DO THE REGIONS OF ROMANIA HAVE POTENTIAL FOR SERVICE INNOVATION? THE CASE OF THE REGION OF BUCHAREST-ILFOV

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Abstract

The paper is focused on conducting an assessment on one particular region of Romania, namely the region of Bucharest-Ilfov, in relation to service innovation. The paper starts with an introductory section that reveals the region's position in terms of competitiveness and innovation within the European Union. Afterwards, a short snapshot on innovation and service innovation is included, followed by a SWOT analysis of the Region of Bucharest-Ilfov. Both the socio-economic performance of the region and the regional performance in service innovation are analyzed. The paper ends with the conclusion section that includes an overview on the main characteristics of the region from the perspective of service innovation. The region of Bucharest-Ilfov is showing its performance in service innovation through various indicators, particularly by the share of employees in service innovation intensive industries and knowledge intensive service that overcome the EU average. Particularly, the enterprises from the Bucharest-Ilfov region are mostly encountered into the services sector, but they are at their beginnings in terms of service innovation. Moreover, most of the innovation comes from SMEs that tend to offer both product and process innovation. Consequently, service innovation in the region of Bucharest-Ilfov is mainly expected to be driven by the SMEs, but taking into account that big companies have their contribution too.

Keywords: *innovation, service innovation, region, Bucharest-Ilfov*

JEL Classification: *L80, O30*

1. Introduction

Seven out of eight regions of Romania are placed in the last category of the Regional Competitiveness Index (RCI) 2013 and the only region that is classified at a higher level is the region of Bucharest-Ilfov. On the opposite side, there is the South-East region [2] that is also among the last competitive European regions. According to the scores registered in the "EU Regional Competitiveness Index" report [2], there is a high variability between the regions of Romania, especially when comparing them with the Bucharest-Ilfov region. But what is indeed interesting to reflect on is that the South-East region is very close to the Bucharest-Ilfov region, but the latter one it does not have the force to spread positive effects outside its area. Maybe, more visible positive effects will be generated on the South-Muntenia region that is surrounding the "leader" region of Romania.

As regards innovation at the regional level within the European Union, Romania is placed in the category of "Modest innovators", meaning that the innovation performance is well below that of the EU average [11]. In terms of service innovation, the dimensions of the European Service Innovation Scoreboard [10] in the case of Romania are at a very low level. The lowest performance scores are related to the dimensions reflecting the "wider framework conditions", "inputs to service innovation", "throughputs to service innovation", "outputs of service innovation", and "innovation and business model generation".

The Bucharest-Ilfov is the only region of Romania that stands out of the crowd, being included within the "moderate innovators" group rather than in the "modest innovators" groups as the other regions. Consequently, the Bucharest-Ilfov region is a more innovative region than the other regions and the country, as a whole. Explicitly, the region performs below the EU average on all indicators, but it presents several relative strengths in some particular directions [12]. The positive issues are related to non-R&D innovation expenditure and sales of new-to-market and new-to-firm innovations. A high level of non-R&D innovation expenditures and low level of R&D expenditures leads to the assumption that Bucharest-Ilfov region is included within the group of regions that tend to innovate by imitating and adopting new products or processes that were previously developed by others.

The challenges of the region of Bucharest-Ilfov in terms of service innovation are related to the global and particular strategic objectives formulated by the ADRBI [1] within the Regional Strategy Bucharest-Ilfov 2014-2020 that are mainly based on innovation.

Namely, the global strategic objectives that are settled at the level of the Bucharest-Ilfov region within the Regional Strategy Bucharest-Ilfov 2014-2020 [1] are focused on:
Consolidating the regional competitiveness by setting two specific objectives:

- Augmentation of the SMEs competitiveness;

- Consolidation of research, technological development and innovation;

Reducing the intraregional disparities by enforcing the social and territorial cohesion within the region;
Sustainable urban and rural development that is divided into three specific objectives, as follows:

- Promoting sustainable transport systems and diminishing the jams within the transport network;
- Improving the environment's quality and supporting the sustainable development;
- Transition to an economy with a low carbon level.

