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SMART SPECIALISATION STRATEGY: THE TERRITORIAL DIMENSION OF RESEARCH AND INNOVATION REGIONAL POLICIES

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Abstract. The paper aims at investigating how EU Regions should incorporate the place-based approach (Barca, 2009) to plan their Research and Innovation Smart Specialisation Strategy (RIS3) within the current Programming Period 2014-2020. Smart Specialisation Strategies become a key factor to stimulate private investment, and “should be integrated into regional development strategies in order to ensure an effective partnership between civil society, businesses and public authorities at regional, national and European levels” (EC, 2010). The link envisaged between S3 and place-based approach is based on their characterization of a development policy, and on the value of the different geographical, social, economic features that territories can express (Foray, 2000). The transformation of these two theoretical approaches into policy is recognizable in two drivers for programming the Agenda 2020. The first is the Theory of Change, which implies the use of “indicators” related to the value that different territories can express to control and measure the expected change. The second is more related to stimulate at regional level an integrated approach to reach a critical mass of the investment effects/impacts. The MAPS-LED Research Project (Horizon2020) perspective is described as a way to investigate how is possible to regenerate local economic areas through S3 considering place-based approach.

Keywords: MAPS-LED, RIS3, S3, Territorial Dimension

1. INTRODUCTION

The aim of this paper is to highlight how European Regions have incorporated the Place-based approach to plan their Research and Innovation Smart Specialisation Strategy (RIS3) within the current Programming Period 2014-2020 taking into account the “territorial dimension”. The European Union is trying to come out of the recent and severe economic crisis that caused serious socio-economic consequences at the macro and micro level. Measures set by the European Commission have been inspired by the so-called “austerity principles”, pushing the academic and political debate towards the impacts and the effectiveness of regional development policies. National and Regional governments are called to set up innovative solutions in order to boost economic growth and development aiming at empower Cohesion Policy and reduce disparities among European regions. The interest generated by the debate has highlighted the special role that the regional governments play in pushing development towards innovation, being more aware that no change is possible without choices relevant for the context. In this sense a “new” approach based on Smart Specialisation Strategies (S3) drives toward this direction, no more a perspective designed within the Operational Programmes just in responding to the general requirement of European Commission. This approach could represent an interesting way to reach the goal of “Territorial Cohesion” by overcoming the conflict that a European strategy could generate in the implementation of territorial transformations, due to the place dimension of Public-Private investment allocated within Operational Programmes of Structural Funds. The first part of the paper is focused on the territorial dimension of European Policies starting from the introduction of the European

Spatial Development Perspective (ESDP, 1999) and the Place-based concept (2009). Since the 1980s the territorial dimension has been taken into account by the European Union and, from the 1990s, the “spatial approach” came to the light thanks to the ESDP and its “polycentric” view for the spatial development of European Regions. The second part is focused on the Smart Specialisation’s concept introduced by Foray (2009) and the place-based approach introduced by Barca (2009), which became the paradigm of the Cohesion Policy. S3 represent a turning point for the European Cohesion Policy. The increased attention toward regional “specialisations” not just for the regional dimension, as in the past, but toward the external dimension, represents a key point in mitigating negative economic effects deriving from globalisation processes. It is arguable that territorial dimension is crucial in RIS3 plans implementation. The third part of the paper is focused on the implementation of National and Regional RIS3 Plans, introducing the MAPS-LED Research Project (Horizon 2020–MSCA Actions-RISE) perspective as a way to investigate how is possible to regenerate local economic areas through Smart Specialisation Strategies taking into account place-based approach.

