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Social Innovation in the Local Public Sector: A Cross-Regional Approach for Romania^{*}

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Abstract. Social innovation could be understood as "new ideas (products, service and models) that, simultaneously meet needs and create new social relationships or collaboration" (Murray et al., 2010). For the local public sector, the social innovation gains endemic characteristics, connected to better use of local resources and human resources, as well as those concerning interregional or even cross-regional cooperation.

For the time being, Romania undergoes a complex process of shifting to regional organization, which essentially involves important changes with genuine characteristics of social innovation. The most obvious aspects of social innovation are expressed by administrative innovation or systemic innovation. Of course, the innovation in the public services or processes for public service delivery becomes visible through citizen orientation, involvement of new material and financial resources.

In this context, the current paper aims to emphasise the main characteristics of social innovation, determined by regionalization and administrative re-organizations.

The cross-regional approach comprises interregional comparative studies and it highlights the instruments for evaluation of social innovation and their application in view to substantiate the comparative studies concerning the impact of social innovation.

The research methodology comprises bibliographic syntheses, comparative studies as well as socio-innovative empirical researches.

Keywords: social innovation, regional development, local public sector.

JEL Classification: O30, O35.

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1. General framework of social innovation

The European Semester report highlighted that "modern public administration is an essential factor to underpin the design and delivery of policies promoting jobs, growth and competitiveness" (EC, COM, 2013, 350).

In this context, the European Union Member States should focus on "reforms aiming at facilitating internal and external administrative processes, such as strengthening the capacity for strategic and budgetary planning; and encouraging innovation, by introducing new organisational and communication models, and by supporting public procurement of innovative solutions" (EC, COM, 2013, 350).

In 2015, the European public administrations must be "recognised for being open, flexible and collaborative in their relations with citizens and businesses. They use e-Government in view to increase their efficiency and effectiveness and to constantly improve public services in a way that caters for user's different needs and maximises public value, thus supporting the transition of Europe to a leading knowledge-based economy (EC, 2012)".

The Digital Agenda and the e-Commission strategy are aimed at making life easier for users, the effective and efficient use of resources, ensuring the security and privacy of citizens and businesses, based on the principles of subsidiarity and proportionality, usercentricity, inclusion and accessibility, security and privacy, multilingualism, administrative simplification, transparency, preservation of information, openness, reusability, technological neutrality and adaptability, effectiveness and efficiency.

The public administration has an important role in boosting innovation in the economy and at the same time, it should trigger innovation itself in the public organisations in order to increase productivity, to improve efficiency, to enhance the creation of public value and thus to meet the society challenges.

In the digital era, the capacity of innovation and capacity to implement new innovations is very important for the public administration. "The public organizations should be able to incorporate information, knowledge, resources within the innovation processes and to harmonise the needs of citizens, businesses, NGOs (Bekkers et al., 2011)"

Innovation represents a prerequisite for administration's modernization. Innovation in public administration may be considered a learning process, a modality for new service development, new technology application, for changing the organisational structures as well as for implementing new managerial approaches in light to meet the citizens, businesses, society needs and requirements in facing the new challenges of knowledge society.

The field literature in public sector innovation reveals that new things derive from taking into consideration ideas, insights and experiences of citizens as end-users (Davenport, 1993; Oudshoorn and Pinch, 2003; Alam, 2006; Von Hippel, 2007), of the middle management of public organizations (Behn, 1995; Fuglsang and Pedersen, 2011) and employees providing services to society (Oudshoorn and Pinch, 2003; Von Hippel, 2007). In view to take into consideration the insights from various groups, the field literature

reveals the importance of considering innovation as a process of co-creation (Oudshoorn and Pinch, 2003; Bekkers et al., 2011).

"The internal public sector excellence potentially benefits from ICT through several channels: public sector employees are relieved of routine tasks, several procedural steps can be outsourced, the quality of transmitted information increases while transaction costs decrease, and some tasks can be centralised, for example at shared service centres" (OECD, 2011).

Most innovations in public administration have an ICT component. ICT is interconnected in many practices in administration as information, communication represent vital resources for public service provision, for implementing public policies and achieving projects and programmes. ICT innovative potential is determined by specific characteristics, for example "the ability to process big data and to communicate beyond the temporal, functional and geographic borders" (Bekkers and Homburg, 2005).

