depreciation of the FTA at the end of the year (De); Ratio of replacement of FTA (Rr); Ratio of cost efficiency (Rce); Ratio of revenue efficiency (Rre); Return on total assets (ROTA); Return on revenues (ROR); Return on expenses (ROEX); Ratio of the fitness of FTA (Rf); Ratio of the repair of FTA (Rr); Ratio of real energy provision (Rrep); Ratio of workload (Rw); Present value of a series of regular cash flows (PV); Equivalent yield model (V); Return on investment (RI1); Return on investment (RI2).

They are considered as being the most representative among the great variety of indicators, and as giving much information for the economic performance of the property.

**Reporting value of fixed tangible assets (FTA) at the end of the year**

$$R\text{Ve} = R\text{Vb} + R\text{Vay} - R\text{Vdy},$$

where: RVe is the reporting value of the FTA at the end of the year, RVb is the reporting value of the FTA at the beginning of the year, RVay is the reporting value of the FTA acquired during the year, RVdy is the reporting value of the FTA disposed of during the year.

The analysis of the municipality's provision with fixed tangible assets belonging to public-law MRP is made with the purpose to establish, to assess and to analyze their price values, their composition and structure, as well as to trace the trends in their dynamics, physical and technical state, movement, etc.

As an information source this analysis draws upon the balance sheet and the note about the fixed tangible assets, which is an annex to the municipality's annual financial statement, as is the case with all enterprises in the EU member states. This note provides good information opportunities to establish the carrying value of the municipality's fixed tangible assets (property) at the end of the reporting period, and to trace its dynamics during this period, and to establish the increase or decrease of assets (their dynamics) and to trace their movement. This indicator may be used in the municipal real property management by tracking its dynamics in time to arrive at the sustainable trends – the growth of the indicators shows the increase in the municipal real property, which is an indicator of the municipality's wealth and of its high balance figure and financial stability. However, it must be taken into account that it is not always the case that the increased value of this indicator is related to the increased quantity of municipal real property. Such an increase may be due to a revaluation of the immovable property toward an overvaluation. Hence the analysis and assessment on the basis of reporting value of fixed tangible assets at the end of the year must always be accompanied by the tracing of the municipal real property. An increase in the assets acquired during the period will be established by RVay – reporting value of the FTA acquired during the year. If such an increase is established, it shows that the increased indicator is the result not of revaluation but of the renovation of the asset portfolio (real estate).

The increased indicator may be due to the reduced value of RVdy – reporting value of the FTA disposed of during the year. In general – this indicator rises with the renovation of the asset portfolio, and with the reduction of the disposed of assets or with an over-valuation of the available assets.

“The reporting value of FTA at the end of the year” indicator is specifically relevant because it gives an idea about the absolute value of the assets comprising the municipal real property’s portfolio within a certain period. To serve management purposes, it is possible to estimate this indicator by homogeneous types and groups of municipal real property. What attaches even greater significance to this indicator is its use in the estimation of a number of indicators which characterize some aspect of the municipality’s provision with immoveable assets and their effective utilization. For instance, “The reporting value of FTA at the end of the year’ indicator” is applied to the assessment of economic profitability from the asset utilization.

“The reporting value of fixed tangible assets at the end of the year” indicator may be estimated according to the periods adopted in the municipality’s accounting policy on the assessment and analysis of the asset portfolio in the form of municipal real property.

#### **Depreciation of the fixed tangible assets (FTA) at the end of the year**

$$De = Db + DCy - DCdy,$$

where: De is the depreciation of the FTA at the end of the year, Db is the depreciation of the FTA at the beginning of the year, DCy is the depreciation charges on FTA throughout the year; DCdy is the depreciation charges on the FTA disposed of during the year.

This indicator is used in the assessment and analysis of the asset values, which is also part of the municipality’s provision with fixed tangible assets within the category of public-law MRP. The objective is to assess the depreciation of municipal real property by the end of the reporting period – month, quarter, half a year, year, etc. This facilitates the formation of the property’s carrying value. The carrying value of the immoveable municipal real property portfolio is determined as the difference between the reporting value of FTA and the depreciation of FTA.

The increasing values of this indicator reveal an increase in the depreciation charges with accumulation (from the start of the depreciation period up to the analyzed period). The increased depreciation leads to the reduction of the carrying value of the municipal real property, which in turn suggests an out-dated municipal property portfolio. When the sustainable trends in this respect are traced in time decisions can be made with regard to the renovation of municipal real property, the writing off of some groups of assets, their liquidation, etc. It must be taken into account that the increase in the “Depreciation of the FTA” indicator may be due to

the changed depreciation method. As a result this will have a dynamic effect on Db – depreciation of the FTA at the beginning of the year, when this change is not due to the acquisition of many depreciable assets in the period, but to the change in the depreciation method (for instance, if a linear method has been applied, which has later been replaced by a digressive method with a higher depreciation rate for the period).

Such changes are admissible, if they result in the more frequent and complete presentation of the municipal real property in the municipality's financial statements. Such changes, as well as their effects must be disclosed in the annexes attached to the municipality's financial statements. The effects of such changes are namely with regard to the "Depreciation of the FTA" indicator and hence to the carrying value of the immoveable municipal property portfolio formed as the difference between "The reporting value of FTA" and "Depreciation of the FTA". Hence in the assessment and analysis of this indicator it is essential to reveal the reasons which have determined its change, and, in case the reason is the wear-and-tear of the asset portfolio, ways and means for its renewal must be sought or a revaluation of the available municipal real property must be undertaken.

#### **Ratio of replacement of fixed tangible assets**

This indicator shows to what an extent the municipality renovates and has the opportunity to acquire new property. Its tracking in time reveals the municipality's ability to renovate its portfolio of assets. This is an indicator of financial stability and management expertise.

$$Rr = FTAa / FTAb,$$

where: Rr is the ratio of renovation, FTAa is the price value of FTA acquired throughout the year, FTAb is the price value of FTA at the beginning of the year;

This ratio may be calculated by groups of FTA and by specific types of FTA of municipal real property. The increase in the "Ratio of replacement of FTA" is a good sign of the renewal of municipal real property. The higher the values of this indicator are, the better the renewal of the municipal real asset portfolio is. The tracing of the dynamics of the "Ratio of replacement of FTA" in time will reveal the trends in the renewal of the municipal real property by groups and by specific types. Low values of the "Ratio of replacement of FTA", their declining trend in time or by groups or by specific assets is a sign of the need to assess and analyze the "Depreciation of the FTA", as well as the carrying value of the municipal real assets portfolio formed as the difference between "The reporting value of Fixed Tangible Assets" and "Depreciation of the FTA". The tracing of their dynamics in time could reveal the need for a revaluation of immoveable municipal real property because of the low "Ratio of replacement of FTA".

**Cost efficiency ratio**

$$Rce. = OSc / Osr,$$

where: Rce is the ratio of cost efficiency; OSc is the overall value (sum) of costs by specific properties or elements, OSr is the overall value (sum) of revenues by specific properties or elements.

This indicator is determined in two stages: classification of maintenance costs per private-law MRP; analysis of expenditures (overall evaluation of expenditures in the municipality's income statement). The purpose of classification of maintenance costs per private-law MRP this classification is to establish the major categories of the economic gains that have been reduced during the accounting period generated by the maintenance and management of this municipal real property. The analysis of the expenditures related to this property's maintenance and functioning requires that the composition and structure of these expenditures are tracked. The analysis must include the analysis of the dynamics and structure of costs by economic elements. The changes in the costs during the current period compared to those during the base (previous) period provide information of the dynamics of costs. On the basis of such information the analyst can reveal the reasons behind the existing negative trends in the dynamics of costs. The changes in the share of costs in the current period compared to those during the base /previous/ period provides information of effective management effects with a view to optimizing the structure of costs on the maintenance of private-law MRP.

Subsequently, the "Cost efficiency ratio" by specific properties (fixed assets) may be estimated, or by elements of expenditures. The high values of this indicator reveal an excess of revenues over expenditures and indicate losses incurred by the utilization of the municipal real property. In such a case action may be taken with a view to revealing the expenditures which largely determine the high values of this indicator and therefore bring most losses. Their dynamics in time may be traced, in order to reveal the reasons underlying these trends and undertake action to reduce the expenditures in question, which will in turn reduce the losses incurred by the utilization of the municipal real property. The high values of this indicator may possibly be due not to increased expenditures, but to decreased revenues. In such a case action is taken to estimate and analyze the next indicator.

**Ratio of revenue efficiency**

$$Rre = OSr / OSc,$$

where: Rre is the ratio of revenue efficiency, OSr is the overall value (sum) of revenues by specific properties or elements, OSc is the overall value (sum) of costs by specific properties or elements;

This indicator is determined in two stages: classification of revenues generated from rent, sales and transactions with private-law MRP; analysis of revenues (overall assessment of the revenues from the municipality's income statement). The purpose of the classification revenues from rent, sales and transactions with the property of the category of private ownership is to study, establish or assess the major sources of the increase of economic gains from the transactions with private-law MRP. The analysis of the revenues from the transactions with this property helps trace the changes in the composition and structure of these revenues.

The changes in the value of revenues in the current period compared to the base (previous) period provide information about revenues' dynamics. On the basis of this information the analyst may reveal the factors determining the negative trends in the revenues' dynamics. The changes in the share of revenues in the current period to the base (previous) period provides information to make effective management decisions with a view to optimizing the structure of revenues generated by private-law MRP.

On this basis the "Ratio of revenue efficiency" may be determined. The high values of this indicator reveal a higher growth rate of revenues compared to the growth rate of expenditures. A detailed structural analysis of revenues could possibly facilitate the optimization of the structure of revenues, their relative share and their dynamics. This indicator aims at helping analysts find the ways and means to increase the growth rate of revenues as a factor of profit, compared to the other factor – expenditures.

#### **Model of analysis of profitability**

The profitability indicators reflect the yield (return on) revenues, expenditures, assets, capital, etc. Usually profitability is calculated by relating the financial result (profit or loss) to some base.

- Return on total assets (ROTA) - Indicators that reveal the economic profitability (Profitability based on assets):

ROTA = Reporting value of property / Financial result from property;

- Return on revenue (ROR) - Indicators that reveal the commercial profitability (profitability based on revenues):

ROR = Revenues from property / Financial result from property;

- Return on expenses (ROEX) - Indicators that reveal the cost-related profitability (cost-based profitability):

ROEX = Expenses related to property / Financial result from property.

In the estimation of indicators it must be taken into account that the financial result is the profit or loss – it is formed as the difference between revenues and expenditures. Hence if these indicators are negative values or show a negative growth in the course of time, this reveals losses or negative trends in the use of private-law MRP.

ROTA shows how many Euros of the asset's accounting value have contributed to making a euro of profit. Thus if there is an immoveable property with a reporting value worth 1000 Euros, which has brought a profit 10 Euros, the ROTA will be 100 Euros, that is every 100 Euros of the property's value has brought a profit worth 1 euro. This indicator decreases in value with every increase in profit. It reaches the value of 1 at the point where the asset's reporting value is equal to the profit it brings. As it was mentioned above, the negative values of this indicator are the result of incurred losses. In the financial statements the loss is presented as a negative result with a minus (indicated in brackets). This indicator reveals the return on property. The goal is to achieve a higher return through the more effective utilization of the property – the increase in revenues and the decrease in expenditures on the assets' maintenance.

ROR shows how many Euros in revenues have contributed to 1 euro in profit. This indicator increases in value in the cases when revenues rise given an unchanged level of profit. This is not a good sign, as it shows that increased revenues have been achieved by increased expenditures, without raising the profit level. The same effect may be achieved at an unchanged level of revenues, but a decreased profit. Such a case again shows increased expenditures, or increased ratios of tax deduction or incurring contingent losses and writing off of assets, which reduce the financial result despite the retained level of revenues. Because of the relation and dependence between revenues, expenditures and the financial result, this indicator must always be compared to indicator ROEX. The rising value of the last indicator in time reveal increasing expenditures given an unchanged profit compared to the base period. The purpose of this complex assessment and analysis of the two indicators is to reach a situation in which revenues grow at a higher rate than expenditures, while the latter are reduced to reasonable levels or maintained within certain limits, which would raise the financial results and the effective utilization of municipal real property. The negative values of the indicators expose a loss (a negative financial result) incurred during the analyzed period.

#### **Ratio of fitness of the assets**

This ratio complements the previous indicator, as the decrease of the assets' reporting value as a result of the accumulated wear and tear. In this sense their "fitness" shows whether they could be used:

$$Rf = CV / RV,$$

where: Rf is the ratio of fitness of FTA, CV is the carrying value of FTA, RV is the reporting value of FTA.

This indicator represents the relation between the carrying value of municipal real property (by groups or by specific types of assets and its reporting value). As it has already been mentioned, the carrying value is formed as the difference between the assets' reporting value and the depreciation charges accumulated as of the moment. In this sense the carrying value reflects the "underutilized", "non-depreciated" or "fit" part municipal real property. The lower this value is, the lower the indicator's values are. This exposes a reduction of MRP's fitness. The tracing of this indicator's dynamics in time, by groups and specific types of assets, and determining persistently declining trends reveals the need to renovate or repair the municipal real property.

**Ratio of the repair of fixed tangible assets**

This ratio provides the opportunity to track in time and within the asset groups their maintenance costs:

$$Rra = Cr / FTAav.,$$

where: Rra is the ratio of the repair of FTA, Cr is the value of repair costs of FTA, FTAav is the average residual value of FTA.

This indicator is used for the analysis of the costs for the repair of assets. In its estimation we should pay attention to the methods of determining FTAav. The determination of FTAav is an element of the analysis of the municipality's provision with assets (properties from the category of public-law MRP ). We must point out that the average value of FTA may be determined also as an ordinary average chronological value and as a weighted average chronological value. The determination of the average value as an ordinary average chronological value is estimated in the cases when the acquisition of FTA during the year is constant. Then this is how the average value of FTA is determined:

$$FTAave = \frac{(\frac{FTAb}{2} + FTA1 + FTA2 + ..... + \frac{FTAe}{2})}{D - 1}$$

where: FTAav is average remain of FTA during the year, FTAb is the price value of FTA at the beginning of the year, FTAe is the price value of FTA at the end of the year;

FTA1+ FTA2+... is the price value of FTA at the end of each month, and N is the number of periods.

In the cases where the FTA dynamics is characterized by irregularity during the accounting period, it is appropriate for the average value of FTA to be determined as a weighted average chronological value:

$$FTA_{av} = \frac{FTAb + FTA_{ay} \times Ta}{12} - \frac{FTA_{dy} \times Td}{12}$$

where:  $FTA_{av}$  is the average remain of FTA throughout the year,  $FTAb$  is the price value of FTA at the beginning of the year,  $FTA_{ay}$  is the price value of FTA acquired during the year,  $FTA_{dy}$  is the price value of FTA disposed of during the year,  $Ta$  is the time (in months), during which the acquired assets have been used throughout the year,  $Td$  is the time (in months) in which the disposed of assets have not been used.

The indicators of the average amount of FTA are of a central importance in determining the absolute price value of the FTA, the provision with FTA and the efficiency of their use.

Once the  $FTA_{av}$  is estimated, we may move on to estimating the ratio of the repair of FTA. The higher the repair costs, the higher the indicator's values (given the level of  $FTA_{av}$  is retained). When the dynamics of municipal real assets by groups and specific types is traced in time, the municipal leadership may assess whether the further utilization of these assets is effective and whether they do not bring too many repair costs so that it would be better to make a decision for their sale, replacement, writing off, etc, rather than continue to utilize them by purpose.

#### **Ratio of actual energy provision of operation of assets /property/**

$$Raer = E / Avwop \text{ or } E / Wmh,$$

where:  $Raer$  is the ratio of actual energy provision of operation of assets;  $E$  is the consumed electricity /in kilowatts/ as a condition for operation of the asset,  $Avwop$  is the average number by payroll of workers and officials serving the activity,  $Wmh$  is the working man-hours ratio of real energy provision of the activity.

This indicator provides for the assessment and analysis of the consumed electricity in relation to the average number by payroll of workers in relation to the worked man-hours. It helps asses, analyze and optimize one of the expenditure items which have the highest relative share in municipalities – electricity consumption. The high provision of power supply (this indicator's high values) suggests high electricity expenditures. It is necessary to find the optimal ratio between the number of employees and their working hours and the consumed electricity (in kilowatt hours). This indicator helps establish the negative trends and single out measures to raise working discipline with regard to electricity consumption, which would impact the rising effectiveness of the utilization of municipal real property.



**Ratio of workload**

$$Rw = Vs / Arv,$$

where  $V_s$  is the value of the rendered social services and their public effect, and  $Arv$  is the average residual value of municipal real property;

This indicator helps assess and analyze the dynamics of the ratio between the value of the rendered social services and their public effect and the average residual value of municipal real property. Its high values reveal good opportunities to utilize municipal real property for the rendering of social services. It must be borne in mind that the assessment of the value of the rendered social services and their public effect may be based on expenditures, which is an approximate estimation.