2. TERRITORIAL DIMENSION AND COHESION POLICY: FROM POLYCENTRISM TO PLACE-BASED APPROACH

Since the 1980s, the main aim of the Cohesion Policy has been to strengthen the economic and social cohesion in order to reduce disparities between more developed and underdeveloped regions. Although the term “territorial” is not the main word emerging from the Cohesion concept, it is (and it was) embedded and implicit and it is crucial in order to reduce the disparities (also territorial not only socio-economic) among European regions (it was included in EC Treaty in 1997, art. 3 of TEU and art. 2 of TFEU). Territorial Cohesion principle is about ensuring the harmonious development of all these places and about making sure that their citizens are able to make the most of inherent features of these territories (EC, 2008). As stressed by D. Hübn r (Böhme et al 2011), “it is a fundamental objective of regional planning in the Union and provides the *raison d’être* for regional development policy”. The European Union is characterised by a huge territorial diversity among regions that makes necessary the inclusion of territorial aspects in implementing European Policies. “Territorial Cohesion, if taken seriously and on condition that is given a broader interpretation than simply the provision of services of general economic interest, will feed into existing EU Policies by adding a territorial dimension to them, thereby making them more effective and efficient” (Zonneveld and Waterhout, 2005 quoted in Waterhout 2008: 83). According with Waterhout (2008) when referring to policies it is more appropriate to use the term “spatial” rather than “territorial” assuming that “territory refers to socially constructed places, whereas spatial refers to less clearly defined areas, which seem to be of a larger scale encompassing territories” (Waterhout 2008: 14). This conceptual issue has been the core of the scientific debate that have brought to consider the spatial dimension in EU policies and to take into account the spatial impacts of their implementation. In 1999, thanks to the European Spatial Development Perspective (ESDP), European Union Members States defined the relevance of the spatial dimension in order to achieve a more balanced and sustainable development of the European Territory. “Polycentric development is the only substantive spatial planning concept in the European Spatial Development Perspective (ESDP) with the potential to integrate the interests of the many parties involved” (Waterhout 2008: 56). The ESDP Document represented the attempt to put spatial planning on the European policy map (Waterhout 2008). One of the main issues that is animating the current debate (see Faludi 2015) is represented by the deep differences among European Member States, which go beyond the simple territorial characteristics of each European Regions. In 2007 the Territorial Agenda of the European Union (Towards a more

competitive and Sustainable Europe of Diverse Region) confirmed the will to “promote a polycentric territorial development of EU” aiming at the territorial integration and securing a better quality of life with respect of the regional and local potentials. The EU Cohesion Policy has to take into account the territorial needs and characteristics in responding more effectively to the specific geographical challenges and opportunities of the regions and cities (Territorial Agenda of the Union 2007). The Territorial Agenda (2007) was integrated by the Leipzig Charter on Sustainable European Cities, which highlighted the relevance of the urban dimension and the need of an integrated urban development policy, making possible the integration between (urban) development policy and territorial cohesion policy in order to achieve a sustainable development. As defined in the Leipzig Charter (2007) the integrated urban development policy is a process in which the spatial, sectorial and temporal aspects of key areas of urban policy are coordinated. In this perspective cities acquired a central role. They have been assumed as “parts of a polycentric pattern to ensure their added value for other cities in rural and peripheral areas” (Territorial Agenda of the Union 2007). Cities and regions then, arise as key elements for a long-term sustainable development. This new approach has paid attention to crucial cities’ issues of the last decades: the need to ensure high-quality public spaces, the need to modernise the infrastructure networks, innovative educational policies, set up new strategies for upgrading the physical environment, strengthen local economy and labour market policy, efficient and affordable urban transportation. Integrated Urban Development is not just an urban policy focused on spatial planning declined by each member state according with its own administrative structure, it is a policy opened to the integration with other European policies and Funds. The introduction of the Europe 2020 strategy in 2010, which can be seen as the general Road Map of EU policy targets within this decade (Schmitt, 2011), contributed to the review of the Territorial Agenda drawn up in 2007. The first part reinforces the relevance of the Territorial Cohesion for the Union because “it enables equal opportunities for citizens and enterprises, wherever they are located, to make the most of their territorial potentials” (Territorial Agenda 2020: 4). Since the end of the 1980s, urban dimension has been taken into account in the European Structural Funds as a result of the recognition of cities’ role in economic growth and competitiveness (Atkinson, 2014). During the middle of 1990s, the European Commission launched the URBAN Programme, an initiative of the European Regional Development Fund (ERDF) to achieve sustainable development in distressed urban districts, characterised by socio-economic and environmental decay. During the programming period 2000-2006, within the second part of the URBAN II programme, was introduced the URBACT network, which main aim was to support and continue the exchange of information on sustainable urban development across Europe. In 2007-2013 programming period, the ERDF included a “stronger urban element” (Atkinson, 2014: 4), providing through the integration of Structural Funds (European Social Fund and Cohesion Fund) a range of initiatives to implement urban development projects (one of the recommendations of the Leipzig Charter was to “coordinate and spatially focus the use of funds by public and private sectors players”). Thanks to the cooperation with The European Central Bank (ECB), the European Commission developed a set of financial engineering mechanisms aiming at contributing to the implementation of the integrated urban development approaches and strategies. This is the case of the JESSICA (Joint European Support for Sustainable Investment in City Areas) and JEREMIE Funds (Joint European Resources for Micro to medium Enterprises), two financial instruments set by the European Central Bank (ECB) and European Commission for leveraging private capitals into the implementation of integrated urban development strategies (Leipzig Charter, 2007). Along this overview on the territorial dimension in implementing EU Policies two main key aspects arise: the “territorial potentials” and the “equal opportunities” principles that represent the basis of the Place-based approach introduced by Barca (2009), considered the core of the European regional development policy