It is important to understand how public organizations are developing new ideas and new knowledge as part of innovation processes and how the organizations learn or fail to learn (Vera and Crossan, 2006). On the other hand, the adoption of external ideas and innovations depends on the characteristics of organizations (Lewin et al., 2011).

As mentioned by Osborne and Brown (2005), the capacity of innovation in public organisations represents "a function of organisational characteristics, but also of internal culture, external environment and institutional framework".

According to Bason (2010), the capacity of innovation can be considered in a pyramid structure, "with overall structural, institutional and political contextual conditions at the top and daily practices – people and culture – at the bottom".

Thus, the capacity of innovation has to take into consideration the contextual level, the institutional environment, the strategic and organisational level as well as the human, financial and technical resources and organisational culture.

A long term clear vision and an adequate strategy can boost innovations in the public organisations, acknowledging the value of innovation which enables the employees to adapt to changing contexts. A working environment which encompasses the culture of change boosts the generation of new ideas and the feedback loops.

The public organisations holding a high capacity of innovation create an organizational culture which enhances the generation and implementation of new ideas in view to generate public value for society, achieving new or improved processes and services. They focus also on implementation of modern technologies, valorising the activity of research and development.

Considering innovation as ongoing sustained process, the public organisations which are open to new ideas and processes involve in networks, share knowledge and cooperate with various partners. In view to collaborate with various networks of partners, beneficiaries, customers, the organizations can turn into account various instruments such as crowdsourcing, field officers, open-source databases, online community platforms. Innovation in the local public sector could be smarter procurement, citizen centric services, digital platforms, new health care systems, intelligent transport systems, as well as various other forms.

Worldwide, social innovation in the public sector has become an important issue for governments, as they are trying to solve community problems.

The pressure on governments "to do more with less" as response to cutting budgets and enlarging the community needs, expectations has triggered a greater focus on change and innovation management. In the local public sector this focus has generated the need to understand its social innovation capacity.

Innovation in public administration could be considered a "magic concept" (Pollitt and Hupe, 2011), used to "frame the necessary transformation of the public sector in order to improve not only its effectiveness and efficiency but also its legitimacy" (Bekkers et al., 2011).

Innovation represents a concept inspiring academics, managers and staff as it provides the challenge of radical change. The wish to innovate the public sector is linked to reform programmes in view to comply with budget constraints, to meet the introduction of new management and governance ideologies (as New Public Management, Neo-Weberian State, New Public Governance or Digital Era Governance) or to comply with the introduction of new information and communication technologies (e-government).

Social innovation represents "an inspiring concept as it stimulates people, politicians and policy makers to explore and implement new ideas about the way how a society deals with several challenges, such as the increasing ageing of the population, the financial and economic crises, the quality of educational system or the regeneration of socially and economically deprived cities and regions" (Mulgan, 2009).

Social innovation also refers to the idea of participation and collaboration with relevant stakeholders that cross organizational boundaries and jurisdictions (Bason, 2010; Sörensen and Torfing, 2011). This corresponds with the notion of 'open innovation' (Chesbrough, 2003, 2006; Von Hippel, 2005, 2007).

2. Concepts and instruments on regional innovation

2.1. Regional Innovation System

Since two decades ago, worldwide, regions and cities have become more active in developing their own innovation policy agendas. According to Florida (1995: 528): "despite continued predictions of 'the end of geography', regions are becoming more important nodes of economic and technological organization in this new age of global, knowledge-intensive capitalism". Taking into consideration the "national innovation systems" framework (Freeman, 1987; Lundvall, 1992; Matei, 1998), the field literature on "regional innovation systems" highlights "the important role of governments as catalysts and coordinators of regional actors' innovative activities and interactions" (Cooke, 2001).

The approach of regional innovation systems, inspired by the theories of industrial sectors and clusters, fosters "agglomeration effects" and "interactive learning," bringing scientific knowledge closer to local industrial needs (Koschatzky and Kroll, 2009; Laranja et al., 2008; Rip, 2002).

The regions and cities are enhancing their capacity to change and innovate, are sharing knowledge, and are fostering regional innovation systems in view to attract investments.

Obviously, the regions represent an adequate level in view to stimulate innovation.

The performance of the regions depends to a large extent on the interactions among various organizations, businesses, and various stakeholders.

"Differences in knowledge absorption, creation and diffusion capacities across regional innovation systems tend to persist over time, both between and within countries" (OECD 2011).