**Present value of a series of regular cash flows**

The economic analysis of municipal real property in terms of its utilization and management is connected with the comparison of indicators, which are related to different time periods. However, money changes its values in the course of time, which requires that these indicators should be estimated with regard to the same period, and this is usually the present period. Such is the case with determining the present value of the expected flow of future income (for instance, rent-generated income), which a property is expected to yield. This may be determined by applying the formula about the present value of the inflow of future revenues in the following form:

$$PV = \frac{FV}{(1+r)^n},$$

where  $PV$  is the present value,  $FV$  is the future value,  $r$  is the interest rate, and  $n$  is the length of the time period.

The above formula clearly shows that the net value of the inflow of future income falls when the period is extended in length or the interest rate goes up.

The very procedure of estimating the present value is referred to as discounting. It is applied to establishing the possible price at which the municipality will be inclined to dispose of a given property, for instance. It is also used in the estimation of the net present value, which represents the difference between the present value of the expected future revenues and the present value of the expenditures on the property throughout its entire life span and utilization.

The above-mentioned formula is applied in determining the present value of future income which will flow in at a specific future moment. In the majority of the cases,

however, municipal real properties yield regular cash flows and then the present value could be calculated in the following way<sup>1</sup>:

$$PV = \frac{a \left[ 1 - (1+r)^{-n} \right]}{r},$$

where: a is the annuity (for instance, rent); r is the interest rate; and n is the length of the time period.

What is the explanatory power of the above described indicator? For example, let assume that the municipality owns a building for economic usage, which could be sold on the free market. If the municipal authorities want to take decision for the municipal real property disposal, they have to compare the above indicator and the market price. Under the ceteris paribus assumption the building will be sold if the market price exceeds the present value of the regular rent payments.

#### Equivalent yield model

The equivalent yield model is also based on the usage of the present value approach. It is usually applied for a valuation of the municipal real property for economic (investment) usage. The equivalent yield model assumes that there is a change in the rental income over time. So, the time period would be divided into two main subperiods – the period up to the next review and the period at the review. The second fundamental assumption is that there is an equal yield applied to both municipal real property and a similar property that has been sold recently. This model can be presented by the next equation<sup>2</sup>:

$$V = \frac{a}{y} + \frac{R-a}{y(1+y)^n},$$

where: a - is the current annuity (rent) up to its next review; R - is the value of rental income occurs at the review; n - is number of years to the next review; y - is the equivalent yield, derived from a similar recently sold property.

The model comprises a fixed term, representing a ratio of current income to the equivalent yield, and a present value of a rental income after the change.

The estimation of this indicator requires the access to reliable and updated information about the level of yield derived from a similar recently sold property. Another specific feature is related to the access to relevant information about the length of the period before the rent is to be changed, and to the rate of this rent in the present and subsequent sub-period. Part of this information may be contained in

<sup>1</sup> See (Brown & Matysiak, 1999, pp. 13-28).

<sup>2</sup> See (Brown & Matysiak, 1999, pp. 13-28)

the rent agreement – for instance, the period and validity of this agreement and of the current rent, whereas another part of this information may be obtained through special expert

statements. In this respect it is logical to assume that this indicator should be estimated periodically by an expert in the valuation of property who, however, must be secured access to the entire information concerning the property in question.

### **Return on investment (1)**

Return on investment is one of the most commonly used indicators for the assessment of the profitability of real estate investments. It concerns both the investment in the acquisition of a new MRP and the investment in the improvement of existent MRP which impact its valuation. The broadest definition of the return on investments is that it measures the annual percentage yield (profit) on the initial amount of investments. Profit is defined as a difference between an income that would be received from renting out or leasing the property, and total expenses on real estate. The indicator itself is estimated according to the following formula:

$$RI(1) = \frac{\text{Profit}}{\text{Investment}} \cdot 100$$

The obtained value RI(1) is compared to some target, which should be set by decision makers with regard to municipal real property management on the basis of expert assessments of the expected investment-generated profit. This target should take account of the processes taking place in the real estate market as well as agents' expectations with regard the future investment-generated revenues and the possible macroeconomic environment. The investment is considered to be acceptable if the return on investment RI(1) is greater than set target.

### **Return on investment (2)**

The second version return on investment indicator is based on the level of rental income and takes the following form:

$$RI(2) = \frac{\text{Rental income}}{\text{Investment}} \cdot 100$$

As rent-generated revenues exceed profit, the indicator RI(2) is greater than RI(1).

The value of the second indicator for the return on investment should also be compared with its target value. In this case the target value is the rate of yield used for income capitalization, determined entirely on the basis of expert assessment. It is assumed that the investment will be acceptable if the return on investment RI(2) is higher than the yield used for income capitalization.

The indicators majority of their components do not contain, and could not be estimated on the basis of the information contained in the municipal real estate registry and in the municipal accounting systems. They are obtained only on the basis of special expert statement about the properties' economic assessment which is drafted by internal experts, and most often by external ones. Their statements, however, bring extra expenditures related to property management and are therefore made less frequently compared to remaining indicators. Their inclusion in the software product is founded on their relevance in the assessment of property management and on the assumption that, even though the fields are filled in relatively less often, the fields in question will add to the information base needed for strategic management decision making.

### Conclusions

The paper presented the structure and content of the indicators of economic and financial analysis of the municipal real property. The estimation (values) necessary to determine the indicators, the indicators themselves and their meaning make it possible to study the effectiveness of the operations (functioning) of the municipal real property in terms of description of its physical condition, structure, content, purpose and functions, which generates revenues or brings expenditures to the municipality. The system of indicators provides for decision making with a view to boosting the efficiency of public sector management and more specifically– the management of municipal real property.

### References

- Brown, G., Matysiak, G. (1999). Real Estate Investment: A Capital Market Approach. *Financial Times/Prentice Hall, Part 2*.
- Fama, E. & French, K. (2000). Forecasting Profitability and Earnings. *Journal of Business*, 73, 161-175.
- Fridson, M.S. (1993). *Financial Statement Analysis: A Practitioner's Guide*. New York: John Wiley.
- Nissim, D. & Penman, S. (2001). Ratio Analysis and Equity Valuation: from Research to Practice. *Review of Accounting Studies*, p. 6.
- Siegel, J. (1991). *How to Analyze Businesses, Financial Statements, and the Quality of Earnings*. 2nd Edition. New Jersey: Prentice Hall, p. 279.
- Statev, Staty; Feschiyan, Daniela; Daskalova, Tatyana & Raleva Stela (2011). Municipal Property Management in South – Eastern Cities. *Developing of financial tools to evaluate the economic performance of properties*, p. 67.
- Penman, S (2004). *Financial Statement Analysis and Security Valuation*. 2nd Edition. New York: Irwin/McGraw-Hill, p. 259.
- International Federation of Accountants (2011). *Handbook of International Public Sector Accounting Pronouncements*. UK.

## Regions and the Territorial Cohesion

Ioan Ianos<sup>1</sup>, Irina Saghin<sup>2</sup>, Gabriel Pascariu<sup>3</sup>

**Abstract:** Territorial cohesion is an important target of European Union, constantly promoted by its institutions and their representatives. In the context of the Europe 2020 strategy, one of the most important support documents, the region represents a very important issue, being considered to be the key to its successfulness. The region is seen as a support for the smart growth and all the operational policy concepts try to make use of the spatial potential, by taking better account of the territorial specificities. Two main questions play attention: the need to transform the present-day developmental regions into administrative ones is a priority? What kind of regionalization it must to be promoted? Correlating these issues with already defined territorial cohesion, the administrative region is a real tool for the future territorial development. The experience of the last 14 years asks urgently the building of a new territorial administrative reform, giving competences to regions. For instant, each development region is a construction resulted from a free association of the counties. Their role in the regional development is much reduced one, because their regional councils are not elected; decisions taken at this level are consultative for the social, economical, cultural or political actors.

**Keywords:** region; territorial cohesion; legitimacy; specificities

**JEL Classification:** R; R1

### 1. Introduction

The paper is based on two main concepts, a very old and controversial one (the region), and the second, relatively new, asserted as a key concept for the territorial development policies in Europe (the territorial cohesion). The relationship between these concepts can be a fertile topic of discussion or is it just a teaching matter or an excuse to repeat already known issues? We believe that both for Romania and for the European Union (EU) the theme is topical and the region is considered to be the most appropriate level to achieve a goal: reaching territorial cohesion by integrating socio-economic cohesion within a cultural diversity. In addition, this is

---

<sup>1</sup> Professor, PhD, University of Bucharest – Interdisciplinary Center for Advanced Researchers on Territorial Dynamics (CICADIT), Regina Elisabeta 4-12, Bucharest, District 1, Romania, Tel.: 021/3138410, Fax:021/3138410, Corresponding author: ianos50@yahoo.com.

<sup>2</sup> University of Bucharest – Interdisciplinary Center for Advanced Researchers on Territorial Dynamics (CICADIT), Regina Elisabeta 4-12, Bucharest, District 1, Romania, Tel.: 021/3138410, Fax:021/3138410, e-mail: irina\_saghin@yahoo.fr.

<sup>3</sup> University of Architecture and Urbanism “Ion Mincu”, Romania, 18-20 Academiei Str., Bucharest 010014, Romania, Tel.: 0040 21 307 71 12, Fax: 0040 21 307 71 09, e-mail: pascariugabriel@upcmail.ro.

an essential prerequisite for the sustainable and balanced development, on a continental scale, as Europe is an example for other parts of the world in achieving solidarity between nations with varied histories and cultures, but with the same political will.

Romania is lagging behind concerning the implementation of the territorial cohesion policies because of the present inefficient institutional framework in which the arbitrary of the regional configuration is based on associative principles and not on efficient territorial management principles. The lack of functional regions as an expression of decentralisation, with a determinant role in implementing projects between counties or regions, is reflected in the low degree of EU funds absorption, in keeping the regional competencies at central level or/and at the level of the counties, in the low efficiency of the state institutions responsible for territorial development.

## **2. General Scientific Context**

Territorial cohesion is an important target of the EU Strategy for the 2014-2020 interval. Even if this is not specified in the strategy, the simplest logic leads to find out that the unifying factor of the three big growth pillars for the next stage has a spatial projection. In such a frame, the importance of reconsidering the territory as one of the main sources for a sustainable and balanced development is clear, also by capitalising the strengths and potentials of each place. The rethinking of the territory as a product of networks of socio-technical practices, namely flow networks (Painter, 2010), is a requirement for future development. The relatively recent history of the concept of territory, underlines a rapid transition from the initial container approach (with emphasis on the three-dimensional perspective) to the systemic type, through an intermediate vision based on mechanistic logics (Ianos & Heller, 2006).

By conceiving the territorial development as a sequence of imbalances, Alfred Hirschman (1958) formulates the “theory of unbalanced growth”, according to which industrialisation, seen as a solution for diminishing territorial imbalances, has its clear limits. It is important to use mechanisms that generate and focus the human energies towards precise objectives. The creation of an activity baseline imbalance will cause significant connection effects upstream and downstream. Gunnar Myrdal (1963) proves that the development analysis can't be based only on economic variables, but also on non-economic ones and that the regional growth processes are the result of a circular and cumulative causality. Important Contributions are being brought by Allan Pred (1965, 1973), who explains the differentiated cities growth, defines among others the importance of the cluster economic activities, of the innovation and of the permanent information changes among cities having a certain hierarchical structure. During the last decade of the

XXth century, the economic geography has been reconsidered, mainly due to Paul Krugman's work (1995). His theory, essentially, considers less important the initial growth cause, emphasizing the "path dependency" as a dominant tendency in the contemporary territorial development.

Developing regions must take into account the proposals made at the EU level. It is important to predict how European territory will look like over the next fifteen years by providing qualitative-quantitative territorial scenarios for an enlarged Europe, under different assumptions about the future direction in which the driving forces affecting the development will turn over (Capello & Fratesi, 2009).

Territorial complexity faces interrelated methodological, conceptual and policy challenges. The feature of model evaluation is important, both to understand and to meet these challenges. They include methodological issues such as sensitivity and complex scaling; the conceptual challenges of conflating pattern and process, and reconciling simplicity and complexity; also, it includes policy issues brought by the science. The importance of these challenges and the centrality of model evaluation in meeting them are demonstrated through examples drawn from human-environment systems, with particular reference to global changes (Manson, 2007).

Achieving territorial cohesion implies the existence of a permanent and cooperative process, by involving a variety of actors in the development and administration field. The dialogue between these actors and the cooperation achieved through the so-called **governance** is the very essence of the territorial cohesion process. Explicitly, we believe that only the joint action of the public and private sector, of the scientific communities, NGOs and other categories of actors might ensure a strong territorial response to the global changes faced by Europe and the global society (Territorial Agenda, Leipzig, 2007).

The planning activity, including strategies, policies and sectorial programs, as well as specific documents integrated in the aim of the balanced and sustainable **spatial development**, becomes essential in achieving territorial cohesion. The improvement of this activity involves individualising operational spatial entities, such as regions that become fundamental in the rational territorial planning process, in the environmental protection and in the achievement of socio-economic objectives (Spatial planning charter – Torremolinos Charter, 1983).

For future territorial cohesion, the different regional structures will have an important role, frequently perceived as urban-rural interfaces, respectively peri-urban interface. This interface is characterised as a process where the place and identity are being reconfigured and contested (Kaiser & Nikiforova, 2006). It's a big challenge to find an appropriate regional configuration to ensure the future development and to keep regional identity too.

The discussion about the modality in which underdevelopment can be diminished at the local and regional levels during a crisis period, has got a positive side,

despite some question marks regarding its realism. In such a stage, the orientation of organizations and public institutions, private or civic, towards the spaces where reality is extremely rigid, can attenuate the effects of the crisis. Up to present, representative institutions in the field are targeted almost exclusively towards territorial areas from a superior level of the hierarchy, by the global development coefficient (Bojnec, 2006).

As recent studies demonstrated, there are big discrepancies regarding development at macro-territorial level (Ianos, 2010; Lefter & Constantin, 2009), and their increasing tendencies are indubitable. National space, as essential part of the European space, can be seen only in correlation to this (Toderoiu, 2009). Consequently, it is very obvious that after a period in which the speed of recovery in the development field is much higher than expected, another period follows, in which initial discrepancies deepen.

In the process of territorial development, the convergence of administrative units is reached after an initial increase of discrepancies. In Romania's case, Williamson's curve (1965) is partially examined, showing that territorial discrepancies increase up to a certain level, and when a saturation threshold is reached, its development generalises and discrepancies diminish very much (Szörfi, 2007). We say "partially", as Romania's development level did not exceed the phase of territorial discrepancies' increase, even if the relation between the capital and the other extreme counties proves the reaching of the maximal level and the start of these discrepancies' decrease process. This is a sign by which Pal's affirmation (2009), according to which countries from the Eastern Europe have got problems regarding regional disparities and their capitals are continuously increasing, seems to be contradicted.

Globally, the territorial convergence process is not visible yet, due to the increase of regional discrepancies between extreme counties. Thus, between the counties Timiș and Vaslui, the increase of the existing disparities continues. The difference between the two counties also confirms the increase of the disparities between the west and the east of the country, except for those of core-periphery type (Petraikos, 2009).

In order to reduce these disparities, except for the process of endogenous development of each state, the EU offers, by the means of Structural Instruments, substantial financing. This is the reason why it is considered that the main challenge for new EU member states is the efficient absorption of the funds allocated for the Territorial Convergence objective. This objective is primary in the policy of European cohesion, attracting 81.5% out of the total financing. Previous experience shows great difficulties in absorbing these funds, as there is not a sufficiently developed culture to create real mechanisms at different levels, in order to access with more efficiency such a financing and especially to use these funds



for creating the bases for the future development. The present Romanian system does not encourage enough the setting up of partnerships between authorities at local, county, regional and central level, on one hand, and between the public administration, civil society and entrepreneurs, on the other hand (Bischoff & Giosan, 2004).

In the conditions of the poles' revitalization and the growth centres' theories, as an instrument for the diminishing of the inequalities among the EU member states (Salmon, 2008; Lopez-Rodriguez, 2008; Pocol, 2009; Ianoş, 2010), using it at the level of the highly disadvantaged areas can be a way of recovering. For the present context, considering the fact that the big challenge is represented by the gap between the western and eastern part of the EU, territorial development is much more important at macroscale level (Eposti, 2008). The development at lower levels refers to national, regional, county or local policies (Huber, 2006).

Most of the studies related to present territorial dynamics focus on the regional framework, and consequently the conclusions refer to the differences at macro-scale and the ways of decrease at this spatial level (Antonescu, 2001). Otherwise, it is well known that intraregional differences are more obvious than interregional differences; therefore the orientation of studies towards measuring the development process at meso- and micro-scale level can be extremely useful too.