The main aim of the paper is to assess the potential of the Region of Bucharest-Ilfov in terms of innovation, and particularly, service innovation. This assessment regards aspects that characterize the region from the perspective of service innovation and provides a deeper analysis on the innovation adopted by the enterprises from the region of Bucharest-Ilfov. Methodologically, content analysis of various reports and data bases was used together with their analysis.

2. Snapshot on the literature review

Within the Oslo Manual [15, p. 46], the "innovation" concept is defined as "the implementation of a new or significantly improved product (good or service), or process, a new marketing method, or a new organizational method in business practice, workplace organization or external relations". A shorter and concise definition of innovation provided by Fagerberg et al. [9, p. 2] refers to "putting into practice of inventions".

Innovation is divided into several divisions represented by the *product innovators* that have to introduce new and significantly improved products in terms of fundamental characteristics; the *process innovators* that have to implement new and significantly improved technologies in production or methods in supplying services and delivering products; and the *organizational and/or marketing innovators* that are focused on capturing innovation processes in services [5]. The product and/or process innovation could be accompanied by the organizational and/or marketing innovation.

Particularly, the European Commission [7, p. 12] within the "Smart Guide to Service Innovation" refers to service innovation as "new or significantly improved service concepts and offerings as such, irrespective of whether they are introduced by service companies or manufacturing companies, as well as innovation in the service process, service infrastructure, customer processing, business models, commercialisation (sales, marketing, delivery), service productivity and hybrid forms of innovation serving several user groups in different ways simultaneously." The influence area of the service innovation is going beyond the service sectors, by reaching the manufacturing firms [3] that obtain new services and integrate product-service bundles.

As regards the service industries, Corona-Treviño [4] is dividing them into three categories, such as: innovation services that refer to innovations based on high tech services and highly qualified personnel, where telecommunications, computer and related activities, professional and technical services and other business activities are included; knowledge intensive services that are characterized by the intensive use of information, qualified personnel and knowledge in standardized processes based on standard or high tech, but with less innovation, within this category education, health care, financial intermediation, communication and media, public administration and defense, compulsory social security are inserted; and traditional services that are based on standardized processes and equipment, technology and personnel, where various services are contained, such as transport and storage, wholesale and retail trade, hotels and restaurants, real estate etc.

3. The SWOT analysis of the Region of Bucharest-Ilfov

The main *strengths* of the Region of Bucharest-Ilfov come from the good transportation connectivity compared to the other regions of Romania, interest for bringing the services of general interest at the European standards, the highest level in terms of human resources with a high educational level, the main employer in both the local and national public administration area, the level of life expectancy level is slightly increasing, as well as the gross medium salary, and attractiveness for direct foreign investments, the attractiveness of the region for the SMEs, including innovative ones, and the most developed region in terms of clusters.

The weaknesses are far more than the strengths, and are referring to the low level of transport accessibility compared to the EU levels, the high level of traffic agglomeration within the urban area, a decreasing tendency in using the public transport, a problematic intraregional transport system, the low capacity of selective collection and waste processing, the insufficient developed infrastructure for public services, the weak use of the touristic potential regarding monuments and areas for entertainment, not enough measures for promoting social inclusion and poverty reduction, the low accessibility level for education and jobs for vulnerable groups, the low interaction level between universities and businesses and almost inexistent integration of the academic research within the business environment, a low level of productivity compared to the EU average (under 70% of the EU average), the low level of competitiveness, the low number of regional brands with national or international impact, the high level of unemployment among youth, very few structures for supporting SMEs, the diminished interest for SMEs towards knowledge and creation of products and services based on innovation, the bad management of terrains.