The concept of Regional Innovation System is emphasised by the "emergence of regional clusters of industrial activity, more policy making competences and responsibilities assigned to regions, policies advanced by the EU for regional development such as the European Cohesion Policy as well as globalization and increased societal challenges that constitute major issues on the political agendas of the regions" (McCann and Ortega-Argiles, 2013, OECD 2001, 2007).

The Regional Innovation System could be defined as the "... wider setting of organisations and institutions affecting and supporting learning and innovation in a region" (Asheim, 2009) or "... the institutional infrastructure supporting innovation within the production structure of a region" (Asheim and Gertler, 2006). "It comprises two subsystems of actors: ...1) the regional production structure or knowledge exploitation subsystem (mainly firms, often displaying clustering tendencies) 2) the regional supportive infrastructure or knowledge generation subsystem. ...These two subsystems are systematically engaged in interactive learning in an informal institutional context. This dynamic and complex interaction constitutes systems of innovation [where] systems are understood as interaction networks." (Asheim and Coenen, 2006).

The field literature reveals three facts:

- "innovative activity is not uniformly or randomly distributed across the regions;
- the tendency towards spatial concentration has become more marked over time despite a wide spread of information and communication technologies and increased globalization;
- even regions with similar innovative capacity tend to have very different growth patterns" (Kourtit et al., 2011, Asheim and Gertler, 2006).

2.2. Regional Innovation Strategies (RIS)

The general framework of innovation provided by the Regional Innovation System is completed with that of Regional Innovation Strategies

We find coherent preoccupations on initiating and implementing Regional Innovation Strategies (RIS) since two decades ago in international organizations such as OECD or the European Union.

The European Union has sponsored such exercises in over 150 regions since the midnineties, in the form of RITTS (Regional Innovation and Technology Transfer Strategies), RTP (Regional Technology Plans) or RIS (Regional Innovation Strategies) and derived exercises.

All the above consider innovation as the most important driver for sustainable economic development.

In March 2000, "the European Council in Lisbon set out a 10-year strategy to make Europe the world's most competitive and dynamic economy through a knowledgeoriented strategy" (De Bruijn and Lagendijk, 2005:1).

The interaction between the innovation strategies in the policies for economic development and the regional dimensions in research and innovation are present in the field literature long before Lisbon Strategy.

The actual researches, since the beginning of this century, focus on the concept of RIS, which "accordingly has acquired a prominent position within European technology and innovation policy" as well as on "the emergence of RIS in analytical and normative follows" (De Bruijn and Lagendijk, 2005:2) and its use and interpretation as an European policy.

RIS concept has evolved rapidly, the systemic approach being the most complex.

"The systemic approach to innovation has enabled the 'linear model' to be surpassed in which the development of innovation is seen as a linear process that starts within science laboratories and moves through successive stages until the new knowledge arrives on the market and it is diffused throughout the economy" (Pellegrin, 2007:203).

Debating on RIS empirical and conceptual premises, Lundvall (1988) highlights the fundamental processes determining innovation: learning – the fundamental process at the heart of innovation ('learning by interacting') and knowledge – the resource fuelling the process.

The approach of innovation in systemic terms assigns an important role to institutions, interactions and their interconnections at regional and national level.

Thus, it will be conceptualised the notion of "National Innovation System" (NIS) as a "powerful analytical instrument" (Lundvall, 1988).

Pellegrin (2007:205) assigns spatial dimensions to the regional innovation policies, "innovation being considered not only as a socially embedded process but also as a spatially structured one".

2.2.1. Characteristics and RIS implementation

The experiences in RIS conceptualization and use have highlighted a series of characteristics which could substantiate an operational framework for RIS. Thus, analysing the drivers, their adjacent operations and activities, OECD (2013) highlights four key characteristics for RIS (Table 1).