As we already mentioned, regional policy is challenged by the globalization and regionalization of political and economic structures, the implementation of sustainable development, and the reform of political and administrative structures. Most European countries have started to reformulate their regional policy. The approach includes the political system and sectorial policies with regional impact and comprises six elements: public and private actors; institutional structures and processes; top-down and bottom-up approaches; exogenous and endogenous strategies; economic, social, and environmental dimensions; and policies at regional, national, and European levels. This integrated perspective is complemented with considerations on how this approach in practice could look like at the national and regional level (Thierstein & Egger, 1998).

### **3. Short History of the Administrative Regions in Romania**

Romania has its history in which there have been experienced different types of administrative forms, having either a beneficial or abhorred role. Until the beginning of the communist regime, the forms of administrative organization have mostly used regional or sub-regional traditions, the historic relations between settlements being key factors to their functioning. During the communism new form of organization copied exogenous models: regions and districts have replaced the provinces (ținuturi), counties (județe) and smaller districts (plăși), disrupting

the historic role of territorial dynamics that some cities have had. In addition, many traditional entities such as “countries” (țări, pays) have lost part of their functionality (Ilies and Ilies, 1999), due to their high fragmentation, following the emergence of the new administrative form called “raion”.

At a sub-national level, the disorder of the ensuing years has been an obstacle for the development process, even if the motivations behind successive reorganizations have always had economic and social extent. In short, in 1950, Romania is separated into 28 regions, in 1952, their number is reduced to 18, as in 1956 remain only 16 regions (Săgeată, 2011). Apparently, all this evolution regarding administrative organization at the sub-national level seemed a natural one: cost reduction on the efficiency of the public administration and territorial development. There should be reminded that one of the slogans of the entire communist period was “the harmonious development of all country regions.” In fact, regional and “raion” competencies channelling resources only towards the capital cities of the regions have increased regional centralism in relation to local communities.

Therefore a return to the traditional sub-national administrative organization, which was the county (județ), has become a necessity. The way this reorganization was conceived in 1967 (becoming operational in 1968), with the participation of many specialists, gave functional consistency to new configurations that could support (with comments on administrative structure of counties around Bucharest), the transition to a new type of territorial development. Recommendations of specialists were taken into consideration at the time (it was during the first years of the arrival to power of Nicolae Ceausescu), which was reflected in the durability of these structures.

During the preparations for joining the EU structures, this administrative ‘cut’, equivalent to NUTS III in member countries, proved to be unable to sustain regional development with the priority objectives to mitigate internal gaps, as well as between Romanian counties and European regions. The county has a much lower level of resources than European regions, and its potential doesn’t allow it playing an important sub-national role, requiring the necessity of new configurations compatible with those in the EU.

Romania started promoting a genuine regional policy only after 1998 when a law was promulgated in the field. This is how the 8 regions have been individualized with the role of the regional councils and regional development agencies, to managing the funds allocated from the state budget and European funds for balanced national development.

Therefore, from that date on the institutional framework was set up for implementing programmes and developing projects. The achievements were more and more obvious from one stage to another even if they were contradictory sometimes – either due to the egalitarian mentality of the members of the local

councils, or to the rather downsized maximal quantum of the projects versus the expected effects. The applications for the PHARE program via this institutional framework, and later on for SAPARD, were as many important experiences for developing an entrepreneurial culture at the level of the small businessmen. Even if cautious at the beginning, they have relatively quickly learned how to use all the opportunities that might appear in a market economy, the offer of unredeemable funds for regional development included.

Is there a model of uneven development specific to Romania? We dare to say yes: there exists a certain historical inheritance of the regional gaps and of their perpetuation, irrespective of the successive political regimes that kept following one another. Therefore, the attempts to implement policies able to smooth the territorial development differences had good effects, although temporary: after the restrictions specific to the respective regimes had been eliminated, the negative effects were even more visible.

The present strategy of Romania's polycentric spatial development, also inspired by the decisions taken at the level of the United Europe, could be defined by concrete, sectorial, or global policies that, if implemented, would contribute to the attenuation of the above gaps (Țurcănașu & Rusu, 2007). If the new regional policy – an older one as a matter of fact (known from the 1960s and 1970s, but forgotten at the European level) – could be accompanied, or rather preceded by a policy for the major infrastructure development, able to connect the poles by a highway network, the results could be quite remarkable. If not, the attempt might be a failure since the interconnecting capacity of the respective poles and the connecting one with the growth centres ranked according to different levels remain very weak.

To diminish the gaps among the country's greater regions and inside them, a policy should be set up of producing temporal inequalities in the much lagging-behind spaces and of supporting poles/ centres able to play the role of genuine engines of territorial development (Ianoș & Heller, 2006). Even if the latest evolutions of the country's regions show a relative approach of their development levels, in absolute values they hide deepening gaps.

After about 15 years of the setting up and functioning of the 8 development regions, the problem of administrative reorganization comes up in the public debate, for the region, as an administrative level needs a change of the Romanian Constitution, that must be agreed by referendum.

#### **4. The Administrative Regions, between Whim and Necessity**

Launching the debate on the idea of generating a new administrative delineation created a real hysteria among politicians, experts and ordinary people. In this context ever more creative ideas are issued, some aiming towards restoring the old communal division and the reconfiguration of existing counties, creation of new ones and diminishing of others and so on. Yet the fiercest discussions are focused on the way counties should be organized to form future administrative regions.

For a part of the population, that is not well informed about the discussions on regionalization in Romania, these aspects appear as a capricious idea: "In circumstances of deep economic crisis, our politicians deal with the problems of a new territorial crop? Other priority issues should be considered and not a new regionalization!" Obviously this means better and consistent information to citizens is needed, using all channels: from school to current mass-media.

The new stage of functional integration of Romania into the EU involves increasing the capacity of interaction with both Member States and European regions. Do counties have current capacity to fulfil the role of regions? Surely not, because there is no needed for critical mass to impose themselves as important actors in the relations with European regions: they do not have economic potential and financial support to enable joint development projects; they do not represent, through their functions, administrative structures able to induce significant development on extended areas. In addition, under increased decentralization, their limited space and low population make them less operational in territorial management.

Why not using developing regions still as tools for territorial cohesion? The present framework for policy development was conceived as a temporary one and has no elected bodies and as a consequence they have no power for decision. This decisional capacity should be defined by the Constitution and laws deriving from the implementation of a real decentralization. Being associative structures, current development regions may not perform specific administrative tasks such as credit ordering structure and cannot be responsible for regulating development process at higher territorial level (above county). Therefore, the necessity for an administrative cut-out to enhance and benefit from the decentralization process and to stimulate regional development becomes obvious.

Why now and not later? This is another question that logically arises among the population and specialists, as irrespective of the way this administrative reform is accomplished, it will incur costs. In the context of a crisis it is rather unusual to proceed to such an action, involving costs not only for the operation of the new regional institutions, but also costs caused by potential disorder of flow decisions.

To demonstrate that the time is right, there should be an emphasize on the fact that according to the way cohesion funds are managed at European level, the financial programming period 2014-2020 is a distinct one, and building a framework that would increase the capacity to absorb more European funds is a necessity. Disappointing achievements of the period 2007-2013 showed that one of the weaknesses is the lack of a regional structure able to take over tasks form central level and manage activities that can attract private funds through European projects. Moreover, the international conference organized by the European Commission and the Government of Romania in 1997 (Proceedings, 1997), clearly stated that the lifetime of the development regions is about 10 years. It has been almost 15 years, and these regions have not been replaced with administrative ones. Later on, it may be too late!

The development of administrative regions does not mean abolition of county, but keeping them while reducing their competencies, as some of them will be transferred to the new regions. Counties have built a certain identity, they represent a traditional structure, specific for the Romanian nation and they have a certain functionality given by the role of the county residence, also by the structure of the county system of human settlements.

The conclusion is that a new administrative organization limited to setting up of administrative regions is a necessity which must be solved soon to become relatively quickly operational.

## **5. Territorial Cohesion, a “Lady Morgana”?**

Territorial cohesion has been defined in various ways; all showing that it still goes through conceptual clarification and methodological processes. For example, in some European documents the Green Paper for Sustainable Spatial Development, territorial cohesion is seen as a tool to enhance the diversity of the continent. Faludi (2009) notes that this concept can be considered both as a product and a process having an important role in the future European architecture. Territorial cohesion requires both solidarity and interdependence, including urban-rural and / or manufacturing-residential dimensions. In our opinion, territorial cohesion can be defined by a certain amount of interdependence and a series of feed-backs, contributing to the sustainable growth of the quality of life of human communities. Territorial cohesion has great potential to reduce certain types of conflict, especially those that originate from social discrepancies (Ianoş, 2011).

One way to interpret such territorial cohesion, with a special particularity, is the border areas. Here, where the case arises, there may be a high consistency on both sides of the border, but there are no synergies (for example, border areas between EU and non-EU countries). On the contrary there are situations when there is a

high consistency on both sides of the border and relations between the two spaces are synergistic and issue a special type of cohesion. The specificity of situations in border areas leads to the idea of several concepts, such as asymmetric cohesion or cohesive ruptures in an apparently homogenous territory.

In other words, we define territorial cohesion (CT) as requiring a degree of internal consistency (C), and a synergistic effect of territorial processes (S), respectively:

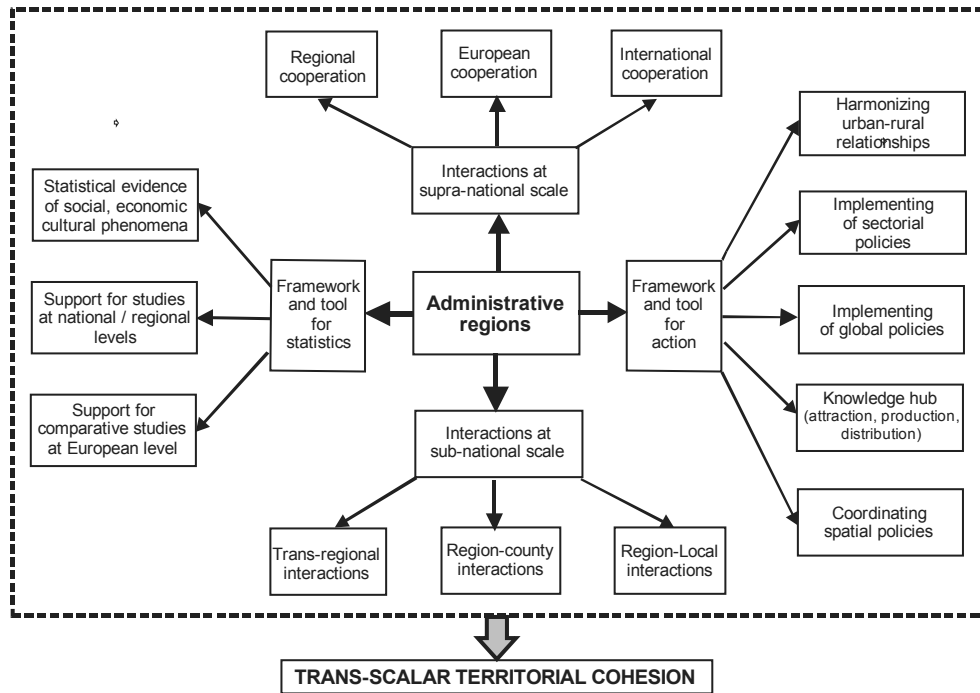


In terms of approach, territorial cohesion can be analyzed from a political perspective, aiming to promote the most effective local governance leading to reduced disparities, to increase competitiveness and ensure sustainable territorial development. From the academic perspective, territorial cohesion represents high compatibility between components of a territorial system to produce maximum efficiency with minimum losses during the operation of that system. From this angle, we can consider territorial cohesion as a product with inputs (those ensuring the close links between natural and anthropogenic components being the dominant ones, targeting to specific objectives) and outputs, materialized in results (Figure 1).

As the sustainable development, territorial cohesion has a high degree of relativity, therefore appears to be a “Lady Morgana”. The general impression is that when finally reached the territorial cohesion, suddenly new disturbances appear (including positive ones by knowledge leap) and so a lower cohesion. Consequently we are discussing a relative “product” that cannot be achieved because of the development of the society and its spatial structuring through “creative destructions”.

Multiscale analysis of the territory revealed the invariability relationship between fragmentation and integration, hence the need for a cohesive development. Fragmentation takes into account the management of an area distinguished by human communities for the purpose of continuous improvement on living conditions of the inhabitants, but also turning to economic performance by different territorial actors. At the same time, integration involves the exploitation of complementarities by communities at national or regional scale, or by multinational companies. Relationship between land fragmentation and its integration is strongly disrupted by globalization through which, increasing competition between cities, centralization is favoured at a higher level as well as urban growth in several metropolitan systems (Sallez & Verot, 1993), which induces the breakage of initial cohesion. This implies an increased fragmentation, regions becoming territorial building blocks of the global economy (Oosterlynck,

2010), whether they are called economic areas, industrial districts, regional innovation systems, learning regions, etc.



**Figure 1. Schematic representation of the trans-scalar perspective of territorial cohesion**

**6. The Advantages of the Present Development Regions to be transformed in Administrative Ones**

The region, as a functional territorial partition became a key level for strategic economic governance, being placed somewhere between the local and the national and it is often dependent on an agency. Such institutions manage political, social, economic and cultural processes whereby functional territorial structures are generally created and dismantled).

As we already mentioned, regional policy is challenged by the globalization and regionalization of political and economic structures, by the reform of political and administrative ones and by the implementation of sustainable development. Most European countries have started to reformulate their regional policy. The approach includes the political system and sectorial policies with regional impact and comprises six elements: public and private actors; institutional structures and processes; top-down and bottom-up approaches; exogenous and endogenous

strategies; economic, social, and environmental dimensions; and policies at regional, national, and European levels. This integrated perspective is complemented with considerations of how this approach in practice could look like at national and regional level (Thierstein & Egger, 1998).

Administrative decentralization is an important part of cohesion increasing. Two examples are decentralization in the structure of public administration, and decentralization in provision of regional services, which seems to be more complicated. Frequently, fragmentation could be assimilated with decentralization; nevertheless there is a big difference among them. In East - Central European countries, parallel to the structural decentralization, different new forms of integration are emerging, simply as a result of the establishment of local institutions in place of former monopolies. This non-administrative but functional integration seems to be very important for the development of effectiveness in a coherent development (Horváth, 1997).

The spatial structure of administration is influenced on the one hand by the requirements of administrative logic and on the other by the fact that an administrative structure has to exist within a broader and generally more complex functional structure. The main criteria for organising the spatial structure of administration under such conditions can be satisfied in the context of a hierarchical urban system (Parr, 2007).

Analyzing the actual situation of the 8 regions, we can summarize their main advantages provided by:

- a critical mass of population that can represent a great potential in trans-regional and trans-European cooperation, by its creative and consumption capacity. It is about going beyond a critical threshold of 2 million inhabitants;
- conditions for cooperation due to complementary of natural and human resources of the component counties of a development region: all regions (except Bucharest-Ilfov) including counties with specific natural resource for different geographical areas. Underground resources which are complementary, such as oil, natural gas, mineral resources such as coal, ore, non-metals etc., are sometimes associated to the three major landforms;
- conditions for stimulating intraregional solidarity through the existence of both developed and underdeveloped, or strongly affected by economic restructuring during the transition period counties;
- regional functionality performed by ordering of functions on structural levels of urban hierarchies; either we refer to the monocentrism, bicentrism or polycentrism, relations between settlements of any region are relatively ordered on the basis of services offered by the city on the upper level.



Among the weaknesses of these regions there can be mentioned only one related in some cases to a lack of regional identity, built in historic time. For example, the South-East region could be harder accepted. Yet, if combined with its bicentrist character, the lack of a unique regional identity is diminished.

### 7. Conclusions

The administrative region, born from the development one, is among the most appropriate tools for territorial cohesion. We must bear in mind that it fulfils four main functions: a framework and a reference for national and European statistics, another one as an action framework and a tool for increasing territorial cohesion, a third environmental one for the interactions at a sub-national scale, and the last one as a favourable element of interactions at a supranational scale (Figure 2).

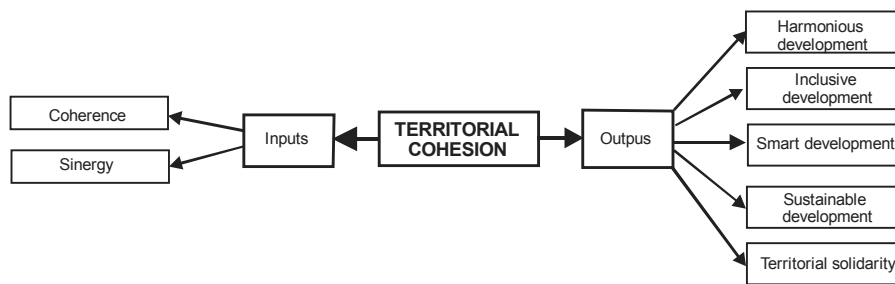


Figure 2. The Territorial Cohesion as a System

Performing such functions, the newly created administrative regions will be the most appropriate tool for achieving decentralization, a very necessary process in the future development of Romania. Based on an optimization of distribution of territorial functions regarding the administrative organizational structures, decentralization will support territorial cohesion. Highlighting the aforementioned functions leads to developing a type of cohesion of a trans-scalar character, which will be reflected by highly differentiated levels of cohesion at different levels of organization.