The most relevant *opportunities* arise from the finalization of the connection between the highways, support actions dedicated to environment and transport through European funds, the possibility to create a market dedicated to recycling services, the consistent potential of producing renewable energy, the development of an economy based on knowledge, the investment increase in education, the governmental incentives that support the employment, the probability of entering into euro zone, the high investment into the most powerful laser from all over the world ELI (Extreme Light Infrastructure), the support of the investments in innovative solutions, the infrastructure and research equipment, the encouragement of innovation and the creation of a knowledge basis in rural areas.

The threats most likely to be encountered in the Region of Bucharest-Ilfov make reference to the decrease of the budget corresponding to the transport sector, the increase of the exhaust emissions, the significant slowdown in the rhythm of catching up the other European regions, the high degree of pollution that may lead to serious health problems among the population, the augmentation of negative economic evolutions that may conduct to a deeper poverty level, the inappropriate measures for supporting the economy that may lead to another economic recession, the acceleration of the Brain Drain phenomena, the reduction of the economic incentives used for encouraging the research, technological development and innovation at the national level, the maintenance at the low level of the SMEs" expenditures in relation to research, technological development and innovation within the firms compared to the European average [1].

4. Socio-economic potential of the region

As regards the Bucharest-Ilfov region, the growth of GDP per capita PPS in 2012-2013 was of 4.5%. In 2013 the level of the GDP per capita PPS of 34,900 has overcome the EU average reaching to 131%. This indicator points out that the Bucharest-Ilfov region is the most developed region of Romania, but as a country hardy passes the half limit of the EU average [8].

Analyzing the trend of the regional gross added value in the period of time 2008-2012 it can be noticed that an average increase of 3.68% was obtained. Once the economic crisis has started, the effects on the gross added value became visible and a decrease of 7.45% was registered in 2009 compared to the previous year. In the coming years, positive values were obtained, reaching to an increase of 5.44% in 2012 compared to the year 2011.

The contribution of the service sector to the regional gross added value is significant and is quite constant in last twelve years at least. In the year 2008 service sector had a contribution of 67% of the regional gross added value and it has managed to increase up to 71.61% in the year 2012 [14]. The remaining share of added value in 2012 is divided between the agriculture, forestry and fishery with 0.3%, industry with 17.94% and construction with 10.14%.

The services that experienced the most impressive growth rate in Bucharest-Ilfov by comparing the gross added value from year 2012 to 2008 are the 'financial intermediation and insurance' and 'real estate activities'. At the opposite side, the 'information and communication' services have decreased with approximately 10%. The service that registers a constant evolution is represented by the services that are mostly related to the public sector, namely 'Public administration and defense; social insurance of public sector; education; health and social assistance'.

A shift focus from agriculture and industry to service sector happened when the socialist economic system collapsed in 1989. The following period was dedicated to the transition to the market economy and continued with the accession within the European Union in the year 2007. Starting with the preparations for meeting the requirements imposed by the community acquis and continuing with the necessary reforms after entering within the European Union, Romania has evolved and positive effects were also noticed at the regional level.

Overall, in the year 2013 the employment rate of the region is of 82.1%, recovering after the year 2010 when the rate was at the lowest level in the last five years. The rate of employment in the Bucharest city is even a little bit higher compared to the region, while in the county of Ilfov the rate is decreasing and reached at 66% in 2013.

14.73% represents the share of occupied population in Bucharest-Ilfov out of the total employees at the national level in the year 2013. Numerically, the occupied population in Bucharest-Ilfov is registering an ascendant trend recovering after the economic crisis effects when the lowest level of 1220.3 thousands persons was reached. The 1256.9 thousands of persons representing the occupied population in 2013 is still under the level of the year 2008, before the crisis period. 73.75% of the occupied population in Bucharest-Ilfov is encountered in the services sector in 2013, following an upward trend during the years [14].