Table 1. A framework for substantiating the regional innovation strategies

| Characteristics | Description | Impact/implications |
|--|--|--|
| Work with "policy-mix" approaches | Spurring and attracting knowledge-based activities and talent demands much more than R&D, technology and innovation policy, and extends over a broad spectrum of policies | Important implications in terms of institutional setting and governance of policies at regional level |
| Use strategic intelligence to assess effectiveness | Characteristics of the changing nature of innovation (multidisciplinary, multi-actor, shorter product life cycles etc.) Need to be taken into account when assessing viability and innovation potential of poles. Strategic intelligence should be in operation so that RIS become dynamic processes, which can be adapted and updated over time. | Benchmarking and exchanges with foreign experiences and peers provide useful additions to domestic intelligence. |
| Ensuring linkages for localised clusters/ growth pole strategies | These are typical outputs of the RIS, acquire a stronger knowledge dimension and tap into knowledge sources, both local and global | Strengthening the pillars of the innovation networks and inter- institutional interactions. |
| Recognise the diversity in possible regional paths | Traditional "triple helix" types of analyses, (governmental, business sector and knowledge production organizations) are not sufficient and should be supplemented by analyses of the "fourth factor" of the regional innovation systems. | The fourth factor covers the socio- cultural regional environment and the extent to which the forming of coalitions at regional level contributed to the creation of "constructed regional advantages". |

Source: adapted after OECD (2013:6).

In the mentioned RIS framework, we should also add the risk factors of innovation strategies and methodologies for evaluation.

OECD (2013) emphasises also a group of specific steps for RIS implementation. Briefly, they could be expressed as follows:

- 1. Initiating a regional dialogue on innovation;
- 2. Analysis of regional innovation needs and capacities;
- 3. Shaping the innovation strategy with direct involvement of all relevant stakeholders;
- 4. Selection of priorities for innovation support;
- 5. Implementation of the strategy;
- 6. Establishment and use of a monitoring and evaluation system for the strategy.

2.2.2. RIS performance

At the EU Member States level, the regions are classified in four groups related to the performance level obtained by RIS application: regional innovation leaders (34 regions), regional innovation followers (57 regions), regional moderate innovators (68 regions) and regional modest innovators (31 regions).

In the EU (2014) we find their description as well as the indicators for establishing the above groups.

In light to provide a clearer overview of the differences between various groups, we undertake "Performance characteristics of the regional performance groups" from EU (2014), (Table 2).

| Indicator | Regional innovation leaders | Regional innovation followers | Regional moderate innovators | Regional modest innovators |
|--|-----------------------------------|-------------------------------------|------------------------------------|----------------------------------|
| Population having completed tertiary education | 120 | 109 | 81 | 72 |
| R&D expenditure in the public sector | 120 | 100 | 69 | 40 |
| R&D expenditure in the business sector | 133 | 83 | 52 | 23 |
| Non-R&D innovation expenditure | 102 | 86 | 93 | 69 |
| SMEs innovating in-house | 131 | 118 | 70 | 24 |
| Innovative SMEs collaborating with others | 126 | 135 | 59 | 33 |
| EPO patent applications | 135 | 84 | 43 | 20 |
| Product or process innovators | 138 | 101 | 67 | 26 |
| Marketing or organisational innovators | 103 | 98 | 80 | 31 |
| Employment in medium-high/high-tech manufacturing and knowledge-intensive services | 121 | 94 | 86 | 62 |
| Sales of new-to-market and new-to-firm innovations | 115 | 94 | 91 | 45 |

 Table 2. Performance characteristics of the regional performance groups

Source: EU (2014: 15)

Average scores for each performance group relative to the EU average (=100).

Specific documents of OECD, EU or World Bank, as well as several publications or research analyses focus on the performance indicators of the innovation processes at regional level. The paper of Zabala-Iturriagagoitia et al. (2006) presents a synthesis of the above indicators.

2. Social innovation – a cross-regional approach for Romania

The general context of regional innovation in Romania provides a comprehensive image also for social innovation. The evaluation tools at the European Union level do not provide specific data and analyses for social innovation, only if they could be extracted and interpreted from the national and European databases (Eurostat, EU (2014) etc.).

According to the Law no. 151/1998 of regional development, amended by Law no. 315/2004 and EC Regulation No. 1059/2003 on establishing a common system for statistic classification of territorial units, Romania is organised in eight development regions. Each region comprises 4-7 counties (except Bucharest-Ilfov region) through free association of county councils. They correspond to NUTS II according to Eurostat classification and represent the framework for collecting specific statistic data at territorial level NUTS II.

The development regions represent the framework for elaborating, implementing, monitoring and evaluating the regional development policies, including the regional development strategies and programmes of economic and social cohesion.

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Table 3 presents the structure of development regions.