for the programming period 2014-2020 together with the concept of Smart Specialisation Strategy. This new “regional-economic thinking”, as defined by Faludi (2015), is a new paradigm emerged thanks to the Barca Report (2009) that highlight the importance of local contexts on grounds of both efficiency and equity (Faludi 2015). The need to rethink economic development strategies, both on national and regional/local level, remarks the importance of factors “such as human capital and innovation (endogenous growth theory), agglomeration and distance (new economic geography), and institutions (institutional economics) (Barca et al. 2012: 136). These factors are the results of a period of radical political, institutional and economic change started in the late 1980s that brought to the revision of regional economic development policies. Within this context “innovation” acquired an increasing importance as a cross-cutting process able to empower the potentials of places in achieving a more balanced and sustainable development.

3. THE INTRODUCTION OF SMART SPECIALISATION STRATEGY AS POLICY PARADIGM: FROM A THEORETICAL CONCEPT TO EUROPEAN POLICY

The introduction of the concept can be dated back to the European Council of Lisbon (2000) where the European Union set the clear objective to develop a knowledge-based economy. Thanks to the “Knowledge for Growth Group”, in 2009 the “Smart Specialisation Concept” came out (Foray et al. 2009, 2011). According with Dominique Foray (2015), smart specialisation concerns “the capacity of an economic system (a region for example) to generate new specialities through the discovery of new domains of opportunity and the local concentration and agglomeration of resources and competences in these domains”. The original smart specialisation concept was mainly focused to elements aiming at maximise the economic potential in filling the transatlantic productivity gap through the valorisation of entrepreneurial actions (McCann, 2015). Indeed, the core of the “Smart Specialisation” concept is represented by the “entrepreneurial discovery” that can be considered a sort of pre-condition in materialising innovation. Foray (2009) defines it as an essential phase, the crucial link for reorienting and renewing a system. Thus, the entrepreneurial discovery phase is crucial for several factors: first of all, a policy based on the entrepreneurial discovery process as priorities identification is not a policy that says “what to do” but “how to do”, underlying the relevance of the process than the product. The entrepreneurial discoveries effects can be maximised if considered in the potential policy actions (Foray, 2009). Thanks to these information, governments have to choose new activities according with their potential impacts, feasibility, proximity to market, relevance for the regional economy, number of actors involved etc. In the S3 process, sectors are not a key area of intervention. Relevant action relates to activities that enable being aware of regional knowledge economy that can be considered as basis for S3. National and regional authorities across Europe shall design smart specialisation strategies starting from entrepreneurial discovery process in order to use more efficiently European Structural Investment Funds (ESIF), activate synergies among EU, national and regional policies and increase public and private investments (EU, 2012). If we consider the theoretical background of S3 (Foray, 2000), the link envisaged between S3 and place-based approach is based on their characterization of a development policy, and on the value of the different geographical, social, economic features that each territory can express. However, Europe still presents deep differences: regions more competitive and able to compete in the globalised market and regions with unsolved structural weaknesses, highlighting an “innovation gap” among them. Funds need to be coordinated and integrated with other European tools in supporting innovation and research, particularly the Community Innovation Program (CIP) and Horizon 2020 Programme (The European Research Program for the period 2014-2020). S3

allow the setting-up of a strategy focused on innovation, giving a valid answer to problems of regions characterised by unemployment and low growth rate. In this perspective, the concept of “strategic intelligence”, i.e. the capability to develop a responsive mode to change complexity, is necessary in selecting high added value activities offering the opportunity to reinforce regions competitiveness. S3 offer the opportunity to link businesses, research centres and universities in order to identify regional specialisation sectors and the hampering factors of this process. The shift of smart specialisation, from concept into policy, came with the new Rules for the European Structural Funds, the Union’s financial tools in achieving European Cohesion Policy. Particularly, Article 2 of the General European Structural Funds Regulation no. 1303/2013 defines the Smart Specialisation Strategy as “national or regional innovation strategies which set priorities in order to build competitive advantage by developing and matching research and innovation own strengths to business needs in order to address emerging opportunities and market developments in a coherent manner, while avoiding duplication and fragmentation of efforts; a smart specialisation strategy may take the form of, or be included in, a national or regional research and innovation (R&I) strategic policy framework” (EU Regulation No. 1303/2013).