In the year 2008, 23.41% of active enterprises from Romania were registered in the Bucharest-Ilfov region, registering the highest share of both SMEs and large enterprises within the country. Moreover, 92% of the active enterprises in the Bucharest-Ilfov region were developed in the service sector. Compared to the year 2008, in the year 2013 a decline of 8.55 % in the total number of active enterprises in the Bucharest-Ilfov region was registered. Even though the economic crisis had generated a decrease in the number of enterprises in Bucharest-Ilfov, their share out of the total number of 485,082 enterprises in Romania has slightly increased compared to the year 2008 and reached at 24.5%. It can be noticed that the Bucharest-Ilfov region was less affected by the economic crisis, which was obviously present in 2009 in Romania, than Romania that had a diminution of 12.6% in terms of active enterprises. Particularly, the enterprises from agriculture and industry have a more abrupt decline than the enterprises from the services sector in Bucharest-Ilfov [14].

The enterprises from the services sector within Bucharest-Ilfov that recorded positive dynamics in the period 2008-2013 are in domains related to hotels and restaurants; education; health and social assistance; entertainment, cultural and recreational activities; and other service activities. More than 83% of the active enterprises in Bucharest-Ilfov in 2013 are from the services sector and it followed an upward trend in the last 5 years.

5. Regional performance in service innovation

In 2013, the regional R&D expenditures have reached 56.07% of the total R&D expenditures in Romania, but there are still on a descendent trend, registering a downturn of 12.29% compared to the previous year. A serious drop of 27.09% was obtained in 2009 and the expenditures level of the year 2008 is still far much higher than the current one [14].

A similar situation is also met in the case of R&D employees, where almost half of the total employees in R&D at the country level are located in Bucharest-Ilfov. Coming with the economic crisis, in 2010 a decrease in the R&D employees of 13.51% compared to the previous year was reached, but in the following year, based on the European fund accessed through operational programmes, the level went up with 31.31%, overcoming the number of persons working in R&D in 2008 [14].

Apart of these two indicators that are traditionally used when analyzing the innovation performance of an economy, several particular indicators dedicated to service innovation are exposed in table 1. These indicators provide an overview of Bucharest-Ilfov in terms of the five functions of innovation systems, as defined in the ESIC Concept Note.

Table no. 1. **Five functions of the innovation system in Bucharest-Ilfov**

Function of innovation system	**Structural indicators**	**EU 27 average**	**RO average**	**Regional value**
Entrepreneurial activities	Share of self-employed people (2013)	15.1	19.9	5.9
	Share of people who think it is important to try new and different things (2012)	42.1	n/a	n/a
	Share of people who think it is important to being creative (2012)	52.8	n/a	n/a
	Labour productivity growth (2008-2011)	1.23	1.56	1.04
Knowledge development and transfer	Share of employees with a higher education degree (2013)	31.9	18.4	40.7
	Share of researchers among employees (business sector) (2011)	0.39	0.04	0.25
	EPO high-tech patent applications (2009)	17.7	47.1	54.4
Innovation and business model generation	Companies with service innovations (2012)	10.4	1.5	2.1
	Employment share in medium-high-tech and high-tech manufacturing (2013)	5.6	4.8	2.2
	Employment share in knowledge-intensive services (2013)	39.2	20.1	40.3
	Employment share in service innovation intensive industries (2012)	4.92	n/a	11.14
Financing innovation and growth	Gross Fixed Capital Formation (2011)	n/a	26.1	39.6
	Total expenditure on R&D (2011)	1.97	0.49	1.08
	Business expenditure on R&D	63.2	36	32.1
	Share of innovating firms who received public financial support (2012)	8.8	1.1	1.3
Collaboration and networking	Share of innovators collaborating with others (2012)	11.3	1.5	1.1
	Specialisation in service-oriented clusters (2011)	1	0.8	1.5
	Employment share in 2 and 3 star clusters (2011)	31.5	45.4	36.8

Source: data extracted from the European Service Innovation Scoreboard [10]

Table 1 reveals that in terms of *entrepreneurial activities*, Romania is positioned above the EU average both in terms of share of self-employed people and labour productivity growth. As regards the Bucharest-Ilfov, the situation is less promising as the share of self-employed people is very low. This may be explained by the fact that 26.21% of the active local units[i] from Romania with more than 250 employees are situated in Bucharest-Ilfov in the year 2013. Consequently, this consistent share of big companies provides an important number of jobs opportunities that could be, at least for a beginner, more attractive than starting a business.