 Table 3. Structure of development regions

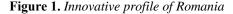
| Develo | opment region | Structure |
|--------|-----------------|---|
| No. | Name | |
| 1 | North-East (NE) | 6 counties: Bacau, Botosani, Iasi, Neamt, Suceava, Vaslui, |
| 2 | South-East (SE) | 6 counties: Braila, Buzau, Constanta, Galati, Tulcea, Vrancea |
| 3 | South (S) | 7 counties: Arges, Calarasi, Dambovita, Giurgiu, Ialomita, Prahova, Teleorman |
| 4 | South-West (SW) | 5 counties: Dolj, Gorj, Mehedinti, Olt, Valcea |
| 5 | West (W) | 4 counties: Arad, Caras-Severin, Hunedoara, Timis |
| 6 | North-West (NW) | 6 counties: Bihor, Bistrita Nasaud, Cluj, Maramures, Satu Mare, Salaj |
| 7 | Center (C) | 6 counties: Alba, Brasov, Covasna, Harghita, Mures, Sibiu |
| 8 | Bucharest-Ilfov | Bucharest Municipality, Ilfov county |

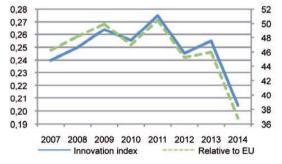
Source: authors.

3.1. Regional Innovation Scoreboard – a comprehensive image on regional innovation

The analysis of innovation in Romania at regional level should start, in our opinion, from the reports achieved at EU level and comparison of Romania outcomes with those of other European states.

Based on the Innovation Index, in 2014, the profile of Romania is shown in Figure 1.





Source: Regional Innovation Scoreboard (2015: 67).

"Romania is a modest innovator. Innovation performance mostly increased until 2011 after which it has been declining. Innovation performance in 2014 is at a significantly lower level than in 2007. The development of Romania's relative performance to the EU has closely followed the development of the innovation index. Over time, the relative performance has worsened from 46% in 2007 to 37% in 2014.

Romania is performing well below the average of the EU for all dimensions and almost all indicators. The weakest relative performance in terms of dimensions is Linkages and entrepreneurship while in terms of indicators the worst relative performance is observed for PCT patent applications and PCT patent applications in societal challenges.

Romania performs similar to the EU average for a number of indicators, in particular new doctorate graduates, Exports in knowledge-intensive services and Youth with upper secondary level education.

Performance has increased for most innovation dimensions, especially Linkages and entrepreneurship and Intellectual assets, and for about half of the indicators. High growth is observed for Community designs (29%) and Community trademarks (22%). The strongest declines in performance are observed in Sales share of new innovations (-21%) and Venture capital investments (-20%)" (Regional Innovation Scoreboard, 2015: 67).

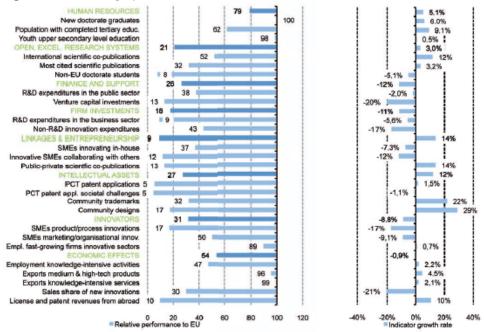


Figure 2. Innovation performance indicators in Romania

Discussing about regions, according to the EU (2014:17), the regions in Romania are distributed as follows: moderate innovator: -1, modest innovator: 7.

Taking into consideration innovation performance, an analysis over time of the regional evolution reveals an oscillating behaviour, as described in Table 4.

| Number regions | | | | | | | | |
|-------------------------------|-----------------------|--------------------------------|---|---|---|--|--|--|
| 2004 2006 2008 2010 2012 2014 | | | | | | | | |
| 1 | 2 | 2 | 1 | 1 | 1 | | | |
| 7 | 6 | 6 | 7 | 7 | 7 | | | |
| | 2004 1 7 | 2004 2006 1 2 7 6 | | | | | | |

Table 4. Evolution of regional innovation performance for Romania

Source: EU (2014: 19)

The analyses show changes evaluated as 8.7% for social innovation performance in Romania, although, per ensemble, we should accept the conclusion that "modest innovators indicate that at regional level there is no convergence of innovation performance: performance differences between regions seem to become larger not smaller" (EU, 2014:19).