### 8. References

Antonescu, D. (2001). *Dezvoltare regională în România. Concept, mecanisme, instituții/Regional development in Romania. Concept, mechanisms, institutions*, Bucharest: Oscar Print.

Bojnec, S. (2006). Regional and structural policies in less favoured and cross-border areas – An example from Slovenia. *Jahrbuch des Österreichischen Gesellschaft für Agrarökonomie/Yearbook of the Austrian Society of Agricultural Economics*, 15, 119-128.

- Brischoll, C. & Giosan, V. (2004). Regional Development and Decentralisation in Romania: Connecting the Dots. *Challenge of Regional Development in South East Europe: Strategies for Financing and Service Delivery*, 17p.
- Capello, R., Fratesi U. (2009). Modelling European regional scenarios: aggressive versus defensive competitive strategies. *Environment and Planning A*, 41(2), 481–504.
- Council of Europe, CEMAT (1983). European Spatial Planning Charter - The Torremolinos Charter.
- Eposti, R. (2008). Regional Growth Convergence and EU Policies: Empirical Evidence and Measuring Problems. *CESifo Forum*, 1, 14-22.
- European Commission (2007). *Leipzig Territorial Agenda*. Brussels.
- European Commission (2010). *Territorial Agenda 2020*. Brussels.
- Faludi, A. (2009). *Territorial cohesion under the looking glass: synthesis paper about the history of the concept and policy background to territorial cohesion*. European Commission, Regional Policy, Inforegio.
- Government of Romania (1997). *Green Paper for defining a regional development policy in Romania*.
- Hirschman, A. (1958). *The strategy of Economic Development*. New Haven, CT.
- Horváth, T. M. (1997). Decentralization in public administration and provision of services: an East - Central European view. *Environment and Planning C: Government and Policy* 15(2), 161–175.
- Huber, P. (2006). Regional Labor Market Developments in Transition. *Work Bank Policy Research, Working Paper*, 3896, April.
- Ianoș, I., Heller, W. (2006). *Spațiu, economie și sisteme de așezări/Space, economy and settlement system*. Bucharest: Tehnică.
- Ianoș, I. (2010). Spatial Pattern of Romania's Uneven Development. *Revista Română de Geografie Politică/Romanian Review on Political Geography*, XII, 1, 5-17.
- Ianos, I. (2012). *European Territorial Cohesion, between reality and imagination*, paper presented at the Second Romanian – Bulgarian – Hungarian – Serbian Conference “Geographical Research and Cross-Border Cooperation within the Lower Basin of the Danube. Eger, Hungary, September 20-23.
- Ilieș, M., Ilieș, Al. (1999). Emergența și evoluția istorică a “țărilor” de pe teritoriul României/Emergence and historical development of the “countries” in Romania. *Revista Română de Geografie Politică/Romanian Journal of Political Geography*, I, 1, pp. 93-97.
- Kaiser, R., E. & Nikiforova, E. (2006). Bordeland Spaces of Identification and Dis/location: Multiscalar Narratives and Enactments of Seto Identity and Place in the Estonian-Russian Borderlands. *Ethnic and Racial Studies*, 29, 5, 928-958.
- Krugman, P. (1995). *Development, Geography and Economic Theory*. Cambridge, MA.
- Lopez-Rodriguez, J. (2008). Regional Convergence in the European Union – Results from a Panel Data Model. *Economics Bulletin*, 18, 2, 1-7.
- Lefter, C. & Constantin, C. (2009). Economic and Social Disparities of Romania in Regional and County Profile. *Management & Marketing*, 4, 1, 77-96.
- Manson, S M. (2007). Challenges in evaluating models of geographic complexity. *Environment and Planning B: Planning and Design* 34(2), 245–260.

- Myrdal, G. (1963). *Economic Theory and Underdeveloped Regions*. New York, NY.
- Osterlynck, S. (2010). Regulating Regional Uneven Development and the Politics of Reconfiguring Belgian State Space. *Antipode*, 42, 5, pp. 1151-1179.
- Painter, J. (2010). *Rethinking Territory*. *Antipode*, 42, 5, pp. 1090-1118.
- Pal, S. (2009). Changing Spatial Structures of East Central European Countries. 3<sup>rd</sup> Central European Conference in Regional Science – CERS, 820-826. Parr J B, 2007. On the spatial structure of administration. *Environment and Planning A* 39(5), pp. 1255-1268.
- Parr, J.B. (2007). *On the spatial structure of administration, Environment and Planning A* 39(5), pp. 1255 – 1268.
- Petrakos, G. (2009). Regional growth and inequalities in the European Union. *Discussion Papers Series*, 15, 2, pp. 23-44.
- Pred, A.R. (1973). *Urban Growth and the Circulation of Information*. The United States System of Cities 1790-1840. Cambridge, MA.
- Pocol, C. (2009). Indicators that characterise the Evolution of European Union's Regions of Candidates Countries and of EFTR Countries. *Buletin USAMV, Horticultura*, 66, 2, pp. 378-383.
- Sallez, A., Verot, P. (1993). *Les villes en questions/Cities in question*. In: A. Sallez (ed). *Les villes, lieux d'Europe/Cities, places of Europe*. Paris, DATAR, Editions de l'Aube, pp. 147-178.
- Salmon, K. (2008). New Directions in European Regional Policy and their Implications for Spain. *Investigaciones Regionales, Section Politica Regional Europaea/Regional Research, European Regional Policy Section*, 12, 147-177.
- Săgeată, R. (2011). Reformele administrative din România – între rațiunile politice și realitățile geografice/Administrative reforms in Romania - between political reasons and geographical realities. *Geograful/The geographer*, III, 1-2, pp. 3-26.
- Szörfi, B. (2007). Development and Regional Disparities – Testing the Williamson Curve Hypothesis in the European Union. *Focus*, 2, pp. 100-121.
- Thierstein, A. & Egger, U.K. (1998). Integrated regional policy: lessons from Switzerland. *Environment and Planning C: Government and Policy* 16(2), pp. 155–172.
- Toderoiu, F. (2009). Real Economic Convergence – European and National Dimensions. *Agricultural Economics and Rural Development, New Series*, VI, 2, pp. 150-180.
- Țurcănașu, G. & Rusu, A. (2007). Etudier le polycentrisme des systèmes urbains de la Roumanie et de la Bulgarie/Studying the polycentric urban systems in Romania and Bulgaria. *Analele științifice ale Univ. A. I. Cuza Iași, Geografie/Scientific Annals Univ. A.I. Cuza Iasi, Geography*, 53, 2, pp. 97-106.
- Williamson, J.G. (1965). Regional inequality and the process of national development: a description of the patterns. *Economic and Cultural Change*, 13, 1-84.

## The Indicators' Inadequacy and the Predictions' Accuracy

Constantin Mitruț<sup>1</sup>, Mihaela Bratu (Simionescu)<sup>2</sup>

**Abstract:** In this article, we proposed the introduction in literature of a new source of uncertainty in modeling and forecasting: the indicators' inadequacy. Even if it was observed, a specific nominalization in the context of forecasting procedure has not been done yet. The inadequacy of indicators as a supplementary source of uncertainty generates a lower degree of accuracy in forecasting. This assumption was proved using empirical data related to the prediction of unemployment rate in Romania on the horizon 2011-2013. Four strategies of modeling and predicting the unemployment rate were proposed, observing two types of indicators' inadequacy: the use of transformed variables in order to get stationary data set (the difference between the unemployment rates registered in two successive periods was used instead of the unemployment rate) and the utilization of macro-regional unemployment rates whose predictions are aggregated in order to forecast the overall unemployment rate in Romania. The results put in evidence that the predictions of the total unemployment rate using moving average models of order 2 are the most accurate, being followed by the forecasts based on the predictions of active civil population and number of unemployed people. The strategies based on the aggregation of the predictions for the four macro-regional unemployment rates imply a higher inadequacy and consequently a lower degree of forecasts' accuracy.

**Keywords:** forecasts; accuracy; indicators' inadequacy; econometric model; uncertainty

**JEL Classification:** C12; C14; C180

### 1. Introduction

The objective of our research is related to the relationship between the inadequacy of the macroeconomic variables to predict and the precision of the forecasts. By its nature, the inadequacy of the indicators is a source of uncertainty, even it is not clearly specified in literature. This type of uncertainty affects at the same time two elements: the econometric model chosen as a quantitative method of forecasts and also the prediction itself. A problem very often met by researchers is the fact that

---

<sup>1</sup> Professor, PhD, Academy of Economic Studies, Faculty of Cybernetics, Statistics and Economic Informatics, Romania, Address: 6 Piața Romana Bucharest 010374, Romania, Tel.: +4 021 319 1900, Corresponding author: mitrut.constantin@gmail.com.

<sup>2</sup> PhD Candidate in Statistics, Academy of Economic Studies, Faculty of Cybernetics, Statistics and Economic Informatics, Romania, Address: 6 Piața Romana Bucharest 010374, Romania, Tel.: +4 021 319 1900, e-mail: mihaela\_mb1@yahoo.com.

an econometric model is used not to describe the evolution of the chosen variable, but the evolution of another variable gotten by making a transformation of the initial indicator. Usually the econometricians have to transform the data series in order to work with a stationary data set. The transformation supposes very often the differentiating of the data set, the use of the logged variables. On the other hand, we can use other variables in modeling because of the lack of same data. For example, the variables at the regional level could be used in constructing the econometric models. Then, the predictions of the regional indicators are aggregated using some empirical coefficients in order to elaborate the forecasts of the initial variable.

## **2. Literature**

The uncertainty of the evolution of a phenomenon is a constant of any element to be studied. Even the presence of the observer in the process is a source of uncertainty. The predictions are also affected by uncertainty, the source of it being related to two major elements: the forecasting method and the forecasting process itself. It is interesting that none of the researchers in this domain presented in detail the problem of the inadequacy of the indicators in modeling and forecasting process. Cicarelli and Hubrich (2010) made a detailed presentation of the literature related to the sources of uncertainty in predictions. The authors made more classifications of the uncertainty sources, taking into account more perspectives that include the informational uncertainty, the model uncertainty (the imprecision of the model and of uncertainty of the forecast based on it) and the uncertainty in data measurement.

Clements and Hendry (1998) specified 5 uncertainty sources for predictions based on econometric models:

1. The estimators imprecision;
2. The incorrect specification of the model;
3. Errors in measuring the data;
4. Structural changes on the forecasting horizon;
5. Economic shocks on the forecasting horizon.

Many international institutions are specialized in providing their own macroeconomic appreciations. Some researchers were interested in evaluating the accuracy of those predictions (Timmermann for IMF Melander for European Commission, Vogel for OECD), neglecting the comparison with government's expectations. Genrea, Kenny, Meylera and Timmermann (2013) made forecasts combinations starting from SPF predictions for ECB and using performance-based weighting, trimmed averages, principal components analysis, Bayesian shrinkage, least squares estimates of optimal weights. Only for the inflation rate there was a

strong evidence of improving the forecasts accuracy with respect to the equally weighted average prediction. Hess and Orbe (2013) studied the association between analyst characteristics and the macroeconomic forecasts accuracy, noticing that the experience and the abilities of the analyst generate a better accuracy. Clarck and McCracken (2013) brought recent and important contribution in this domain: the assessment of point and density forecasts using the Vector Autoregression, direct and iterative forecasts with more steps, the application of accuracy tests on different samples of forecasts. Bratu (2012 a) assessed the accuracy of some macroeconomic predictions for Romania made by the Institute of Economic Forecasting and the National Commission of Prognosis, the last institution outperforming the forecasts for: inflation, unemployment, GDP deflator, export rate and exchange rate on the horizon 2004-2011. Novotny and Rakova (2012) assessed the accuracy of macroeconomic forecasts made by Consensus for the Czech Republic, observing an improvement in accuracy from a year to another on the horizon 1994-2009. The authors also proposed a regression for comparing the predictions. Abreu (2011) was interested in assessing the performance of macroeconomic predictions of IMF, European Commission and OECD and two private institutions (Consensus Economics and The Economist). The directional accuracy and the ability of predicting an eventual economic crisis were studied. Dovern and Weisser (2011) used a broad set of individual forecasts to analyze four macroeconomic variables in G7 countries. Analyzing accuracy, bias and forecasts efficiency, resulted large discrepancies between countries and also in the same country for different variables. In general, the forecasts are biased and only a fraction of GDP forecasts are closer to the results registered in reality. Gorr (2009) showed that the univariate method of prediction is suitable for normal conditions of forecasting while using conventional measures for accuracy, but multivariate models are recommended for predicting exceptional conditions when ROC curve is used to measure accuracy. Ruth (2008), using the empirical studies, obtained forecasts with a higher degree of accuracy for European macroeconomic variables by combining specific sub-groups predictions in comparison with forecasts based on a single model for the whole Union. Heilemann and Stekler (2007) explain why macroeconomic forecast accuracy in the last 50 years in G7 has not improved. The first explanation refers to the critic brought to macro-econometrics models and to forecasting models, and the second one is related to the unrealistic expectations of forecast accuracy. Problems related to the forecasts bias, data quality, the forecast process, predicted indicators, the relationship between forecast accuracy and forecast horizon are analysed.

In literature, there are several traditional ways of measurement, which can be ranked according to the dependence or independence of measurement scale. The most utilized measures of forecasts accuracy, recalled by Fildes and Steckler (2000) are:

- Mean error (ME)

$$ME = \frac{1}{n} \sum_{j=1}^n e_X(T_0 + j, k)$$

- Mean absolute error (MAE)

$$MAE = \frac{1}{n} \sum_{j=1}^n | e_X(T_0 + j, k) |$$

- Root Mean Squared Error (RMSE)

$$RMSE = \sqrt{\frac{1}{n} \sum_{j=1}^n e_X^2(T_0 + j, k)}$$

These measures of accuracy have some disadvantages. For example, RMSE is affected by outliers. If we have two forecasts with the same mean absolute error, RMSE penalizes the one with the biggest errors.

- Mean absolute percentage error

The percentage error is given by:  $p_t = \frac{e_t}{X_t} \cdot 100$

The most common measures based on percentage errors is the mean absolute percentage error (MAPE), which is:

$$MAPE = \text{average} ( |p_t| )$$

- Mean relative absolute error

It is considered that  $r_t = \frac{e_t}{e_t^*}$ , where  $e_t^*$  is the forecast error for the reference model.

The mean relative absolute error (MRAE) is computed as:

$$MRAE = \text{average} ( |r_t| )$$

- The relative RMSE

The relative RMSE is calculated as:  $rel\_RMSE = \frac{RMSE}{RMSE_b}$ , where  $RMSE_b$  is

the RMSE of “benchmark model” U Theil’s statistic is calculated as U1 and U2 and it is used to make comparisons between forecasts.

Notations used:

r- the registered results

f- the forecasted results

t- reference time

e- the error ( $e=r-f$ )  
 n- number of time periods

$$U_1 = \frac{\sqrt{\sum_{t=1}^n (r_t - f_t)^2}}{\sqrt{\sum_{t=1}^n r_t^2 + \sum_{t=1}^n f_t^2}}$$

A value of  $U_1$  closer to zero implies a higher accuracy.

$$U_2 = \sqrt{\frac{\sum_{t=1}^{n-1} \left(\frac{f_{t+1} - r_{t+1}}{r_t}\right)^2}{\sum_{t=1}^{n-1} \left(\frac{r_{t+1} - r_t}{r_t}\right)^2}}$$

If  $U_2 = 1 \Rightarrow$  the same accuracy for the two predictions

If  $U_2 < 1 \Rightarrow$  the prediction to compare more accurate than the naive one

If  $U_2 > 1 \Rightarrow$  the prediction to compare more accurate than the naive one.

### 3. The Consequences of the Indicators' Inadequacy in Modeling and Forecasting. An Empirical Research for the Short-Run Predictions of the Overall Unemployment Rate in Romania

The indicators' inadequacy for describing a certain economic phenomenon has even at the level of forecasting process. Therefore, from this point of view we will try to assess the effects of using inadequate variables in econometric models regarding the precision of the forecasts based on this quantitative method. The data series refers to the registered unemployment rate for Romania and for the 4 main macroeconomic regions. The first macro-region includes the central region and the north-west one. The second major region groups north-east and south-east regions. The third macro-region refers to Bucharest-Ilfov and South-Muntenia. South-west Oltenia and the western part are included in the fourth macro-region. The data sets are provided by the National Institute of Statistics, using TEMPO-online facility. Our purpose is to predict the unemployment in Romania, using several strategies:

STRATEGY 1 (S1): Forecasting the total registered unemployment rate using an econometric model;



STRATEGY 2 (S2): Forecasting the unemployment for each region and then aggregate the predictions using some weighting coefficients;

STRATEGY 3 (S3): Forecasting the total number of unemployed people and the active civil population in order to get the total unemployment rate;

STRATEGY 4 (S4): Forecasting the numbers of unemployed people and the active population for each region, the calculation of the regional unemployment rate and the aggregation of the rates in order to get the total unemployment rate.