3.1 The territorial dimension in research and innovation policies: the RIS3 plans

The European Commission requested to each European region to enlighten in an action plan for RIS3 the regional strategies for the programming period 2014-2020, in order to respond the local demand of innovation and to stimulate new sources for a self steady development. The role of the city together with the horizontal perspective of sustainable urban development, could better drive an effective implementation and adjustment of RIS3 regional plans. The current phase allows outlining the level of completeness, relevance and consistence of the selected actions by each European region to drive economic change through smart specialization strategies/RIS3. National/regional research and innovation strategies for smart specialisation (RIS3) are integrated, place-based economic transformation agendas focused on five key elements (EU, 2012): (i) policy support and investments on key national/regional priorities, challenges and needs for knowledge-based development, including ICT-related measures; (ii) country's/region's strengths, competitive advantages and potential for excellence; (iii) support for technological as well as practice-based innovation and aim to stimulate private sector investment; (iv) stakeholders' involvement and encourage innovation and experimentation; (v) evidence-based and inclusion of sound monitoring and evaluation systems.” (RIS3 Guide 2012). The Barca Report emphasised the need to focus on fewer priorities, to be more transparent, to make sure that programme success is verifiable and to better coordinate place-based policies (Barca, 2009). This step has contributed to transform smart specialisation from a technology and research concept to a place-based concept attuned to regional policy (McCann and Ortega-Argilés, 2013). The Barca report (2009) highlights how regions opted for similar types of innovation priorities, increasing the risk of fragmentation and lack of critical mass, which will prevent regions from developing economies of agglomeration and positive spill-overs. “In order to overcome these problems of fragmentation, mimesis and lack of critical mass, great importance has been given to urging regions to foster new activity sectors or industries, by investing in R&I in a limited number of areas with the greatest strategic potential” (Sörvik and Kleibrink, 2015: 4). In the design and implementation phase of RIS3 process, monitoring and evaluation activities play a central role. In 2011, the S3 Platform was established with the aim to support regions in the preliminary phase of their Smart Specialisation Strategies, particularly for “Research and Innovation Strategies for Smart Specialisation” (RIS3). The Platform has the peer review task of proposed RIS3 and to facilitate

RIS3 knowledge and experiences exchange and is located at the “Institute for Prospective Technological Studies (IPTS) of Seville (ES), one of the European Commissions’ Joint Research Centres. The role of the S3 Platform is to provide information, methodologies, expertise and advice to national and regional policy makers, as well as promote mutual learning, trans-national co-operation and contribute to academic debates around the concept of smart specialisation (S3 Platform, 2015). The platform has set up an evaluation methodology in supporting the construction of regional RIS3 plans and in monitoring those critical factors that represent an obstacle for the plan implementation. This methodology is based on the definition of a relevant set of criteria in order to evaluate the performance of each RIS3 plan elements. It helps to highlight the scientific and methodological appropriateness of the plan, highlighting the peculiarities of the regional context according with the 3 critical factors selected for each step of the process (six steps). The evaluation platform set up by the Seville Platform, in which RIS3 strengths and weaknesses are evident and comparable, allow a better sharing of results in orienting the changes to produce. The Seville Platform, in order to support and address context analysis in the conceptual framework of S3 in regional plans, has developed six tools for the monitoring activity: the EYE@RIS3, the ESIF viewer, the ICT monitoring, the Regional Benchmarking, the EU Trade, the R&I Regional Viewer. These tools help in monitoring the adopted RIS3 of European Regions and the outcome they will produce thanks to specific databases. Particularly, the Regional Benchmarking database aims at identifying the regions’ positioning in the European regional context. This positioning is explained through the “distance index” for each European region with the aim to capture structural similarities in the European context and to guide RIS3 tools toward the so-called competitive advantages. The methodology to obtain the synthetic index has been elaborated by the JRC Technical Support and is reported in the S3 working paper series no. 03/2014 “Regional Benchmarking in the smart specialisation process: Identification of reference regions based on structural similarity” (Navarro et al. 2014). It is arguable, observing that the theoretical basis has shifted from benchmarking to performance analysis, for selecting those factors able to give a picture of how competitive advantage is perceived or boosted in the global market. Contemporary, the inclusion of structural context variables is having a central role in support policy decision in the difficult linkage between innovation systems and local economic development. Despite the relevance of monitoring and evaluation activities for S3 implementation, during the last two years the academic and policy-makers debate was characterised by pro-contra positions. The pro arguments start from the conception of S3 as a territorial strategy going beyond policy. Monitoring and evaluation should focus on the capability of a region to achieve its goals and to monitor and evaluate the policy-mix, not individual policies (S3 Platform, 2015). The contra arguments address the importance of the process of monitoring itself, focusing on the role played by regions, the approaches to monitoring and the importance of traditional rigorous monitoring techniques, “given the experimental, entrepreneurial and innovative nature of smart specialisation” (S3 Platform, 2015). In both cases the entrepreneurial discovery process plays a central role, because it will shape the regional system through priority identification and setting (market processes are central in producing the information about the domains for future priorities) (S3 Platform, 2017). The analysis of the Fraunhofer Institute for Systems and Innovation Research ISI (2016) on EDP perception by policy-makers reveals how EDPs are entering in a second phase of discussion characterised by consultation and exchange, rather than concrete decision making. The survey (2016) highlights how, in the majority of cases, the process is led by universities rather than local firms and businesses, with a scarce presence of civil society organisations. The leading role played by universities could affect the expected outcome related to the entrepreneurial discovery process. It could influence the capability of a territory to produce innovation rather than empower and valorise the local specialisations in finding new market

opportunities. In some case, universities are complemented by intermediaries such as clusters, providing a business sector’s perspective thanks to the presence of firms and businesses (ISI, 2016).