Source: Regional Innovation Scoreboard (2015: 67)

However, in 2014, the overall trends of development for regional innovation in Romania are in consensus with the European ones, (EU, 2014), highlighting the situation presented in Table 5.

 Table 5. Trends of development for regional innovation performance in Romania

| Levels of growth of regional innovation performance | Number of regions |
|--|-------------------|
| 2.5% - 15% | 4 |
| 0% - 2.5% | 2 |
| -2.5% - 0% | 1 |
| -20%2.5% | 1 |

Source: EU (2014: 19).

The survey in the framework of the study "Analysis of actual status of reporting the performance in the field of innovation and technologic transfer and elaboration of methodologies and instruments in view to improve the reporting systems and procedures", the barriers faced by development of innovative activities, innovative projects or for decision-making not to innovate were identified. So these barriers refer to: costs (lack of funds in the organization, lack of funds from outer sources, too high costs for innovation, factors related to accumulation of knowledge (lack of skilled employees, lack of information concerning technology, lack of information about market needs, difficulty in finding adequate partners in view to cooperate) and market-based factors: market dominated by other organizations, oscillating demand of innovative goods and services (MRDPA, 2012:55).

We should also add the lack of a culture for innovation as well as the low preoccupation of local authorities for stimulating the social innovation.

3.2. A new model for analysis of regional innovation

Innobarometer is a report about innovation in development regions, analysing and ranking the regions' capacity to create and maintain an environment supporting innovation at the level of companies. The innovation score of regions is presented comparatively in the eight development regions, based on 68 criteria (including also indicators from the European Innovation Scoreboard) and a methodology created by the Technologic Information Center IRECSON.

In view to obtain a comprehensive image of regional innovation, an evaluation model was created, based on 5 innovation factors: potential for innovation management, potential for knowledge creation, capacity of innovation and integration in a relational system, copyright. Each factor was divided in sub-factors, 16 in total, and criteria were assigned to each sub-factor: 65 quantitative criteria and 3 qualitative criteria. The innovation score at regional level was obtained by aggregating the results.

Bucharest-Ilfov region has the highest innovation score, both general and on each innovation factor. In general, the other development regions have different scores. Analysing the innovation factors, after Bucharest-Ilfov region, North- East region and Center region have the higher scores, while West region has the lowest score.

| Regions | Score | General rank | Potential for innovation management | | Potential for knowledge creation | | Capacity of innovation and integra- tion in a rela- tional system | | Perforn of inno activitie | vation | | ght |
|---------|-------|-----------------|---|------|--|------|---|------|---------------------------------|--------|-------|------|
| | | | score | rank | score | rank | score | rank | score | rank | score | rank |
| BI | 72,96 | 1 | 62,39 | 1 | 100 | 1 | 64,00 | 1 | 66,44 | 1 | 81,04 | 1 |
| NE | 37,19 | 2 | 53,42 | 2 | 23,32 | 4 | 57,02 | 2 | 47,98 | 7 | 21,73 | 6 |
| С | 31,43 | 3 | 52,61 | 7 | 14,80 | 8 | 56,00 | 3 | 44,51 | 3 | 12,44 | 2 |
| S | 30,95 | 4 | 33,05 | 5 | 12,46 | 2 | 42,37 | 5 | 39,60 | 6 | 12,03 | 3 |
| SE | 28,84 | 5 | 30,98 | 6 | 8,87 | 7 | 42,10 | 4 | 37,88 | 2 | 11,18 | 7 |
| SW | 28,75 | 6 | 29,63 | 3 | 7,72 | 6 | 38,31 | 8 | 35,58 | 4 | 7,89 | 8 |
| NW | 27,13 | 7 | 25,90 | 4 | 5,14 | 3 | 38,24 | 7 | 31,43 | 8 | 7,66 | 4 |
| W | 25,11 | 8 | 22,24 | 8 | 2,74 | 5 | 21,30 | 6 | 26,21 | 5 | 4,24 | 5 |

 Table 6. Regional innovation score in 2011

Source: MRDPA (2012), p. 55.

3.3. Towards a complex framework of regional social innovation in Romania

3.3.1. Social innovation – implicit approach for the Regional Development Strategy

In the last decade, the strategic regional development benefited of multiple documents issued by the Government of Romania or Agencies for Regional Development, operating at the level of each development region.