In 2013, a number of 26,764 active enterprises were created in Bucharest-Ilfov, representing 19.69% of the total new created active enterprises in Romania. This indicator is also affected by the effects of the economic crisis that are visible starting with the year 2009, when a drop of 24.74% compared to the previous year was recorded. Comparing the figures associated to Bucharest-Ilfov on a longer period of time, 2002 up to 2013, it can be noticed that the nowadays situation is a normal one, while the values of new active enterprises registered in the economic boom in 2007 and 2008 were atypically.

Knowledge development and transfer is a strong point of the Bucharest-Ilfov that obtains for two out of the three indicators scores above all the other comparable within the table. An explanation for the high share of employees with a higher education degree can be the intense concentration of universities within the capital that provide educated people that are mainly remaining after finishing their studies as employees at the enterprises within the Bucharest-Ilfov. The weak point represented by the low share of researchers among employees within the business sector may be due to the low interest of both universities and enterprises to find common points that may lead to applicable projects that involve the employment of the researcher. The high score in high-tech patent applications submitted to the European Patent Office (EPO) can be explained partially by the high-tech services sector that has exploded in the last years in Bucharest-Ilfov and the entrepreneurs' interest to protect their applications.

Innovation and business model generation reveals that Bucharest-Ilfov and Romania have a lot to catch up compared to the EU average in terms of companies that generate service innovations. The high share of employment both in service innovation intensive industries and knowledge intensive services, and the low employment share in high-tech manufacturing compared to the EU average enforce that Bucharest-Ilfov is a region dominated by the services sector and less dedicated to manufacturing. Overall, Romania obtains the employment share in high-tech manufacturing comparably to the European average, meaning that Romania has representative manufacturing exponents, but their business is placed outside the Bucharest-Ilfov region. Adding innovative services to goods can be a great opportunity of which manufacturing should take advantage in order to increase their competitiveness and, overall, the score of the companies adopting service innovations would be higher.

The structural indicators associated to *financing innovation and growth* in the case of Bucharest-Ilfov are far behind the EU average, meaning that ways for improving the financing of innovation has to be found. Bucharest-Ilfov has potential to increase its business expenditure on R&D as many international companies form various domains, such as real estate, banking, software, are already on the market. The public financial support is received by few firms, reaching the level of only 1.3 in Bucharest-Ilfov compared to the EU average that is of 8.8.

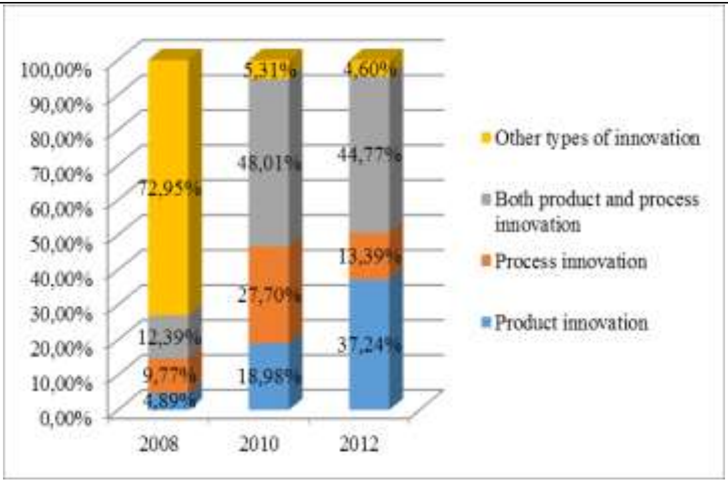
Bucharest-Ilfov registers impressive values above the EU average related to *collaboration and networking*. According to the European Cluster Observatory [6], Bucharest-Ilfov has six 2-star clusters[ii], namely "industry", "apparel", "biotech", "footwear", "leather products", "media and publishing", and "textiles". Most of the activity domains have a certain tradition in Bucharest-Ilfov, but there are some new ones, such as "biotech" and "media and publishing" that are in their process of expanding.