4. TERRITORIAL AND SPATIAL DIMENSION IN S3 IMPLEMENTATION: THE MAPS-LED PROJECT PERSPECTIVE

The territorial dimension is a key element of European Cohesion Policy as emerged from the official documents and scientific literature in the field. However, two questions seem to be less investigated within RIS3 plan: the spatial perspective, in physical, economical and social dimension, and the social perspective, in terms of expression of continuously changing behaviours, which sometimes is not captured from the governance structures (MAPS-LED, 2017). Some concerns arose among scholars and practitioners about the real consideration of territorial dimension in RIS3 plans proposed by national and regional authorities. This consideration leads to better understand and investigate the implications of the territorial dimension (intended as the combination of economic, social and spatial factors) dimension of such policy paradigm (see Figure 1).

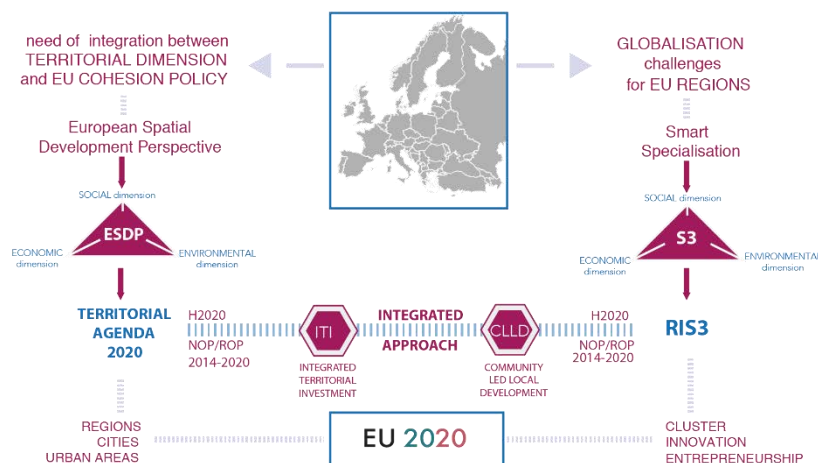


Figure 1. Territorial Dimension and S3. Source: MAPS-LED Project

The MAPS-LED project reflects the progressive attention given to Smart Specialization Strategies (S3) in boosting the implementation of Europe 2020 strategy, at regional and local level. S3 are designed to capture knowledge and innovation dynamics closely connected with characteristics of context. The main challenge is to reverse the current and persistent gap among lagging regions in Europe, which remain at same development stage despite long-term structural funds in research, innovation and technological development. In this sense, contexts conditions, especially in cities located in lagging regions, can significantly affect the implementation of complex policies such as S3 (MAPS-LED, 2017: 12). The joint Exchange programme MAPS-LED is based on a research proposal finalized to examine how smart specialization strategies (S3) to regenerate local economic areas can be implemented, according to the new agenda of Europe 2020. This can be largely achieved by incorporating a place-based dimension. The main objective of the MAPS-LED project is to build and test an evidence-based methodology for recognizing and assessing emerging and potential of S3 in terms of spatial, social and environmental factors. The research project will map out local needs and opportunities in a variety of contexts that could drive regional policy interventions. The resulting S3 will not only emphasize “Key Enable Technologies”, but will also empower the

local innovation process. The MAPS-LED process starts from a place-based framework and will include two important drivers: 1. Cluster policy and cluster-based analysis, 2. Innovative milieu in terms of the local value chains based on the urban-rural linkages. The MAPS-LED project will be built in order to connect three important key-factors including: Governance (in terms of cluster policy and based cluster analysis); Localization (in terms of place-based approach); Territorial network (in terms of innovative milieu based on urban-rural link). The general framework of the research project is organised across four main topics (see Table 1).