However, the socio-economic analyses of regions emphasised low development levels as well as important regional disparities. No special approach was achieved for social innovation, being often included in general topic of research and innovation or in the context of highlighting the need to implement social policies aimed to support social development on specific topics such as health, education, social environment etc.

MRDPA (2012) achieves a detailed analysis on the social and economic problems, accomplishing also relevant inter-regional and intra-regional comparisons.

Thus, several characteristics derive in view to trigger adequate social innovation policies:

- general trend of population ageing;
- increasing the inter-regional mobility of population;
- decreasing the share of active population in total population;
- oscillating unemployment rate, increasing due to the effect of global economic crisis;
- important regional disparities on regional GDP per capita (higher rate of 3/1 between BI and NW);
- the policies for supporting and promoting entrepreneurship did not succeed to stop the decrease of the number of SMEs;
- low interest of companies for the activities of research and innovation;
- accelerated diminishing of infrastructure for education in schools.

MRDPA (2012) substantiates also the Strategic National Framework of Reference, containing elements of regional strategy until 2020.

Based on the priorities set up by MRDPA (2012), a general framework of reference for a social innovation strategy at regional level could be substantiated.

| Priority for regional development | Processes and products of social innovation |
|--|---|
| Integrated sustainable urban | -social initiatives for environment protection and biodiversity |
| development | -supporting and stimulating social cohesion, social inclusion |
| | -new instruments of local governance (administrative innovation) |
| | -developing local social entrepreneurship |
| | -urban regeneration |
| Improving the energy efficiency of | -initiatives on reducing CO2 emissions according to Europe 2020 Strategy |
| public and residential buildings | -promoting and using new technologies for reducing the energy consumption |
| Developing the infrastructure of | -monitoring the quality of public transport |
| regional and local importance | -promoting alternative services of education and lifelong learning, health and |
| с . | social security |
| | -developing prevention programmes (counselling, mediation) in the field of |
| | social security |
| Promoting social inclusion and | -promoting the interests of marginalised community and ensuring main |
| reducing poverty | services and decent life conditions |
| | -stimulating the employment through social economy |
| | -activity of integrated community development (information, counselling, mediation) |
| Improving the businesses with | -activities to stimulate the economic competitiveness, development of |
| regional and local importance | infrastructure for technologic innovation and research |
| | -extending and diversifying the social enterprises |
| | -developing innovative systems for public affairs, marketing and services |
| Sustainable development of tourism | -developing adjacent social services in view to stimulate the activities of tourism |
| | -protection of natural, cultural patrimony |
| | -sustainable valorisation of touristic potential |
| | -promoting the territorial and community brand |
| Improving the environment | -combating pollution, increasing the quality of water services |
| conditions at regional and local level | -rehabilitation of polluted and abandoned industrial sites |

Table 7. General framework of reference for a social regional innovation strategy

Source: authors, by processing MRDPA (2012).

3.3.2. Interregional correlations

The national and European statistic databases do not provide specialised data concerning social innovation. However, in the latest 5-6 years, the statistics has presented data on overall innovation divided on various criteria.

Considering that service innovation represents the closest approximation for social innovation, we have extracted regional statistic data for Romania (Table 8) during the period 2006-2012.

| Year | | Innovative services (%) | Of which | | Product | Process | Mixed | |
|----------|----|-------------------------------|---------------------------|-------------------------------|---------------------|-------------------|-------------------|-------------------|
| (Period) | | | Technologic innovation | Non-technologic innovation | Mixed innovation | innovation (%) | innovation (%) | innovation (%) |
| 2006- | NW | 25.70 | 16.85 | 43.68 | 39.47 | 21.74 | 48.22 | 30.04 |
| 2008 | С | 25.90 | 17.87 | 32.38 | 49.75 | 19.46 | 25.57 | 54.97 |
| | NE | 51.10 | 7.57 | 62.15 | 30.28 | 11.57 | 29.17 | 59.26 |
| | SE | 42.70 | 38.37 | 13.20 | 48.43 | 3.75 | 37.91 | 58.34 |
| | BI | 25.10 | 26.50 | 37.10 | 36.40 | 11.87 | 29.32 | 58.81 |
| | S | 34.20 | 9.68 | 59.48 | 30.84 | 15.81 | 31.64 | 55.55 |
| | SW | 20.40 | 24.49 | 48.17 | 27.34 | 8.14 | 46.51 | 45.35 |
| | W | 16.70 | 22.65 | 39.23 | 38.14 | 24.77 | 46.79 | 28.44 |