Another important aspect regarding the variables' inadequacy is related to the fact that in many cases, in order to work with stationary data series in econometric models, we have to transform the variables, more often applying a differentiation of the data series. What we have to predict using the econometric model is a transformed variable, whose forecast is then utilized to get the prediction of the main variable. It is clearly that a supplementary source of uncertainty was introduced in this way. The forecasting horizon is 2010-2012 and 2013. For the last year prediction, the accuracy assessment was done considering as benchmark the previous value of the indicator (the value from 2012). The total unemployment rate data set has a unit root, according to Phillips-Perron test (Appendix 1). The adjusted t-statistic is greater than the critical values for different levels (1%, 5% and 10%). The associate probability is greater than the threshold of 0.05, so the hypothesis that states the existence of unit root is not rejected. Therefore, it is necessary to stationarize the data. In this case the way to get a stationary data set is to difference it once (the new variable is  $d_{ur}$ ). If the unemployment rate is denoted by  $ur$  and the error at time  $t$  is written as  $\epsilon_t$  then the following econometric models (moving average of order one MA(1)) are used to predict the indicator in one-step-ahead variant on the forecasting horizon 2011-2013.

**Table 1. The moving average models used to forecast the overall unemployment rate in Romania on the predicting horizon 2011-2013**

Forecasted years	MA(1) models
2011	$ur_{2011} = 9 + 0.5706 \cdot \epsilon_{2010}$
2012	$ur_{2012} = 5 + 0.1805 \cdot \epsilon_{2011}$
2013	$ur_{2013} = 8 + 0.1713 \cdot \epsilon_{2012}$

Source: Authors' computations

The unemployment rates for each macro-region are denoted by ur1, ur2, ur3 and, respectively, ur4. The data series are integrated of order 1, in the models being used the differentiated values.

**Table 2. The moving average models used to forecast the macro-regional unemployment rates in Romania on the predicting horizon 2011-2013**

Forecasted years	MA(2) models
2011	<ul style="list-style-type: none"> <li>■ 895 – 0.8924 ·</li> <li>■ 885 – 0.9305 ·</li> <li>■ 818 – 0.9096 ·</li> <li>■ 843 – 0.8907 ·</li> </ul>
2012	<ul style="list-style-type: none"> <li>■ 773 – 0.9227 ·</li> <li>■ 251 – 0.9985 ·</li> <li>■ 239 – 0.6716 ·</li> <li>■ 057 – 0.6613 ·</li> </ul>
2013	<ul style="list-style-type: none"> <li>■ 987 – 0.9352 ·</li> <li>■ 179 – 0.9722 ·</li> <li>■ 716 – 0.9492 ·</li> <li>■ 114 – 0.6583 ·</li> </ul>

*Source: Authors' computations*

For each macro-region the unemployment rate was computed and then the forecasts are aggregated in order to predict the total unemployment rate in Romania.

**Table 3. The forecasts for macro-regional unemployment rate (%) in Romania**

Forecasted years	Unemployment rate (%)			
	Macro-Region 1	Macro-Region 2	Macro-Region 3	Macro-Region 4
2011	3.73	6.47	3.008	4.19
2012	5.53	5.57	4.56	6.56
2013	3.77	5.69	3.21	6.06

*Source: Authors' computations*

The weightin correspondi uations,

After solving this system in Excel, we got the following values for coefficients: 0.95, 1.2, 0.85 and 1.05. After the aggregation of the regional predictions using these weighting coefficients, the forecasts were presented in final table.

**Table 4. The forecasts for unemployment rate (%) in Romania (2011-2013)**

Forecasted years	Type of strategy			
	S1	S2	S3	S4
2011	5.69	8.26	6.03	8.33
2012	5.77	7.3	7.12	7.98
2013	5.83	6.55	6.9	7.57

Source: Authors' computations

The fourth strategy supposes the use of MA(2) models to predict the variables used in the computation of the unemployment rate. The regional forecasts for unemployed people and active civil population are used to determine the macro-regional unemployment rates. The aggregation of these rates is made using the same coefficients used in the application of the second strategy.

**Table 5. The moving average models used to forecast the number of unemployed people and the active civil population in Romania on the predicting horizon 2011-2013**

Forecasted years	MA(2) models for unemployed people	MA(2) models for active civil population
2011	$44064.06 - 0.95 \cdot 44064.06 + 1.2 \cdot (-9152.386) + 0.85 \cdot (18675 - 7750.126) - 1.05 \cdot (-7860)$	$3590000 - 0.95 \cdot 3590000 + 1.2 \cdot (900000 - 670000) - 1.05 \cdot (3650000)$
2012	$44778.06 - 0.95 \cdot 44778.06 + 1.2 \cdot (-9447.997) + 0.85 \cdot (18776 - 7863.87) - 1.05 \cdot (-7993)$	$3790000 - 0.95 \cdot 3790000 + 1.2 \cdot (900000 - 670000) - 1.05 \cdot (3550000)$



the fourth strategies bring a higher degree of uncertainty because the inadequacy of the indicators is higher. The total rate of unemployment is predicted starting from the components' predictions.

**Table 7. The accuracy of the forecasts for overall unemployment rate in Romania on the predicting horizon 2011-2013**

Unemployment rate	Forecasts corresponding to the following strategies:			
Indicators of accuracy	S1	S2	S3	S4
RMSE	<b>0.3276</b>	2.0941	1.2502	2.5392
ME	<b>-0.2967</b>	-1.9033	-1.2167	-2.4933
MAE	<b>0.2967</b>	1.9033	1.2167	2.4933
MPE	<b>-0.0571</b>	-0.3660	-0.2340	-0.4795
U1	<b>0.0292</b>	0.1627	0.1027	0.1890
U2	<b>0.3421</b>	2.2335	1.5194	2.8445

*Source: Authors' computations*

In the second case, when the ex-ante evaluation of the forecast made for 2013 is taken into account, the degree of accuracy for S1 is higher, because the assumption of the same effective value was considered. The tendency of overestimation of the unemployment is kept, but the error represents in average 5,71% of the previous registered value. For all the applied strategies the tendency of providing too large in average values is persistent, the indicators ME and MAE having the same absolute value.

#### **4. Conclusions**

The indicators' inadequacy should be considered an important and frequent source of uncertainty in econometric modeling and in forecasting process based on econometric models. In our empirical study regarding the predictions for the total unemployment rate in Romania we demonstrated that the inadequacy of the predicted indicators induces a growth of the degree of uncertainty. As a result, the degree of accuracy is lower. If the sources of uncertainty are more, the inadequacy being higher, the degree of accuracy is lower.

According to our empirical research, we should prefer modeling the total unemployment rate using a moving average model of order 2. The predictions based on this model are better than those gotten by the aggregation of the macro-regional predictions. On the other hand, it is preferable to predict the variables used to compute of the unemployment rate instead of forecasting the regional variables and aggregate the macro-regional unemployment rate for Romania.

This study recommends the introduction in literature of the inadequacy of the indicators as a source of uncertainty in modeling and forecasting. The relationship between the inadequacy and the forecasts accuracy is obvious, an increase in the degree of inadequacy by developing more phases in which unsuitable variables are used generating a decrease in predictions' precision.

## 5. References

- Abreu, I. (2011). *International organizations' vs. private analysts' forecasts: an Evaluation*, Retrieved from <http://www.bportugal.pt/en-US/BdP%20Publications%20Research/wp201120.pdf>.
- Bratu M. (2012a). Applying econometrics methods to improve the accuracy of the exchange rate forecasts in Romania. *Analele Universitatii "Eftimie Murgu" Resita, Fascicola II - Studii Economice/Annals of the University "Eftimie Murgu" Resita, Fascicle II - Economic Studies*, Year 2012, p. 611-616
- Bratu, M. (2012 b). *Strategies to Improve the Accuracy of Macroeconomic Forecasts in USA*. LAP LAMBERT Academic Publishing.
- Ciccarelli, M. & Hubrich, K. (2010). Forecast uncertainty: source, measure and evaluation. *Journal of applied econometrics*, Vol. 25, pp. 509-513.
- Clarck T.E., McCracken M.W. (2013). Evaluating the accuracy of forecasts from Vector auto regression. Federal Reserve Bank of St. Louise, *Working Paper* 2013-010A.
- Clements M.P. & Hendry D.F. (1998). Forecasting in co-integrated systems. *Journal of Applied Econometrics*, 10, pp. 127-146.
- Dovern, J. & Weisser J. (2011). Accuracy, unbiasedness and efficiency of professional macroeconomic forecasts: An empirical comparison for the G7. *International Journal of Forecasting*, 27 (2), pp. 452-465.
- Fildes R. & Stekler H. (2000). The State of Macroeconomic Forecasting. Lancaster University EC3/99, George Washington University, Center for Economic Research, *Discussion Paper* No. 99-04.
- Genrea V., Kenny G., Meylera A. & Timmermann A. (2013). Combining expert forecasts: Can anything beat the simple average?. *International Journal of Forecasting*, 29(1), pp. 108-121.
- Gorr, W.L. (2009). Forecast accuracy measures for exception reporting using receiver operating characteristic curves. *International Journal of Forecasting*, 25 (1), pp. 48-61.
- Heilemann, U. and Stekler, H. (2007). Introduction to "The future of macroeconomic forecasting". *International Journal of Forecasting*, 23(2), pp. 159-165.

Hess D. & Orbe S. (2013). *Idiosyncratic predictability and analyst characteristic*. University of Cologne papers, 30(1), pp. 3-20.

Novotny F. & Rakova M.D. (2012). Assessment of Consensus forecasts accuracy: The Czech National Bank perspective. *Economic Research Bulletin*, 10(2), pp. 10-13.

Ruth, K. (2008). Macroeconomic forecasting in the EMU: Does disaggregate modeling improve forecast accuracy ?. *Journal of Policy Modeling*, 30 (3), pp. 417-429.

### APPENDIX 1

The Phillips-Perron test  
Null Hypothesis: UR has a unit root

	Adj. t-Stat	Prob.*
Phillips-Perron test statistic	-0.457010	<b>0.5048</b>
Test critical values:		
1% level	-2.679735	
5% level	-1.958088	
10% level	-1.607830	

\*MacKinnon (1996) one-sided p-values.

Null Hypothesis: D(UR) has a unit root  
Exogenous: None  
Bandwidth: 11 (Newey-West automatic) using Bartlett kernel

	Adj. t-Stat	Prob.*
Phillips-Perron test statistic	-5.729595	0.0000
Test critical values:		
1% level	-2.685718	
5% level	-1.959071	
10% level	-1.607456	

Null Hypothesis: D(UR) has a unit root Test equation with trend and intercept

	Adj. t-Stat	Prob.*
Phillips-Perron test statistic	-6.797518	0.0001
Test critical values:		
1% level	-4.498307	
5% level	-3.658446	
10% level	-3.268973	

\*MacKinnon (1996) one-sided p-values.

Null Hypothesis: D(UR) has a unit root

Test equation with intercept

	Adj. t-Stat	Prob.*
Phillips-Perron test statistic	-8.119033	0.0000
Test critical values:		
1% level	-3.808546	
5% level	-3.020686	
10% level	-2.650413	

\*MacKinnon (1996) one-sided p-values.



## Opportunities, Challenges and Results of the Regionalization Process in the Romanian Water Sector

Erika Marin<sup>1</sup>

**Abstract:** One of the specific objectives of the Sectoral Operational Programme Environment SOP ENV is to *improve the quality and access to water and wastewater infrastructure, by providing water supply and wastewater services in most urban areas by 2015 and by setting efficient regional water and wastewater management structures.* (Priority Axis 1 – Water: regional projects). In order to implement the investments needed to comply with the relevant EU environmental directives for improving the quality of water services and environment, the regional operators have access to the EU Funds from the current programming period 2007-2013. For the Priority Axis 1 the allocated funds raise up to 2,78 billion Euros from Cohesion Funds and 0,49 Billion Euros from national co-financing. The paper presents a comparative approach of current status of the regionalization process in the water sector in Romania as well main problems encountered by the regionalization process, in general and the regional operators, in particular, presenting some solutions and success factors in the regionalization process in the Romanian water sector.

**Keywords:** regionalization; water services; Sectoral Operational Programme for Environment; Intercommunity Development Association; tariffs

**JEL Classification:** O2; O18; P48; Q56

### 1. Introduction

The joining of the European Union brought to Romania the need and obligation to comply with the European standards, including the water and wastewater sector. As a consequence, the European standards were transposed in the Romanian legislation. The two major Directives regarding the water and wastewater sector are Directive 91/271/CE on urban wastewater and Directive 98/83/CE regarding the drinking water quality.

The implementation of the European directives is made in the context of the national strategic framework, the most important being the Sectoral Operational Programme Environment, setting the general and specific objectives in the water and wastewater sector.

---

<sup>1</sup> Professor, PhD, Academy of Economic Studies, Romania, Address: 6 Piața Romana Bucharest 010374, Romania, Tel.: +4 021 319 1900, Corresponding author: erika\_tusa@yahoo.com.

The regionalization of water services is a key element in improving the quality of services and the efficient use of the infrastructure in order to comply with the environmental objectives.

## 2. Strategic National Objectives

The SOP Environment - Sectoral Operational Programme Environment - regards a national development priority for 2007-2013, e.g. the “Protection and Improvement of the Environment Quality” and it considers social, economic and environmental needs in Romania so as to obtain the highest positive impact upon environment and to stimulate the economic development. From international perspective, it is based on the EU Strategy for Sustainable Development and the 6th Environmental Action Programme of the EU.

In this respect, SOP ENV focuses on the improvement of accessibility to public services, on ensuring adequate quality and level of services and on preservation of the environmental potential. *Ensuring the basic water and environment infrastructure and adequate public services is an essential requirement for encouraging the investors and is a pre-requisite for the economic development of the country. Creation of better jobs is also expected as environmental protection is a growing sector in Romania.*

The objectives of Priority Axis 1 “Extension and modernization of water and wastewater systems” aim at the improvement of quality and access to water and wastewater infrastructure, by providing water supply and wastewater services in line with EU practices and policies, in most urban areas by 2015 by the following aspects, as presented in the

- *Providing adequate water and sewerage services, at accessible tariffs;*
- *Providing adequate drinking water quality in all urban agglomerations;*
- *Improving the purity of watercourses;*
- *Improving the level of Waste Water Treatment Plant sludge management;*
- *Creating innovative and efficient water management structures.*

An efficient management in the water structure depends on the institutional setting, on one hand, and on the available financing, on the other hand.

The financing in the Romanian water and wastewater system before Romania’s accession to the EU was well below the real needs in terms of quality and quantity of the provided services. An important number of municipalities did not attract financial funds from national or international financial institutions or from private operators, hence the water and wastewater infrastructure falls behind the population and economic agent’s quality standards.

After the accession to the EU, Romania intends to access important funds for investments in the water and wastewater sector, in order to comply to the EU requirements applied to the drinking water – such as requirements on turbidity, pesticides, nitrates, etc. as well as requirements related to the collection and treatment of the wastewater.

In Chapter 22 – Environment of the Accession Treaty, Romania committed to major improvements in the quality of water and wastewater system and has been granted transition periods for compliance with the Directive 91/271/EEC related to urban wastewater collection, treatment and discharge – by 2015 for a number of 263 agglomerations of more than 10,000 population equivalent (p.e.) and by 2018 in 2,346 agglomerations between 2,000 and 10,000 population equivalent.

In the same vain, transition periods are also agreed to comply with the Directive 98/83/EC on drinking water quality by 2015. Moreover, following the negotiations for accession, the whole territory of Romania was declared as a sensitive area. This means, that all the urban agglomerations with an equivalent population of 10.000 p.e. - or above - will require an advanced wastewater treatment level (that will remove phosphorus and nitrogen).

In order to reach the above mentioned objectives, Romania through the Ministry of Environment has received financial assistance through several pre-accession funds (PHARE, ISPA, SAMTID, etc.) as well as the Cohesion and structural funds after the accession to EU. To implement all the specific projects that will ensure meeting the general and specific objectives presented above, it is needed to create strong regional operators in the water and wastewater sector that, by adopting polluter-pays and water conservation-principles, will ensure the correct implementation of the EU-funded projects, an adequate operation of the existing and new infrastructure and, overall, will ensure meeting the EU standards through rehabilitation and extension of water supply and wastewater services.

The responsibility of implementing SOP falls to Management Authority for SOP Environment, supported by eight Intermediate Bodies for SOP Environment, one for each development region of Romania. The funds allocated for SOP Environment for the current programing period of 2007-2013 is 5.6 billion Euros, of which 4.5 billion Euros represents EU grants from the two major EU Funds – European Fund for Regional Development and the Cohesion Fund. The difference is represented by national co-financing contribution. For the next programing period 2014-2020, Romania has obtained a budget of 39.887 billion Euros, an increase of 18% compared to the previous programming period.