Table 1: MAPS-LED Project (Horizon 2020) Main Topics

Topic	Key aspects to investigate
<i>Research and Innovation Strategies</i>	Technology transfer based on "business process"; Business models and partnership research groups and strategic action plan; Entrepreneurship in the research community and social innovation; Clustering entrepreneurial;
<i>Spatial Planning Factors suitable to be mapped in physical terms</i>	Proximity and accessibility (to gateway cities, to infrastructural nodes, to HEI Centres, to broadband facilities...); Spatial pattern ("boundary" of the cluster, network of connections, localisation of place of production and distribution...); Size (dimensional data of the cluster) Critical mass (number of enterprises, size of urban centres involved, number of jobs created....);
<i>Cluster Policy Factors related to the governance systems of the clusters:</i>	Institutional networks, entrepreneurial networks, the global-local nexus between the local area and global systems, the organisation of local value chains, a suitability to be mapped through stakeholder analysis;
<i>Social Innovation Responses to social needs that are developed in order to deliver better social outcomes</i>	(Spatial) identification and GIS mapping of new/ unmet/ inadequately met social needs, related to vulnerable groups.

The originality and innovation in the methodological approach stems from the spatial-led approach to the analysis of US clusters, allowing researchers to draw evidences for a S3 place-based theory testing and implementing pilot S3 areas in European regional contexts. Cluster-based analysis is structured in a spatially oriented logical frame, where the spatial dimension is treated as a combination of the territorial dimension rationale within Cohesion Policy and place-based approach in reforming the Cohesion Policy, both related to Europe 2020 strategy. The cluster based analysis conducted in Boston (case study area) finds its justification in the spatially-led approach to innovation and knowledge dynamics, because cluster includes in its occurrence the specialization process towards innovation. Spatializing cluster acquires the meaning to spatialize innovation, namely, to investigate the nexus between innovation and space/place. The research activities demonstrated that the cluster geographic concentration is characterized by a multi scalar and multivariable geography, in the sense that in each territorial dimension (from state level to city level), clusters provide a conceptual framework to describe and analyse important aspects of modern economies of that territorial dimension. Its role is not to demark a specific area, but to characterize that specific geographic area in terms of innovation, specialization and capacity to activate competitive and comparative advantages (Porter, 1998, 2000; Delgado et al., 2014). Accordingly, the cluster, even with a physical configuration, has been considered as a proxy of innovation concentration because its occurrence is strictly connected (by definition from the Porter's model) to innovation, specialization and job creation (MAPS-LED, 2017b). The research project stages match the implementation of Research and Innovation Strategies for Smart Specialisation (RIS3) regional plans, that are required as ex ante conditionality for Research and Innovation of the current programming period (MAPS-LED, 2017b: 23). The second stage of the MAPS-LED project will take up the final year and will deal with the practice and implementation of the research:

in order to understand the success factors from the US experience on clusters, the selected case studies will be investigated with a view to the S3 concept through an assessment grid based on the above mentioned elements (see table 1), integrated throughout the whole first year research. Multi-criteria approach based on correlation matrix, cluster analysis, hierarchical clustering and Hierarchical Decision Model, and Planning Balance Sheet (PBS) will be applied to analyse, assess and compare: (i) Factors characterizing USA clusters correlated with the EU ones; (ii) Indicators of cluster specialization, spatial factors, organization type; (iii) Success factors with respect to innovation, localization and governance. The data set, ranging from selected data from USA panel information to EU S3 potential data, will be structured in a GIS of Cluster/S3 information system. The proposed methodology under the MAPS-LED project would apply this concept to the wider territorial network and chains, thus allowing to quantitatively assess the potential of the clusters also in social terms and to pave the way to estimate the wider potential of place-based S3 through a two-steps process. The first step aims to develop and test a methodology for Mapping & Assessing Clusters in a place-based and spatial-led perspective. The second step follows the mapping stage and relates to the assessment of the wider impacts of place-based S3, by assessing the clusters' impact in the wider social and environmental perspective, thus leading to discover the extra value generated by the clusters and territorial milieu-nexus.