Table 8. Service innovation in development regions of Romania

| Year | Region | Innovative | Of which | | | Product | Process | Mixed |
|----------|--------|-----------------|---------------------------|-------------------------------|---------------------|-------------------|-------------------|-------------------|
| (Period) | | services (%) | Technologic innovation | Non-technologic innovation | Mixed innovation | innovation (%) | innovation (%) | innovation (%) |
| 2008- | NW | 26.40 | 13.49 | 54.70 | 31.81 | 12.76 | 16.49 | 70.75 |
| 2010 | С | 22.50 | 13.90 | 55.60 | 30.50 | 22.14 | 29.01 | 48.85 |
| | NE | 49.40 | 7.50 | 81.67 | 10.83 | 3.61 | 34.09 | 62.30 |
| | SE | 37.80 | 26.56 | 37.64 | 35.80 | 8.15 | 32.96 | 58.89 |
| | BI | 35.70 | 6.76 | 62.99 | 30.27 | 18.97 | 27.70 | 53.33 |
| | S | 26.10 | 9.46 | 69.32 | 21.21 | 11.11 | 29.63 | 59.26 |
| | SW | 30.90 | 1.96 | 82.84 | 15.20 | 31.43 | 22.86 | 45.71 |
| | W | 17.50 | 10.49 | 61.73 | 27.78 | 20.96 | 17.74 | 61.30 |
| 2010- | NW | 26.10 | 15.17 | 49.19 | 64.36 | 17.25 | 32.36 | 50.39 |
| 2012 | С | 23.60 | 15.88 | 43.99 | 43.13 | 20.08 | 27.29 | 52.63 |
| | NE | 50.70 | 7.54 | 71.91 | 20.55 | 7.59 | 31.63 | 60.78 |
| | SE | 39.80 | 32.46 | 25.42 | 42.12 | 5.95 | 35.44 | 58.61 |
| | BI | 25.80 | 16.62 | 50.05 | 33.33 | 15.42 | 28.51 | 56.07 |
| | S | 29.30 | 9.57 | 64.40 | 26.03 | 13.46 | 30.64 | 55.90 |
| | SW | 26.40 | 13.23 | 65.51 | 39.37 | 19.78 | 34.68 | 45.54 |
| | W | 17.20 | 16.57 | 50.48 | 32.95 | 22.86 | 32.26 | 44.88 |

Source: authors (through processing statistic data of the National Institute of Statistics).

As an overview, the situation is compatible with most European regions. However, we should express mistrust concerning the truthfulness of some data. We find examples sustaining this observation by comparing indicators between regions where the differences are even of 50%.

Anyway, the interregional statistic correlations are high, demonstrating, one the one hand, a similar trend for the evolution of social innovation in the development regions of Romania, and on the other hand, the specificity resulting from different resources in the regions.

An analysis on macro regions shows correlations of the same size inside them, precisely what we also have found out at the level of the historical regions of Romania.

We find the lowest level of correlation (0.485) between the North-West and South-East regions and the highest levels of correlation (0.899) between Bucharest-Ilfov and South regions and (0.871) between North West and West regions.

The correlations are significant at 0.01 level (2-tailed).

Conclusions

The current paper achieves a brief presentation of the state of the art on social innovation in Romania in the context of deepening the regionalization process

Evan if in the paper we have not succeeded a presentation of stages of innovation in Romania, the current stage represents without doubt a positive evolution for several aspects:

- increasing the preoccupations of the public and private sector for social innovation;
- associating the preoccupations for social innovation to those on enhancing social responsibility, creating networks of social enterprises and in general substantiating the processes of change and social adaptation;
- conceptualizing and creating tools specific for promoting social innovation (strategies, plans on medium and long term);
- strengthening the flow of transfer of good practices on social innovation;

 monitoring the results of social innovation, diversifying the contents and forms of expression of social innovation.

Similar to other European states, the regionalization process in Romania substantiates clearer the possible directions for the development of social innovation.

Better valorisation of local resources in view of development represents at the same time an important resource of social innovation.

Efforts should be added for the awareness of the importance of social innovation by authorities, organizations and citizens as well as viable mechanisms for transferring the European good practices in the field of social innovation should be implemented.

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