### 3. Regionalization of Services

According to Romania's policy reflected in the SOP Environment, the achievement of the objectives for the water and wastewater sector is realized through a process of regionalization, meaning the implementation of an institutional framework for the creation of a public operation regional system respectively of a technological, operational and managerial assembly achieved by gathering several local water and wastewater systems with the scope of optimizing the level of services supplied through common operating process and use of resources and facilities.

The regionalization is a key element in improving the quality and cost efficiency of local water infrastructure and services in order to fulfil environmental targets assumed by Romania in the Accession Treaty, but also to assure sustainability of investments, of operations, of a long term water sector development strategy and of a regional balanced growth. Providing grant financing in the water and wastewater sector is conditional to setting up Regional Operating Companies (ROC). The regionalisation process represents an essential element for achieving the environmental Acquis in the water and wastewater sector because experienced operators are needed to accomplish the investments and to guarantee their satisfactory maintenance and operation.

Without grant-financing, most of the smaller operators will not be able to comply with the Acquis. Accordingly, there is a strong incentive for the different operators to arrange an appropriate set-up of ROC, and to overcome potential administrative and political burdens. The pre-accession funds and programs – such as PHARE, ISPA, SAMTID, FOPIP – have ensured the financing as well the technical assistance in creating efficient regional operators in the water sector, able to successfully implement the EU funded projects. The Regionalization process includes 35 beneficiary counties in Romania. In the current programming period 2007-2013 as well as in the next one 2014-2020, the EU funds such as Cohesion and Structural Funds will contribute to the financing of the investments in the water and wastewater sector.

These investments are the key of the creation of strong regional operators, capable to ensure good quality services, at acceptable tariffs – high enough to ensure the cost recovery and the further development of the infrastructure, but taking into account in the same time the affordability level of the population. The key institutional elements according to the strategy from the Sectorial Operational programme (SOP) are: the Intercommunity Development Association (IDA), the Regional Operating Company (RO) and the Delegation Contract – as the main management tool of the relation between the Regional Operator and the local councils.

The framework is set up to function as follows: a single regional operator is created based one or more existing water companies; In order to co-ordinate the

development of water and waste water services in the county, its various territorial administrative units should become members of the Intercommunity Development Association (IDA). The County Council will also be a member of the IDA, and will represent the interests of the smaller communities. The communities that comprise the IDA will delegate to the IDA the responsibility for their water and waste water service provision.

The IDA and the operating company will then enter into a bilateral service contract, whereby the operating company provides services to the IDA's member communities under the general oversight of the IDA itself.

Taking into account all the aspects mentioned earlier, the requirement for creating regional operators in the water and wastewater system can be based on the following aspects:

- Legal – given by the existing European legislation and the Romanian legislation, that have transposed the EU Directives
- Policy implementation – for implementing the objectives of the Sectoral Operating Programme
- Financial – in order to access the European funds – both pre-accession as well the Cohesion and Structural funds available for the current and next programming period
- ‘In House rules’ instituted by the Government Ordinance 13/2008 stating that the regional operator should provide exclusively the essential parts of the drinking water and wastewater services and it should be completely in public ownership and controlled by the public authorities
- There are some principles in the construction of the regional operators (RO)
- The OR cannot externalise the core drinking water and wastewater services
- The OR should activate exclusively in its own operating area
- The OR ownership is exclusively public and all its members should be part of the IDA – Intercommunity Development Association – that will control the OR as an internal department, based on the provisions of the Delegation contract

The delegation contract will ensure a correct relationship between the local authorities and the regional operator in the interest of the final user of the services, by ensuring the absorption of the financial funds needed to construct, extend and rehabilitate the infrastructure while establishing a correct tariff strategy.

#### **4. Problems and Solutions Encountered by Regional Operators; Success Factors of the Regionalization Process**

In the regionalisation process, the regional operators are activating in an existing national policy framework for capacity building programme in the water sector.

From the total 41 Counties plus Bucharest, 35 Counties have the experience of implementing ISPA projects – where they entered the process of regionalization. Moreover, in the current programming period, most of the counties have well established regional operators.

Nonetheless, in the regionalization process, several issues had to be addressed, that can be summarised as follows:

##### **a. Institutional/Organizational difficulties**

The difficulties encountered can be related either to the existing of an inefficient operator, as main operator to build the Regional Operator on, or to the existing and building the institutional capacity of the OR personnel.

Regarding the first aspect, there are several counties in Romania, where the main existing operator had large historical debts, and, as a consequence, the creation of a new, strong and financially viable OR is jeopardised.

On the other hand, the strength of the OR is based as well on the quality of the personnel. In many cases, the senior and experiences staff has left the water companies due to new opportunities in the private sector or their own reluctance to change or los of some administrative positions.

##### **b. Political difficulties**

The regionalisation process is strongly linked to the commitment of the local decision factors – from county level to each community. Moreover, a good collaboration should exist between the local politicians and the regional operator's top management – and this is not always the case.

The local and central elections cycles have delayed or disturbed, as well, the implementation of the regionalisation process

##### **c. Financial difficulties**

Regarding the financial performance, in some cases the financial performance of the existing water companies is poor.

Another issue is when the main operator or even a newly created regional operator has signed financial agreements with some other technical assistance, and, as a consequence, this will raise important property transfer issues.

Difficulties may appear in sustaining the co-financing investment costs of the projects especially by the small and medium communities, as well as cash flow problems related to the Value Added Tax payments.

#### **d. Technical/Infrastructure Difficulties**

In some cases, the regional operator has to manage an insufficient or obsolete wastewater treatment and sewerage network. There are inadequate facilities for sludge treatment, inefficient water management structures, especially in smaller towns and not all the infrastructure needs can be addresses with the limited funds received from the EU grants.

Among the **success factors** to an efficient regionalisation process are:

- Decrease the political influence and interests; politicians should only supervise and support the regionalization process
- The regional operators should have professional and experienced managers
- Ensure the full cost recovery of the operation and maintenance costs and the investment cost
- Ensure a sound financial flow by taking into considerations all the constraints on the financial flows when implementing EU funded projects – from delays in the work/service contracts due to delays in tendering procedures to delays in received the authorised reimbursement sums or VAT related issues
- Implement and efficient tariff policy that will balance the need cost recovery and the population affordability of the water services; if needed, social policies should be specifically targeted
- Sound social climate ensures by informing the population about the advantages and possible short-term disadvantages of the regionalization process and the implementation of new investment in the water and wastewater sector.

## **5. Conclusions**

The overall objective of the Sectoral Operating Programme is to protect and improve the environment and living standards in Romania, focusing in particular on meeting the environmental Acquis. The aim is to reduce the environment infrastructure gap that exists between the European Union and Romania both in terms of quantity and quality. This should result in more effective and efficient services, while taking fully into account sustainable development and the polluter pays principle

The objectives for the environmental operating programs in the water and wastewater sector can be achieved through an efficient management of the

financial funds, achieved through a regionalization process – the creation and implementation of a sound institutional framework Romania, suitable to combine the water supply and wastewater services.

The purpose of the process of regionalization of water services, initiated by Romanian authorities and largely supported by the pre-accession programs (PHARE, ISPA), is to assist the local beneficiaries (Associations of Municipalities and Regional Operating Companies) in the creation of efficient water and wastewater service operators and in strengthening the capacity of local authorities to monitor their activities effectively

The regionalization is a key element to improve the quality and cost efficiency of local water infrastructure and services in order to fulfil environmental targets but also to provide sustainability of investment and operation.

## 6. References

(2013). Ministry of Environment and Climate change - “Programul Operational Sectorial Mediu 2007-2013”- SOP Environment, revised version.

(2008). EU, Government of Romania, Guide on the regionalization of drinking water and wastewater services.

[www.posmediu.ro](http://www.posmediu.ro).



## **Regional Development Disparities in Europe**

**Liliana Craciun<sup>1</sup>**

**Abstract:** Regional economic integration provides both, developing countries and the least developed, the ability to enjoy the benefits of a larger „European “market, whether it is their home or their adoptive home. This issue gains a larger dimension in the context of economic crisis and euro zone. The argument for this statement is that regional development disparities may negatively affect economic cohesion from European space. There were identified two obstacles of the efficient use of European resources. The first one is the geographic barrier: the inability to make labor division due to barrier restrictions. The second one is the lack of an entrepreneurial culture. The entrepreneurial culture provides the flexibility of economy - in particular, the structural flexibility to cope with changes in the division of labor. These disparities can be gradual changed, and they are primarily result from autonomous technological innovations made in response to depletion of resources or affected environment. Analyzing regional development disparities there were applied well known research methods: analytical and statistical method. The analysis consists on selecting and describing a set of indicators “measures” for regional competitiveness, able to show the situation of the region in metric terms, but also from economic point of view.

**Keywords:** territorial disparities; globalization; economic development; entrepreneurship; regions of development

**JEL Classification:** F6; L26; O1; R11

### **1. Introduction**

According to a relatively dedicated literature, against the background of increases of revenues and local externalities, economic integration leads to the spatial concentration of productive activities, so that in EU this unequal spatial impact of economic integration offered an important motivation for a set of political measures known under the name of Cohesion Policy of EU, with the purpose of counteracting economic and social discrepancies. An extremely popular and influential version from this perspective claims that “globalization flattens out” the world and leads to economic dynamism even in the poorest regions (Friedman, 2005).

---

<sup>1</sup> Senior Lecturer, PhD, Academy of Economic Studies, Romania, Faculty of Economics, Address: 6 Piața Romana Bucharest 010374, Romania, Tel.: +4 021 319 1900, Corresponding author: lilianacraciun@economie.ase.ro.

It is obvious that mankind is looking for new pathways of development and wellbeing both in national state frameworks, in existing and future regional structures and at international level.

There is a series of theories which makes reference to the regional aspects of development such as: the theory of development as frictional differentiation, the polarized development theory, the endogenous development theory.

The theory of development as frictional differentiation was formulated by the laureate of the Nobel Prize for economy, Gunar Myrdal. Regional imbalances are based on inherent chronological lags in integration processes, lags which have as consequence the imperfect mobility of production factors, this brings into discussion the problem of homogeneity of economic time, the development lags being interpreted as chronological lags. This perspective is more complete than the theory of development stages, or the theory of dual development, because it seeks to identify temporal reference points in the economic field, the field of institutions and social norms, the field of cultural, religious, ethical values, etc. The elimination of lags appears as a problem of synchronization of different historical times.

Polarized development theory (or the theory of growth poles) has as starting point the works of Francois Perroux, being subsequently developed with a rich literature in the field. The theory starts from the fact that development represents an imbalanced and hierarchized process at the same time and only certain economic units play the role of engine of development. These units have the role of "*poles of economic growth*".

Endogenous development theory is opposed to the growth poles theory, laying emphasis on the so-called development from the basic structural levels. The major components of this theory are selective regional autarchy and the highlighting of strategic regional advantage. The merit of such a theory consists of the mobilization of efforts of highlighting the local potential. This theory has inspired numberless studies of regional development.

## **2. Constraints of Development**

The civilizations which exhausted their basic natural resources and did not take into consideration their finite character became vulnerable as the conditions worsened. Those who tried to exceed these limits collapsed. Instead of changing their behavior or ceasing the devastating actions on the environment, they assimilated the natural resources and riches from other areas, usually by conquering other settlements or by conquering new territories less populated across their discovery.

The current model of progress privileges the exponential growth of production and consumption in almost any field of activity. The idea we learned and with which we grew up is that there can be recorded an endless economic growth without taking into account the limited character of natural resources.

And yet, although it is obvious that an exponential growth implies the consumption of raw materials and activities with significant impact on the environment, it has been adopted by our civilization – either capitalist or socialist. The continuous exponential growth is considered good for an economy, and a high growth rate is considered even more opportune. This trend of continuous encouragement of exponential growth solicits the life support system and has begun to approach the last ecological limit of our planet.

If we consider the whole planet as a system, we can better understand the effects of human activity. The term “system” is made up of interconnected parts, but represents more than the sum of its parts, the “exceeding” takes place when a limit is exceeded, the “stock” is the current level of an element such as population, forestry resources, fossil fuels or capital, the “erosion” takes place when the basic resource which supports a system suffers a decline, “the loop of positive reactions” represents the succession of events which causes the increase of stock of an element and “the loop of negative reaction” is the succession of events which causes the decrease of the stock of an element. The “balance” appears when the increases are equal with decreases, and the “collapse” appears when a stock goes into uncontrollable decline caused by the surpassing of limits or when a loop of positive reaction causes an erosion of its limits.

A computerized model of the world system highlights that if we continue with the same trend of growth, the population and the industry will exceed the limits for a few decades, before the exhaustion of natural resources leads to a decrease of population, of industrial production, of food production, of life expectancy.

The states with robust economy know that human resources represent an important factor for economic success. Yet, the investments in workforce or its depreciation are nowhere centralized. The expenditure with education and health are considered only in the light of social security not as an investment in human capital. It becomes obvious that the GDP will continue to increase even if the ecological crisis and the development crisis worsen and, in conclusion, we will have to look towards other indicators to measure progress.

Therefore, another macroeconomic indicator proposed is Sustainable Economic Welfare Index. This index is based on the statistics regarding personal consumption just like National Gross Product, but calculates adjustments for a number of factors: (1) distribution of revenues – the increase of revenues in a poor family which creates more welfare than in a rich family, (2) net capital increase – takes into account only the principal achieved by man, but excludes the expenditure with

education, health, etc. relating to the workforce involved in the production process, (3) foreign capital vs. local capital – the increase of foreign capital loans weakens national economy and is not taken into consideration in the determination of the index, (4) natural resources – we take into account only non-renewable resources (fuels, minerals) but also the degradation or conservation of agricultural lands, of aquatic ecosystems, (5) degradation of environmental factors – includes both the short-term effects of air and water pollution, but also the long-term effects of climate changes and of destruction of ozone layer, (6) self-housekeeping – we aim at quantification of goods and services produced in households.

If we are starting to analyze the origin of imbalances presented above, we will discover which is the direction we have to take. First of all, economic and financial power has to be more divided, not excessively concentrated at world level; otherwise, the financial imbalances which were generated and propagated in USA will grow in amplitude. The institutions which have as purpose the regulation of all transactions at world level have to establish the rules of the game and control financial transactions in order to exclude the speculative method. The international financial system should encourage only the profitable activities which generate goods and services capable of supporting the company in the future.

It is important to use the principle of “mini maximum”: we will use minimum of resources (energy and natural resources) to obtain maximum results. Because in the past emphasis was laid more on work productivity, an increase of productivity of resources and energy will determine smaller costs and losses.

The different forms of economic theory and practice have to be developed for the purpose of combining the current economic system with the environmental system and causing changes in the value of the natural and human capital. Therefore, from the political and economic point of view, the Earth would not be just a production factor, but will be considered an ecosystem, representing both a right and a responsibility. Eventually, in the evaluation of progress (in general) and of economic welfare (especially) we will exclude the non-profit activities and we will take into account the value of the human and natural capital. The human capital has to be included in the tax; thus, the companies would invest in it, encouraging the increase of the degree of occupation of the workforce, the improvement of abilities and diversification and forms of property. The principles of ecological economy have to be adopted so that the land, the money and the market are managed to such a manner that can sustain global economy.

### **3. Factors of Regional Disparities in Europe**

The delimitation of regions is not at all an easy task. Regardless of the criterion used – economic, administrative, geographic, social, cultural, historical, ecological, etc., there are no all satisfying methodologies, the compromise is inevitable. The definitions are multiple, and the choice depends to a large extent on the objectives pursued. At the level of a country and in different countries, we can encounter homogenous regions, which have common characteristics, such as close revenues/inhabitant, a common dominant industrial sector, relatively uniform unemployment rates, similar topography or climate, a common natural resource, a certain regional identity, a common historical development. We can also deal with nodal regions, which are usually polarized to a dominant center, but also with regions for planning.

The region is also regarded as an administrative-territorial unit of a country, having on one hand, a geographical determination (a portion from the territory of a country which individualizes by historical, cultural, economic, social features, and on the other hand, an administrative determination, involving a sum of institutional competences, which gives it a certain autonomy in relation to the central authority (wider or more restrained, depending on the options, dominant political orientations of that period).

The term of region does not apply only for the national structural regional space, being also used at international level to define regions created on the basis of connections between the border areas of neighbouring countries or regions made up of groups of countries between which there are intense economic, commercial, cultural connections following their location in a well delimited geographical space.

In order to better understand the regional economy we have to make distinction between the non-differentiated space, which is an abstract, geometrical space and the differentiated space which is characterized by geographical, economic, social, cultural, historical projections, which leads to the concepts of transport networks, industrial concentrations, natural advantages, economies of agglomerations, etc.

We consider that the main factors which determine **regional development disparities in Europe** are:

1. a complex of causal factors under the umbrella term of globalization determined an international configuration of economic activities labeled “global enterprise” which dominates large areas of the world economy;
2. the existence of the global enterprise system constrains the options of development of a large number of developing countries;

3. the difficulties of mobilization of entrepreneurial skills in many countries react with these constraints to produce a difficult environment for economic development;

The pathways for economic development in this system are:

- A) Activities of gradual modernization in the existing global enterprises;
- B) Development of global enterprises under local control;

All these development options are extremely difficult to implement. In the global economy, the control or organization of these activities remains very firm in metropolitan (advanced) countries.