5. CONCLUSION

Smart Specialisation Strategies represent a turning point for the European Cohesion Policy. The increased attention toward regional “specialisations” not just internal, as in the past, but toward the external dimension represent a key point in mitigating negative economic effects deriving from globalisation processes. Further, the Foray’s perspective, highlights the territorial dimension in terms of “specialisation” of activities that are relevant within a territory (i.e. regional). Regions have to be “aware” of their current assets and their potentials and most of all have to make choices in order to drive the “structural changes”. The contact point between S3 and Territorial dimension seems to occur in 2009 with the publication of the Barca Report, linking the “spatial” issues introducing the place-based approach in contrast with the “spatially-blind” policies. As highlighted by Barca (2009) it is necessary the shift from a “space-blind” to “place-based” approach. This renovated attention to the “place” could reach the overall aim to satisfy efficiency (the capacity of a region to exploit its territorial potential) and equity principles (capacity of each region to provide equal opportunities to their citizens). Although the territorial dimension has always been part of European Policies (at least since 80s and then since 90s in the European Treaties), it was emphasised at the end of 90s with the introduction of ESDP that highlighted the need of “spatial” vision for European territories. In this perspective the territorial dimension become crucial in RIS3 plans implementation. However, two questions seem to be less investigated within RIS3 plan: the spatial perspective, in physical, economical and social dimension, and the social perspective, in terms of expression of continuously changing behaviours, which sometimes is not captured from the governance structures (MAPS-LED, 2017a). RIS3 are in their implementation phase and it is not possible at this moment to establish, clearly, what effects/impacts these strategies will produce in the mid and long terms (MAPS-LED, 2017). The risk of the so-called “me-too effect” is high and this could mean that regions are not taking into account seriously the potentials (economic and social) of their territories combining the “use” of innovation (more than the production of innovation) with a spatial perspective for European regions (MAPS-LED, 2017a: 33). The “territorial” aspect of Smart Specialisation Strategies of Foray’s concept, lies in our opinion, on the “spatialisation” concept, which is understood as a specific activity in a specific space

(region) that has the potentials in contributing to the regional economic growth. Hence, National and Regional Authorities, in implementing Operational Programmes to reach the goals of Europe 2020 Strategy, should focus on an integrated approach, linking together Cohesion, Research and Innovation and Territorial Policies. The expression of the territorial potential is relevant not only for the local dimension but also for the international openness of local markets. A consequence of the complete RIS3 process could be the possibility that the empowerment of local innovation systems could bring toward the entry of SMEs into the Global Value Chain and help the revitalisation of local economic systems (MAPS-LED, 2017a). Faludi (2015) argues that even if the S3 strategy is integrated and effective it could be hard to translate it into a spatially-oriented development policy. The need to develop a multidisciplinary approach to plan smart specialisation strategies emerges as crucial to properly pursue the local economic development's targets. Hence, the MAPS-LED project appears at forefront into this unexplored new research domain (MAPS-LED, 2017a).

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7. REFERENCES

- Atkinson R. (2014), *The Urban Dimension in Cohesion Policy: Past developments and Future Prospects*. Paper presented at a RSA workshop on "The New Cycle of the Cohesion Policy in 2014-2020", Institute of European Studies, Vrije Universiteit Brussels, 24/03/2014.
- Barca, F. (2009), *An agenda for a reformed cohesion policy: a place-based approach to meeting European Union challenges and expectations*, Independent Report prepared at the request of Danuta Hübner, Commissioner for Regional Policy, European Commission, Brussels.
- Barca, F. et al. (2012), *The Case for Regional Development Intervention: Place-Based versus Place-Neutral approaches*. Journal of Regional Science, Vol. 52, No. 1, pp 134-152.
- Böhme K., Doucet P., Komornicki T., Zauzha J., Świątek D. (2011), *How to strengthen the territorial dimension of "Europe 2020" and EU Cohesion Policy*. Warsaw.
- Dąbrowski M. (2014), *Towards Place-Based Regional and Local Development Strategies in Central and eastern Europe?* in: "(Re)appraising place-based economic development strategies" Journal of Local Economy. Vol. 29 Issue 4-5.
- Delgado M., Porter M., Stern S. (2014), *Clusters, convergence, and economic performance*, Research policy, vol. 43, No. 10, p. 1785-1799
- European Parliament (1997), *Treaty of Amsterdam*, amending The Treaty on European Union, The Treaties Establishing The European Communities and Certain Related Acts.
- European Parliament and Council (2013), *Regulation No 1303/2013 of the European Parliament and of the Council of 17 December 2013*
- European Commission (1999), *ESDP. European Spatial Development Perspective. Towards Balanced and Sustainable Development of the Territory of the European Union*, Agreed at the Informal Council of Ministers responsible for Spatial Planning in Postdam, May 1999. Published by the European Commission
- European Commission (2007), *Leipzig Charter on Sustainable European Cities*, Final Draft, 02 May 2007
- European Commission (2007), *Territorial Agenda of the European Union. Towards a More Competitive and sustainable Europe of Diverse Regions*, Agreed on the occasion of the Informal Meeting on Urban Development and Territorial Cohesion in Leipzig on 24/25 May 2007.
- European Commission (2008), *Green Paper on Territorial Cohesion Turning territorial diversity into strength* {SEC (2008) 2550}. Brussels, 6.10.2008 COM (2008) 616 final.
- European Commission (2010), *Regional Policy contributing to smart growth in Europe 2020*, Communication from The Commission To The European Parliament, The Council, The European Economic And Social Committee And The Committee Of The Regions. Brussels, 6.10.2010 COM (2010) 553 final