Apart of these clusters, there are clusters of one star in the area of construction, education and knowledge creation, financial services, pharmaceuticals, telecom, and transportation and logistics. Compared to the other regions of Romania, some cluster domains are exclusively developed in the Bucharest-Ilfov region, such as biotech, media and publishing, education and knowledge creation, financial services, pharmaceuticals, and telecom.

Within the Regional Development Plan of the Bucharest-Ilfov Region [1] seven representative clusters are nominalized, such as Elinclus innovative cluster in electronics, Romanian textiles concept cluster Bucharest in textiles – apparel, Ind agro pole Bucharest in food industry, Romanian aerospace cluster Bucharest in aerospatiale, All electric pole in electric engineering, Mecatrec regional cluster in mechatronics, Sis-autom-int-pol Bucuresti in automatization systems.

In line with the functions of the innovation system in Bucharest-Ilfov, the innovation potential of the enterprises within the region is not so encouraging. The innovative enterprises represent only 1.03% out of the total number of active enterprises in Bucharest-Ilfov. As the number of innovative enterprises at the national level is declining, consequently the effects are also visible at the regional level. Bucharest-Ilfov has 1186 innovative enterprises, representing 19.87% of the total innovative enterprises in Romania in 2012. By dividing these innovative enterprises into classes, the small enterprises is the leader with 70.75% out of the total in 2010, and the share decreased at 57.93% of the total enterprises in 2012 in favor of both the medium firms and big companies. The share of innovative enterprises into the medium class has risen over the time, reaching to more than 30% of the total innovative enterprises in Bucharest-Ilfov [14].

Most of the innovative enterprises are related to services and their proportion is increasing year by year; in 2012 services covered 72.26% out of the total innovative enterprises in Bucharest-Ilfov. For a closer look on the types of innovation that the firms in services sector are bringing on the market, the graph 1 is presented.



Graph 1. **The share of the innovative enterprises in services sector by type of innovation**
Source: own representation, based on the date from the National Institute of Statistics [14]

Nowadays, the most wide spread type of innovation among the enterprises from the services sector is the one that mixes the product innovation with process innovation. On the second position in 2012, product innovation within enterprises is situated. These statistics are also confirmed by a recent study [16] conducted among several companies in Romania, where innovative services and innovative products were placed on the first positions as innovation outcomes. Moreover, the same study [16] points out that the Romanian companies prefer incremental innovation rather than radical innovation, as it involves minor improvements to existing products and services.

6. Conclusions

Characterizing the Region of Bucharest-Ilfov in relation to its potential for service innovation, the following conclusions are formulated: the share of the self-employed people is very low compared to the EU average, the share of employees with a higher education degree is impressive, the share of researchers among employees in the business sector has a lot to catch up compared to the EU average, the EPO high-tech patent applications reflect the high interest for the high-tech area, the percentage of the companies with service innovations is very low in relation to the EU average, the employment share in service innovation intensive industries reflects the attractiveness of services rather than manufacturing, low level of both business expenditure on R&D and the share of innovating firms who received public financial support, high score for the specialization in service-oriented clusters in relation to the EU average.

Overall, the results obtained by analyzing the innovation at the enterprise level within Bucharest-Ilfov enforce the conclusions formulated by ADRBI [1, p. 134], namely approximately 20% of the innovative enterprises of Romania are encountered in the region, most of the innovation come up from SMEs, the services sector is the main area where enterprises innovate, and most of the enterprises bring both product and process innovation.

Apart of the product and process innovation, the enterprises from the Bucharest-Ilfov should also take a look on the marketing and/or organizational innovation that has potential for expanding in relation to the environmental aspects of the products by following the new trends of green marketing [13].