The generating factors in globalization and global development are generated by:

- demand, the producers can make substitute or competitive products more and more easily. Moreover, the consumers are willing to exchange products, especially when the prices decrease for some classes of products. This causes high volatility and creates pressures on the producers of blocking the consumers.
- supply, fast innovation leads to mass production of standardized offers which create opportunities for scale economies. Therefore, the access to cheap workforce has become much easier. The combined effect of the necessity of flexibility to satisfy the demand of consumers and the descending pressure on prices by competition induces the growth of demand for outsourcing and extra-territoriality. The costs of adoption of flexible production are now much lower than before.

The financial-economic crisis generated the modification of several economic factors, making the business cycles intervene in the modification of markets and create major fluctuations at their level especially at investments level by suppression of credits.

### **3.1. A Need for New Objectives of Regional Development**

The great turbulences induce by global economic crisis on E.U. economies lead up to an obvious question: there is a need to redefine actual objective of regional development? As we now actual regional development objectives are:

- Objective 1: promotion of structural development and adjustment of underdeveloped areas at regional level, respectively the regions with GDP per capita < 75% of EU average.
- Objective 2: economic and social reconversion of regions facing structural problems, in general, this objective will be designed for the areas facing

economic changes, rural areas in decline, underprivileged piscicultural regions and urban areas facing difficulties.

- Objective 3: human resources development at local level in the context of regionalization. These objectives can be achieved by: convergence, regional competitiveness, jobs and territorial cooperation.

The main goal of European Union is the reduction of regional disparities, goal achieved through the cohesion policy. The non-refundable financial allocation funds projects especially designed for the new member states because they present large differences compared to community average, in most sectors: infrastructure, environment, research & development and innovation.

The disparities between the member states strongly widened after the accession to EU of the new member states. Thus, in 2000 in EU 15 the ratio between the GDP of the least developed region and the community average was 66%.

After the accession of the 10 new member states the average dropped to 46,6% of the average EU25, and after the accession of Romania and Bulgaria the lowest value of GDP/inhabitant reaches only 32% compared to the average EU 27.

**Table 1. Growth rate of GDP (%) in E.U.**

	1990-2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
<b>UE-25</b>	2,1	1,7	1,1	0,9	2,1	1,5	3,0	2,9	0,4	-4,2	1,8
<b>UE-15</b>	2,1	1,6	1,0	0,8	2,0	1,4	2,9	2,7	0,2	-4,3	1,8

*Source: www.eurostat.ro*

Moving the economic development strategy from speed to quality, sustainability and efficiency are very important to maintain the growth and to “catch up” developed economies.

There are large development differences both between member states and between the regions within member states. These development differences widened with the accession of the ten states in 2004, the accession of Romania and Bulgaria in 2007. Thus, one of the most thriving regions of Europe (London) has a GDP per capita nine times higher than the GDP per capita recorded in the poorest regions of Romania.

Beside the similarities of growth rates between old and new E.U. is still a real need for redefine the regional development policy objectives.

### **3.2. The Romanian priorities for a real development at regional level.**

After a first experience of ERFD using for regional development sustaining, Romania is now into a complex process of redefining administrative and NUTS 2 regions. In our opinion this is obvious sight of redefining the national priorities in regional development process. I think that these new priorities are:

1. Assimilation and application of sustainable development principles as conceptual basis of strategic planning and public policies.
2. Establishment of a specific country profile and the highlighting of real competitive advantage of Romania especially by supporting the formation and consolidation of the national capital in forms compatible with the European regulations.
3. Modernization of state structures mainly by consolidation of institutions and democratic procedures.
4. Highlighting the importance of human capital for the development of Romania in the 21<sup>st</sup> century by the priority allocation of resources.
5. Initiation of national debates – with the participation of political factors, scientific and academic community, business environment, social partners and civil society.

So far, the problem of territorial cohesion has been approached in the general framework of regional development policy, this being the only European policy which sets up cohesion as explicit goal.

### **4. Conclusions**

The concern of cohesion policy is rather the identification of potential threats to the accession process, such as strong territorial contrasts regarding the level of revenues or productivity, defective transport infrastructure inside or between regions. Thus, the cohesion policy plays an important role in the cohesion process which exceeds the strict framework of redistributive role. This means that convergence (reduction of inequalities) is considered the main way of assurance of economic and social cohesion. Although it sounds real, such an argument does not lead to a correct formulation of the cohesion problem. In order to grasp the nuances which differentiate the cohesion from convergence in the economic and social field, it is necessary to briefly describe the problem of convergence in the regional economic growth.

The evaluation of spatial disparities is influenced by the selection of size (geographical scale) of indicators and of the period of time envisaged; the European



regional policy is based on data collected for short series of time, usually below 10 years, which makes profound structural changes, the evolution of spatial matrices which takes place across longer periods of time cannot be surprised in the absence of an analysis on different levels of the elements of the integrative system of European Union. Moreover, the analysis of regional disparities with structural indicators which capture not only the economic dimension, but also social, demographic aspects, regarding the education and environment condition shows the existence of divergent territorial moulds compared to those observed by analyzing strictly the regional product reported to population.

The cycle of changes in the economy top list started in 2000 and will last 30 years according to the abovementioned facts. In this period, the world GDP will increase by an annual average pace of 3.5% and will reach 129 thousand billion dollars in 2030 (dollars at the value of 2009), double compared to the current level.

As we could see, the economies of states increase and decrease from one year to another, the competition between them is tough. The forecasts made by great economists showing that the top of the ten greatest powers of the world can change anytime, by the reversal of positions between the states already existing in the top, and by the introduction of new states, each wanting to hold total influence in a world economy.

## 5. References

- Agh A., Rozsas A. (2004). *Regional Policy in Hungary. The Dynamics of EU Cohesion Policy*, Dublin European Institute, Ireland.
- Ailenei, D. & Jula, D. (1999). *Economic Development*. Bucharest: Viitorul Românesc.
- Arias, M. & Guille'n, M. (1998). The transfer of organizational management techniques. *Diffusion and Consumption of Business Knowledge ed. J. Alvarez*, pp.110–137, London: MacMillan.
- Bartlett, C. & Ghoshal, S. (1987). *Managing Across Borders*. Cambridge, MA. Birkinshaw: Harvard Business School Press.
- Hood, N. J. (1998). Multinational subsidiary evolution: capability and charter change in foreign-owned subsidiary companies. *Academy of Management Review* 23, pp.773–795.
- Bartik, Timothy J. (1991). *Who Benefits From State and Local Economic Development Policies?* Upjohn Institute, Kalamazoo, MI. Bartik, Timothy J. (1993). Who benefits from local job growth: migrants or the original residents. *Regional Studies*, pp. 27–31.
- Barzel, Y. (1989). *Economic Analysis of Property Rights*. Cambridge, M.A.: Cambridge University Press.
- Barrios, S., Gorg, H. (2006). Strobl, E., Multinationals' location choice, agglomeration economies and public incentives. *International Regional, Science Review* 29, pp. 81–107.
- Basile, R. (2004). Acquisition versus Greenfield investment: the location of foreign manufacturers in Italy. *Regional Science and Urban Economics*, pp. 3–25, 34.

- Basile, R. (2007). Castellani, D., Zanfei, A., National boundaries and the location of multinational firms in Europe: a nested logit analysis. *EMS Working Papers*. University of Urbino.
- Becker, Gary (1962). Investment in human capital: a theoretical analysis. *Journal of Political Economy* 70 (part 2), pp. 9–49.
- Belu, C. (2009). *Essays on Efficiency Measurement and Corporate Social Responsibility*. Sweden: University of Gothenburg available at [gupea.ub.gu.se/bitstream/2077/20886/2/gupea\\_2077\\_20886\\_2.pdf](http://gupea.ub.gu.se/bitstream/2077/20886/2/gupea_2077_20886_2.pdf).
- Blanchard, Olivier & Katz, Lawrence F. (1992). Regional evolutions. *Brookings Papers on Economic Activity*, pp. 1–75.
- Blomquist, Glenn, Berger, Mark, Hoehn, John. (1998). New estimates of the quality of life in urban areas. *American Economic Review* 78, pp. 89–107.
- Blum, U, Haynes, KE & Karlsson, C. (1997). The regional and urban effects of high speed trains. *The Annals of Regional Science* 31, pp. 1–20.
- Bound, John, Holzer, Harry J. (2000). Demand shifts, population adjustments, and labor market outcomes during the 1990s. *Journal of Labor Economics* 18 (1), pp. 20–54.
- Bowen, H.R. (1953). *Social responsibilities of the business man*. New York: Harper&Row.
- Buchholz, G. T. (2004). *Idei noi de la economiști morți/New ideas from dead economists*. Bucharest: Andreco Educațional.
- Burke, L. & Logsdon, J.M. (1996). *How corporate social responsibility pays off*. *Long Range Planning* 29. pp. 495–502.
- Cameron, R.A. (1993). *Concise Economic History of the World from Paleolithic Times to the Present*. New York: Oxford.
- Carlton, D.W. & Perloff, J.M. (1998). *Economie industrielle/Industrial Economics*. Paris: De Boeck Universite.
- Christmann, P. (2000). Effects of ‘best practices’ of environmental management on cost advantage: The role of complementary assets. *Academy of Management Journal* 43, pp. 663–68.
- Christmann, P. (2004). Multinational companies and the natural environment: determinants of global environmental policy standardization. *Academy of Management Journal* 47, pp. 747–760.
- Dinu, M. (2004). *Globalizarea și aproximările ei/Globalization and its approximations*. Bucharest: Economică.
- Dinu, M.; Socol, C. & Marinaș, M. (2004). *Economie europeană. O prezentare sinoptică/European Economy. A synoptic overview*. Bucharest: Economică.
- Commission des Communautés Europeennes (2001). *Livre vert. Promouvoir un cadre européen pour la responsabilité sociale des entreprises/Green Paper. Promoting a European framework for corporate social responsibility*, available at: <http://eurlex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2001:0366:FIN:FR:PDF>.
- Commons, J. R. (1934). *Institutional economics*. Wisconsin: University of Wisconsin Press.
- Dahlsrud, A. (2006). *How Corporate Social Responsibility is defined: an Analysis of 37 Definitions. Corporate Social Responsibility and Environmental Management*, 15. pp. 1–13, available at: Wiley InterScience Library website.

- Demsetz, H. (1997). *The Economics of the Business Firm*. Cambridge: Cambridge University Press.
- Engel, James F., Warshaw, Martin R., Kinnear, Thomas C. (1987). *Promotional Strategy – Managing the Marketing Communications Process, 6th ed.* Homewood: Irwin.
- European Commission, Nov. (2007). *A Guide to the EU's Sustainable Development Strategy: A sustainable Future in Our Hands*.
- Fann, Thomas; Gail, Zolin; Roxane, Hartman & Jackie L. (2009). The Central Role of Communication in Developing Trust and Its Effect on Employee Involvement. *Journal of Business Communication*, pp. 46.
- Fisher, D. (1993). *Communication in Organizations*. St. Paul: West Publishing.
- Forman, Janis, Markus, Lynne (2005). Research on Collaboration, Business Communication, and Technology: Reflections on an Interdisciplinary Academic Collaboration. *Journal of Business Communication*, pp. 42, 78.
- Gallagher, D.R. (2006). Trading Behavior and the Performance of Daily Institutional Trades. *Accounting and Finance*.

## Is there an Amazing Way to Deal with the Crisis of EU Integration?

Gabriela Marchis<sup>1</sup>

**Abstract:** Nowadays, we talk about economic crisis, financial crisis, political crisis, Eurozone' crisis and the criticisms on 2007-2013 EU cohesion policy is facing makes me wonder if it isn't about a crisis of European integration? The economic booms of 1993-2007 as well as the recession started by the end of 2008 have fallen unequally across EU population, regions and cities, increasing spatial economic inequality. This is because regions differ with respect to their local economic activity, employment opportunities, social and cultural infrastructure, public services, governance structure, environmental quality and so on. Therefore, EU cohesion policy must not be concerned only with reduction of regional inequalities of prosperity across Europe, but also with the construction of a European regional identity, with the aim to promote regional development in a globalized world. Through this paper I want to explore the question of whether there is a path not to lose our European sense in these tormentors' times. This is because the EU anti-crisis marathon started and there are already many debates regarding the Multiannual Financial Framework for the EU Budget 2014-2020 and which instruments must be developed in order to maintain the accent of cohesion policy over the delivery of the Europe 2020 objectives.

**Keywords:** multi-level governance; smart and target investments; solidarity; economic wellbeing

**JEL Classification:** R13; R58

### 1 Introduction

The ground-work for successfully build Europe started on May 9, 1950, with the historical declaration of the French foreign minister, Robert Schuman. Since then, May 9 became the annual celebration of *peace* and *unity* in Europe.

But, is this celebration somewhat outdated now?

The *separation* seems to be the word that governs Europe in nowadays. Different opinions on the future of EU budget do not have anything in common with the principle of diversity but with adversity. The parting between *net contributors to communitarian budget* (such as Germany, United Kingdom, France, Finland, Sweden, Holland and Austria) and the states from the "*friends of cohesion*" group is very visible. EU was designed to be a *battle of ideas* and not an *ideological battle*.

---

<sup>1</sup> Senior Lecturer, PhD, Faculty of Economic Sciences, Danubius University of Galati, Romania, Address: 3 Galati Blvd, Galati, Romania, Tel.: +40372 361 102, fax: +40372 361 290, Corresponding author: gabrielamarchis@univ-danubius.ro.

In this context, the **resurgence of the Europe Union**, which is vital for assuring the peace and the unity on the old continent, may be obtained only by a *bottom up approach*, that is, at the philosophical level, the attribute of **cohesion policy**. Therefore, an extensive range of tools to promote regional development is needed for the next programming period, in order to overcome the strong effect of the ongoing crisis on European economy, which may be resumed in increased inequalities between and among Member States, mass unemployment and socio-economic insecurity.

Accordingly, the policymakers together with the academics should find new approaches and solutions towards recovery for the EU as a whole.

With respect to this research note, it intends to be a starting point to a larger debate on “*Que vadis EU?*” under the aegis of the International Conference: “*Regional development between recent experiences and future challenges*” organized by Romanian Association of Regional Science.

## 2 Related Studies

“Although *cohesion* has been a substantive part of the process of European integration, the prospect for a **genuine European Social Model** is far from being a reality. [...] The predominance of national states over EU institutions makes social harmonisation a difficult task. Incentives for coordination are scarce as a result of divergence in *economic development, policy preferences, political systems, identities and cultural attachments.*” (Diaz & Zamanillo, 2011) Also, “the conflict between capital and labour interest has resulted in the *predominance of European business objectives* in the EU agenda.” (Van Aperdoon, 2006) As stated by Antoniades, there is “a certain antagonism between Anglo-Saxon – more market oriented – and the Continental model – more sensible to social concerns – in favour of the former.” (Antoniades, 2008)

Additionally, *governments blame European institutions* for bad developments and decisions, even *when Member States had initially agreed* to them. This is reflected by Gerhards’ findings on the basis of media debates in Great Britain and Germany. (De Wilde & Zurn, 2012). As it is clearly highlighted by Kriesi, the cleavage between “*integration*” and “*demarcation*” plays an important role. There is an “increasing conflict between those in favour of opening national societies, economies and politics, and those who seek national isolation in immigration, trade matters and political integration issues” (Kriesi, Grande, Lachat, Dolezal, Bornschiefer, & Frey, 2008). In other words, *national identity* is facing the *incursions of international institutions*, the challenges of *globalizations* and *cosmopolitan thinking*. (De Wilde & Zurn, 2012)

Paul Krugman designed four *scenarios for the EU crisis management* (Can Europe Be Saved?, 2011): •*Revived Europeanism* – as moving closer towards a fiscal union; •*Toughing it out* – as contracting budgets and services but avoiding default; •*Debt restructuring* – as losing the ability to borrow any more money; •*Full Argentina* – as troubled economies breaking their link with the euro.

Furthermore, based on the key indicators for European future, Agh (The European Futures and Cohesive Europe EU2020 Strategy and Cohesion Policy with Flexible Integration, 2011) elaborated a four scenario model and readjusted it from time to time in order to capture the possible future outcomes for the EU in a SWOT analysis with positive and negative synergies.