- European Commission (2011), *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, Hungary.
- European Commission (2011), *Regional Policy for Smart Growth in Europe 2020*, Directorate General for Regional Policy, Brussels.
- European Commission (2012), *Guide to Research and Innovation Strategies for Smart Specialisation (RIS3)*, Available online: <http://s3platform.jrc.ec.europa.eu/s3pguide>.
- European Commission (2013), *The Role of Clusters in Smart Specialisation Strategies*, European Commission, Directorate General for Research and Innovation
- Faludi A. (2015), *Place is a no-man's land*, *Geographia Polonica* Vol. 88, Issue 1, pp 5-20
- Faludi A. (2015), *S3 place-based: Look who is talking*, International Open Panel Discussion, MAPS-LED Research Project H2020, Marie Slowdoswka Curie-RISE Actions, Reggio Calabria, Italy 27-28 May 2015
- Foray, D. Hall B. H. (2009), *Smart Specialisation – the concept*, in: Knowledge for Growth. Prospects for Science, Technology and Innovation. Selected Papers from Research Commissioner Janez Potocnik's Expert Group.
- Foray, D. (2015), *On the economic fundamentals of smart specialization*, International Open Panel Discussion, MAPS-LED Research Project H2020, Marie Slowdoswka Curie-RISE Actions, Reggio Calabria, Italy 27-28 May 2015
- Foray, D. (2015), *Smart specialisation: opportunities and challenges for regional innovation policy*, Routledge, Abingdon.
- ISC (2017), *Cluster Studies*, Institute for Strategy & Competitiveness, Harvard Business School, available at <http://www.isc.hbs.edu/competitiveness-economic-development/research-and-applications/pages/cluster-studies.aspx>
- ISI (2016), *Policy Brief on Smart Specialisation*, Fraunhofer Institute for Systems and Innovation Research, ISI.
- Navarro M. et al. (2014), *Regional benchmarking in the smart specialisation process: Identification of reference regions based on structural similarity*, S3 Working Paper Series No. 03/2014. Technical Report by the Joint Research Centre of the European Commission
- McCann P. (2015), *The regional and Urban Policy of the European Union*, Edward Elgar Publishing Cheltenham.
- McCann P. and Ortega-Argilés (2013), *Smart Specialisation, Regional Growth and Applications to European Union Cohesion Policy*, *Regional Studies*, vol. 49, No. 8, p. 1291-1302
- MAPS-LED (2014), *Multidisciplinary Multidisciplinary Approach to Plan Smart specialisation strategies for Local Economic Development, Horizon 2020 – Marie Swlodowska Curie Actions RISE –2014*
- MAPS-LED (2017), *S3: Research and Innovation Strategies in Cluster Policies*. First Scientific Report, MAPS-LED Project, Multidisciplinary Multidisciplinary Approach to Plan Smart specialisation strategies for Local Economic Development, Horizon 2020 – Marie Swlodowska Curie Actions -RISE –2014
- MAPS-LED (2017), *S3: Cluster Policies & Spatial Planning. Knowledge Dynamics, Spatial Dimension and Entrepreneurial Discovery Process*. Second Scientific Report, MAPS-LED Project, Multidisciplinary Multidisciplinary Approach to Plan Smart specialisation strategies for Local Economic Development, Horizon 2020 – Marie Swlodowska Curie Actions -RISE –2014
- OECD (2009), *How regions Grow: Trend and Analysis*, OECD Report
- Porter M. (1998), *Clusters and the New Economics of Competition*, *Harvard Business Review*, p. 77-90
- Porter M. (2000), *Location, Competition and Economic Development: Local Clusters in a Global Economy*, *Economic Development Quarterly*, No. 1, vol. 14, p. 15-34
- S3 Platform (2015), *PXL. Feedback Report on Monitoring*, Peer eXchange & Learning Workshop, Bologna (Italy)
- S3 Platform (2017), *Entrepreneurial Discovery Process: How does the EDP affect S3 strategies?*, Smart Specialisation Platform, available at <http://s3platform.jrc.ec.europa.eu/entrepreneurial-discovery-edp>
- Schmitt P. (2011), *The Territorial Agenda of the European Union 2020 – A turning point in striving for Territorial Cohesion? In: Europe's strive for Territorial Cohesion*. Nordregio News Issue 1, October 2011
- Sörvik J. and Kleibrink A. (2015), *Mapping innovation Priorities and Specialisation Patterns in Europe*, S3 Working Paper Series No. 08/2015. JRC Technical Reports - IPTS
- Waterhout B. (2008) *The Institutionalisation of European Spatial Planning*, Series: Sustainable Urban Areas. TU Delft.
- World Bank Group (2009), *Reshaping Economic Geography*, World Development Report 2009

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