Concluding, the region of Bucharest-Ilfov has potential for service innovation, as it has already some strong points, but joint efforts should be made in order to promote radical innovation for a more rapid catch up the most performant European regions.

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[i] *(The local unit is an enterprise or part of it (factory, deposit, office, station etc.) situated at an identified address (National Institute of Statistics, 2015).*

[ii] *(The rating refers to the size of clusters, the level of specialization in the region, and the focus upon the industries comprising the cluster category. If this last issue is accomplished, then the cluster receives its third star).*

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7. References

[1] ADRBI, *The regional development plan of the Bucharest-Ilfov Region 2014-2020 [Planul de dezvoltare regională al Regiunii Bucureşti-Ilfov 2014-2020]*, 2014, available at: www.adrbi.ro/media/9437/PDR-BI%20varianta%2012%20iunie%202014.pdf, accessed 22 January 2015;

[2] Annoni, P., Dijkstra, L., *EU Regional Competitiveness Index*, Publications Office of the European Union, Luxembourg, 2013;
[3] Carlborg, P., Kindström, D. and Kowalkowski, C., *The evolution of service innovation research: a critical review and synthesis*, The Service Industries Journal, 34(5), pp. 373-398, 2014;
[4] Corona-Treviño, L., *Knowledge intensive sectors in Mexico: An international comparison*. Proceedings 24th Annual RESER Conference "Services and new societal challenges innovation for sustainable growth and welfare. Espoo, 2014.
[5] ESPON & BEST - Politecnico di Milano, *Final Report*. KIT (Knowledge, Innovation, Territory), 2012, available at: http://www.espon.eu/export/sites/default/Documents/Projects/AppliedResearch/KIT/FinalReport/KIT_Final-Report_final.pdf >, accessed 29 October 2014;
[6] European Cluster Observatory (ECO), *Star Cluster in Romania*, 2011, available at: http://www.clusterobservatory.eu/common/galleries/downloads/Star_clusters_Romania.pdf, accessed 04 February 2015;
[7] European Commission, *The smart guide to service innovation*, 2012, available at: http://ec.europa.eu/enterprise/policies/sme/regional-sme-policies/documents/no.4_service_innovation_en.pdf, accessed 25 May 2015;
[8] Eurostat, *Regional GDP*
GDP per capita in the EU in 2013: seven capital regions among the ten most prosperous, 2015, available at: http://ec.europa.eu/eurostat/documents/2995521/6839731/1-21052015-AP-EN.pdf/c3f5f43b-397c-40fd-a0a4-7e68e3bea8cd, accessed 23 May 2015;
[9] Fagerberg, J., Mowery, D.C. and Nelson, R.R., *The Oxford Handbook of Innovation*, Oxford University Press, Oxford, 2005;
[10] Hollanders, H., *European Service Innovation Scorecard*, 2015, available at: http://ec.europa.eu/enterprise/initiatives/esic/scoreboard/regional-scorecards/index_en.htm, accessed 04 February 2015;
[11] Hollanders, H., Es-Sadki, N., *Innovation Union Scoreboard*, Belgium, 2014;
[12] Hollanders, H.; Es-Sadki, N., Buligescu, B., Leon, L.R., Griniece, E. and Roman, L., *Regional Innovation Scoreboard 2014*, Belgium, 2014;
[13] Mogoș, R., *Customized Offer – An Essential Element in Delivering Green Marketing*, Calitatea – Acces la succes, 16, S1, pp. 274-280, 2015.
[14] National Institute of Statistics, www.insse.ro, 2015;
[15] OECD and Eurostat, *Oslo Manual-Guidelines for collecting and interpreting innovation data*, OECD, Third Edition, 2005.
[16] Pamfilie, R., Giuşcă, S., and Bumbac, R., *Academic research – a catalyst for the innovation process within companies in Romania*, Amfiteatru Economic, 16(37), pp.759-769, 2014.