#### Head start scenario (Strengths)

- The small versus big MS
- Basic Reform with a creative crisis
- The Nordic scenario (Europe - the World's Scandinavia)

#### Fragmented EU scenario (partial disintegration -weaknesses)

- The pro-integration versus Euroscentic MS
- Weak reform with increasing divergence
- The British scenario (weak EU reduced to the Common Market)

#### Continental scenario (Opportunities)

- The good performer versus laggard MS
- Partial reform with moderate divergence
- The Western scenario (German-French engine)

#### Doomsday scenario (Threats)

- The new-new virtual members versus all MS of the EU27
- Missing reform and overextension of the EU
- The stagnation scenario (long term zero growth with quasi desintegration)

**Figure 1. The SWOT analysis of EU possible future**

### 3 The Crisis of EU Integration

Recent EU literature is filled with so-called crisis and many of these crises are catalogued as the *worst ever* (Wallance, 2012): “existential crises” (Moeller & Parkers, Preface: A Fitness Regime for the European Union, 2011), “international crisis (financial first, then economic, social and political)” (Renard & Biscop, 2011), “Euro-crisis” (Moeller, The Flexible Union: Rethinking Constitutional Affairs), “serious financial and economic crises” (Devrim & Vaquer, 2011), “banking crisis, economic crisis, Euro-crisis, legitimacy crisis” (Van Den Berge, 2011). In addition to these essays published by observers from the academic world,

gloomy statements on EU's health and well-being, come both from EU politicians and from journalist: "If the Euro fails, Europe fails" – German Chancellor Angela Merkel's statements before the Bundestag (Center for Strategic & International Studies, 2011), "While the world waits for Europe to make up its mind, catastrophe is in the air." (The Economist, 2011).

Wallace's article about the EU collapsing literature shows that "repeated and exaggerated claims of imminent disaster have been a feature of politics within the EU ever since the Common Market was formed in the 1950s" and demonstrates that "*these exaggerated claims* are based on *unexamined premises* and are backed by *superficial comparisons* drawn from the history of the EU". In this context, a key question arises:

***Are we able to define an EU crisis with scientific precision?***

In the absence of any widely accepted indicators that would allow observers to track changes in the *health and well-being of EU*, the correct answer is **to relate** variations in the *severity of so-called EU crises* to variations in *political behaviour, processes and outcomes*.

EU is a phenomenally successful organization that constantly outgrows its treaty-based legal foundation (deepening) as it adds new members (enlarging) and new responsibility (widening), as a result of the tri-dimensional aspect of integration.

Since its early stage (EEC or EC), EU proves to be an important tool that transformed Europe from a collection of warring states into a security community within war would be unthinkable.

By denationalizing defence and security issues, accepting new members, continuing to broaden and deepen the range of issues that come within its purview, **EU proves to be once again strongly oriented toward the future rather than the past**. The fact that EU identifies problems as they arise and tries to offer solution to them demonstrates that **EU grows stronger with every new crisis**.

In my opinion, it is very normal that some members disagree on some issues and it's hardly a surprise that some member states are *pressured to compromise*. But, in a multi-state organization like EU, **compromise is the life-blood that makes EU survive**, despite the repeated strident warnings that Europe is on the verge of catastrophe, facing the most critical crises of its history.

Even if the policy-makers, journalists, pundits and professors, as well, use the word "crisis" when *simply counting the number of unresolved issues* within the EU or when they *estimate the intensity of disagreements* with the EU, we should consider that the occurrence and debating of these various kind of crises – either of geopolitical, social, economic or other nature – is on a large extent an important tool **to increase awareness on EU affairs and to stimulate European**

**integration**, in the long run, by fostering more intense cooperation among European nation-states.

The hypothesis that **EU integration process represents the sum of energizing efforts to respond to crises** proves to be very accurate. Like previous crises of various kinds, the financial crisis forces the issue of European integration onto political agenda. The *problem-solving approach* developed by European Commission to “**deliver results for Europe**” help us understand *how* and *why* the European Union survives withal illustrating that *conciliation* is the key in finding a solution that would be acceptable to all. Moreover, from all these so-called crises Europe learned that *working collectively confers legitimacy*.



**Figure 2. The genuine route of EU integration**

Economic growth and social cohesion are not evolving at the same pace among EU countries. Thus, *cohesive Europe* presupposes a flexible integration among EU member states and also a special regional policy for the less developed member states. The unbalanced patterns of growth which are characterizing Europe, cause the increase of inequality, mass economic migration, a deterioration of labour conditions and serious environmental risks.

The improving in *competitiveness* does not guarantee the achievement of *social progress*, which is the core purpose of EU2020 Strategy. In this context there is the need to put into motion a **new mode of inter-regional process of European integration**, much more oriented on *market-correcting* than *market-building*. Thereby, the *renewed cohesion policy* should represent an integrative tool that



allows **the transition from the EU crisis management to its socio-economic recovery.**

The traditional methods to determine classic growth is related on GDP/inhabitant, but this indicator cannot measure the notion of *well-being*. This is because the EU cohesion policy was designed for EU citizens and not for statistical purposes. In order to calculate performance in the regional context, we have to re-think the entire measurement system of regional policy *performance* – **social progress**. Cohesion policy was settled to cope with the *level of divergence of economic development* in EU regions, raised as a consequence of **enlargement** process.

The need of *coordinated regional cooperation* aroused with the **deepening** of EU integration – Single Market. It is therefore essential to identify what intervention within cohesion policy can contribute to achieve each goal of EU2020 Strategy, by reducing the divergence between different parts of the EU, in terms of GDP and social polarisation, as well. A long term answer is needed because *social inequity* is on the rise, the situation becoming worse for groups already at heightened risk, such as young adults, children and emigrants. Moreover, the gender differences still remains, even if the part-time jobs, a traditional domain for women employment, has expanded during the crisis, the pay gap between women and men enlarged, women facing higher risk of poverty and exclusion than men.

In order to invigorate the EU2020 Strategy within the vision of cohesive Europe, the relatively short itinerary seems to be *stronger economic governance*. However, so far the short-term actions-aid package to Greece, Ireland and Portugal (Europact) and the discussion on the renewed cohesion policy through the functional macro-regions strategies (Baltic and Danube) only reflect the *creative aspect of the crisis* in order to rediscover those perspective of a European integration instead of *an integrative balancing mechanisms*, which lead to social progress. Simultaneously, we have to understand that *the advantages* of being a part of this European project must be assigned in accordance with *the extent of our contribution and involvement* in the construction of Europe. The membership which is not corroborated by a proactive attitude is just an act and not an action so the results are accordingly.

#### **4 The Crisis of EU Identity. Why is Europe Differently?**

EU was conceived as a unique project in the world with a clear defined mission of bringing the peace on this continent, which was fully accomplished, by the way.

**Table 1. The main indicators for European future**

INTERNAL REFORMS	EXTERNAL REFORMS
1. <b>Policy reform</b> – the EU2020 as the brave vision of the cohesive Europe	1. <b>The West Balkan enlargement</b> – well designed Road Map for pre-accession.
2. <b>Institutional reform</b> – the Lisbon Treaty completed with the strong economic governance	2. <b>The ENP</b> (European Neighbourhood Policy) <b>renewal</b> – widening as the regionalization in the neighbourhood.
3. <b>Budgeting reform</b> – policy driven budget with the renewed cohesion policy	3. <b>EU as a global actor</b> – promoting European values for the global governance.

*Source: (Agh, 2011, p. 54)*

Today, the success of this project is widely acknowledged globally, European Union receiving the distinction of Nobel Peace Prize in 2012 for its “*contribution for over six decades to the advancement of peace and reconciliation, democracy and human rights*”. (European Commission)

With this occasion the President of the European Council and the President of the European Commission made a joint statement (European Commission):

*“This Prize is the strongest possible recognition of the deep political motives behind our Union: the unique effort by ever more European states to overcome war and divisions and to jointly shape a continent of peace and prosperity. It is a Prize not just for the project and the institutions embodying a common interest, but for the 500 million citizens living in our Union”.*

This **transformative power** of the European Union arose from the active involvement of all member states. Looking back in time, the **stabilizing role** played by the EU was built on *some compromises* and, pointing towards the future, *other compromises* are required in order to go forward together.

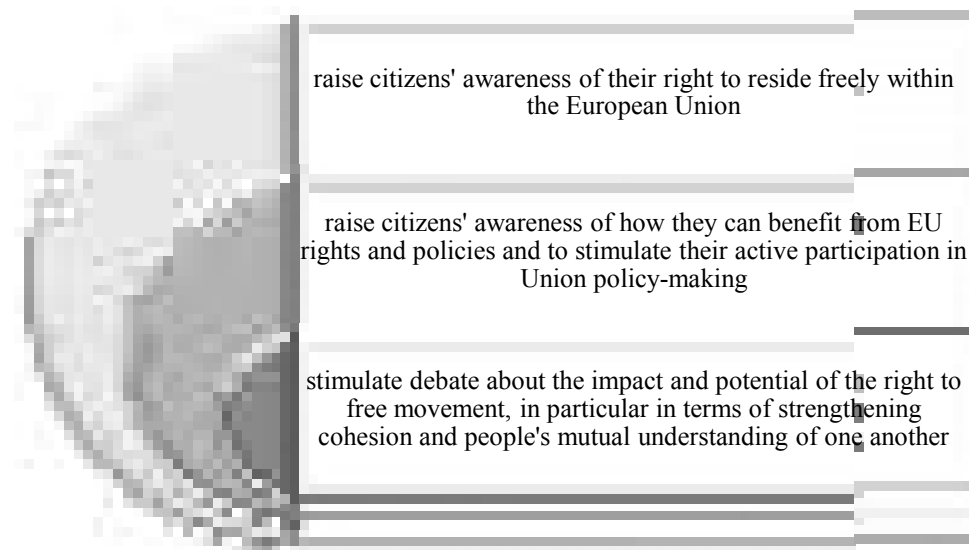
The EU working-agenda increases in volume but also in complexity as a direct consequence of **tridimensional process of integration**: *deepening, widening and enlargement*. The essential vectors in turning “old enemies” into “close partners” are *coordinated efforts* and *mutual confidence*. Moreover, the Community should focus on **stability** and **public health**, as a priori conditions for *economic growth* and *reduced unemployment*.

## 5 Possible Solutions: from Crisis to Recovery

A range of tools are designed in order to counter the negative effects of the crisis towards the *integration* of EU member states and much more, of EU citizens. Maybe the most important step is **to raise the consciousness** that all of us are belonging to the same family: Europe.

I think it is not a coincidence that 2013 was declared as *The European Year of Citizens*, and it reflects the efforts of European policymakers to lighten the way towards recovery of the EU as a whole.

*“If Europeans do not know their rights, they cannot effectively exercise them [...] The European Year of Citizens will help us change this. It will be a good opportunity to remind people what the European Union can do for every one of us.”* (Vice-President Viviane Reding, EU-Commissioner responsible for Justice and Citizenship)



**Figure 3. The purposes of the European Year of Citizens**

The proposed budget for the activities to take place during the 2013, under the auspices of *European Year of Citizens* is EUR 1 million.

Even if the main aim of the “European Year of Citizens” is to raise the awareness of EU citizens about their rights, it may be observed that those rights do not imply a *passive attitude* but a *proactive* one. The involvement of each of us in this everlasting process of building Europe is the basic foundation of *bottom-up approach*.

Put differently, another key question is **to what extent and under what circumstances mass-media provide a platform for mobilization on EU issues?**

Growing awareness among EU citizens may also be stimulated by an increase in *media coverage* (in terms of new items) and also in *media receptiveness* (in terms of organizational and cognitive readiness to report).

## 6 Conclusions

The amazing way to deal with the crisis of EU integration is to develop a **new political culture**, able to promote a new idea of EU. I think that our main concern is about being able (or not) to define Europe.

The basic foundation of the **New Era of European Union** is the *conceptual leap* regarding the *European citizen*, because their perception on the European project is vital for its success. Europeans must be *reconnected* and *educated* in the spirit of active participation in the EU affairs.



**Figure 4. Necessary steps in changing the perceptions of EU citizens on integration project**

In order to transform European Union from a *source of problems* into a *source of solutions*, we need to amend the “Europe of waiting” in the favor of an “animated Europe” and to keep in mind that the most important value of European Union is its *diversity*.

Redefining Europe means to reinvent it as a new *governing form* of the European society. The crisis of EU integration arose from the conservatism and the fear of changing. These tormentors' times must be seen as an opportunity to redesign our socio-economic evolution and the success or the fail of this project must be assigned *equally* between citizens, member states and EU as a whole.

We have the **mission of EU progressive perpetuation**, Europe signifying the complementary part of our national spirit. So, the EU membership must be regard as a chance to a participative transformation of our *socio-economic wellbeing* and not as a privilege. We have to find the common ground with the others and to be opened to embrace a profound socio-economic transformation. All of these will be possible only by *a constructive dialogue* and *mutual understanding* and by having *the courage to overcome our complexes*, either superiority or inferiority, both at the individual and at the national level, as well.

The **construction of an EU identity** needs an active dialogue between *equal and well informed partners*.

“Due to the paralyzing effects of the battle between *pro-integration* and *anti-integration* member states *a weak Cohesive Europe* may emerge. If the EU2020 fails generating policy reforms for regaining the strength and global competitiveness of the EU, then the EU can be hurt in its internal cohesion and homogenization.” (Agh, 2011)

As Jean Monnet said, we have to “*make all the men work together, to show them that, beyond their divergences or over and above frontiers, they should have a common interest*”. (Jean Monnet Scholarship Programm)]

## 6 References

(n.d.). Retrieved from [http://ec.europa.eu/news/eu\\_explained/121012\\_en.htm](http://ec.europa.eu/news/eu_explained/121012_en.htm)

Center for Strategic & International Studies. (2011). Retrieved from CSIS: <http://csis.org/publication/if-euro-fails-europe-fails-according-german-chancellor-angela-merkel-and-if-europe-fails>

*The Economist*. (2011, November). Retrieved from <http://www.economist.com/node/21536872>.

Agh, A. (2011). The European Futures and Cohesive Europe EU2020 Strategy and Cohesion Policy with Flexible Integration. *Journal of Comparative Politics*, 4(2), 54.

Antoniades, A. (2008). Social Europe and/or global Europe? Globalisation and flexicurity as debates on the future of Europe. *Cambridge review of international affairs*, 3(21), 327-346.

De Wilde, P., & Zurn, M. (2012). Can the Politicization of European Integration be Reversed? *Journal of Common Market Studies*, 50(S1), 137-153.

Devrim, D., & Vaquer, J. (2011). The Democratic Union: Strengthening Democracy in the Wider Europe. In A. Moeller, *What the EU Did Next: Short Essays for a Longer Life*. Berlin : German Council on Foreign Relations.

Diaz, J. R., & Zamanillo, D. C. (2011). Globalisation, Crisis & EU's dilemma: redefinition or irrelevancy. In J. M. Beneyto, *La Union Europea como actor global - Las nuevas dimensiones de la politica exterior europea* (pp. 169-187). Madrid : Instituto Universitario de Estudios Europeos. Universidad CEU San Pablo.

European Commission. (n.d.). Retrieved January 2013, from [http://ec.europa.eu/news/eu\\_explained/121012\\_en.htm](http://ec.europa.eu/news/eu_explained/121012_en.htm)

Gerhards, J., Rose, J., & Offerhaus, A. (2011). Rekonfiguration von Politischer Verantwortungszuschreibung im Rahmen Staatlichen Wandels. In M. Zurn, & M. Ecker-Ehrhardt, *Gesellschaftliche Politisierung und Internationale Institutionen*. Frankfurt am Main: Suhrkamp.

Jean Monnet Scholarship Programm. (n.d.). <http://www.jeanmonnet.org.tr/sayfaen.php?op=sayfayap&sid=3>.

Kriesi, H., Grande, E., Lachat, R., Dolezal, M., Bornschie, S., & Frey, T. (2008). *West European Politics in the Age of Globalization*. Cambridge: Cambridge University Press.

Krugman, P. (2011, January 16). Can Europe Be Saved? *New York Times Magazine*.

Moeller, A. (n.d.). The Flexible Union: Rethinking Constitutional Affairs. In A. Moeller, *What the EU Did Next: Short Essays for a Longer Life*. Berlin: German Council on Foreign Relations.

Moeller, A., & Parkers, R. (2011). Preface: A Fitness Regime for the European Union. In A. Moeller, *What the EU Did Next: Short Essay for a Longer Life*. Berlin: German Council on Foreign Relations.

Renard, T., & Biscop, S. (2011). The Strategic Union: Rising to the Multipolar Challenge. In A. Moeller, *What the EU Did Next: Short Essays for a Longer Life*. Berlin: German Council on Foreign Relations.

Van Aperdoon, B. (2006). La gobernanza socio-economica europea: el futuro del neoliberalismo de compromiso. *Cuadernos Europeos de Deusto*(35), 143-173.

Van Den Berge, M. (2011). The Delivery Union. In A. Moeller, *What the EU Did Next: Short Essays for a Longer Life*. Berlin: German Council on Foreign Relations.

Vice-President Viviane Reding, EU-Commissioner responsible for Justice and Citizenship. (n.d.). Retrieved from [http://europa.eu/rapid/press-release\\_IP-11-959\\_en.htm](http://europa.eu/rapid/press-release_IP-11-959_en.htm)

Wallance, J. T. (2012). Is the EU Collapsing? *International Studies Review*, 14, 225-239.