



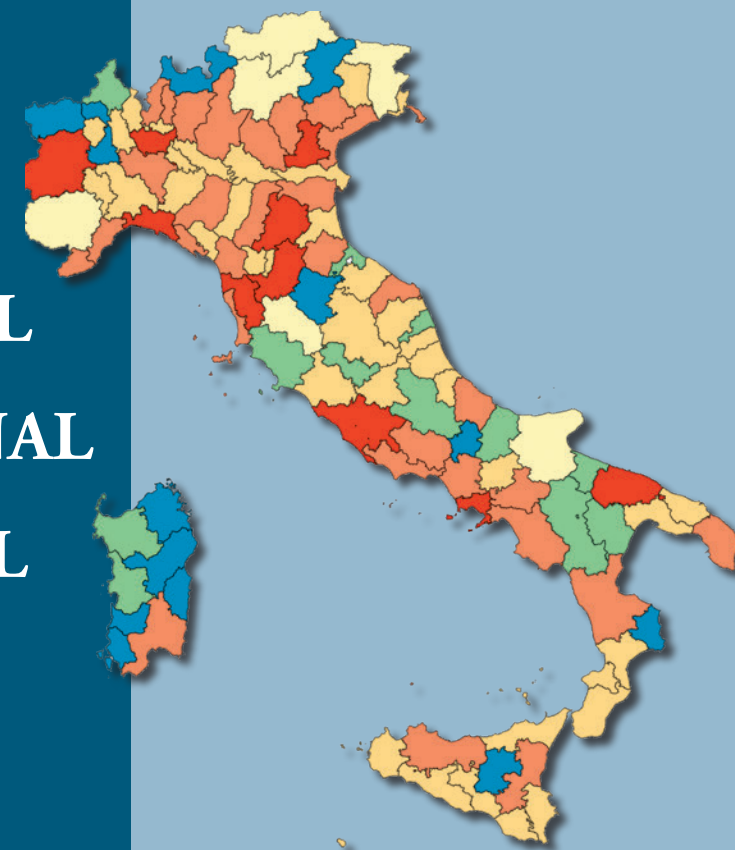
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TERRITORIAL IMPACT ASSESSMENT OF NATIONAL AND REGIONAL TERRITORIAL COHESION IN ITALY

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PLACE EVIDENCE AND POLICY
ORIENTATIONS TOWARDS
EUROPEAN GREEN DEAL

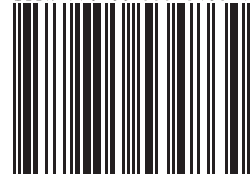
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LIST OF ACRONYMS

ACT	Agenzia per la Coesione Territoriale – Agency for Territorial Cohesion
AdP	Accordo di Partenariato – Partnership Agreement
BAT	Best Available Techniques
CAP	Common Agricultural Policy
CBC	Cross Border Cooperation
CE	Commissione Europea – European Commission
CF	Cohesion Fund
CINSEDO	Centro interregionale di studi e documentazione – Interregional Centre for Studies and Documentation
CIPE	Comitato Interministeriale per la Programmazione Economica – Interministerial Committee for Economic Planning
CLLD	Community-Led Local Development
CoR	European Committee of the Regions
CPR	Common Provisions Regulation
DEF	Documento di Economia e Finanza – Document of Economy and Finance
DG	Direzione Generale – Directorate General
EAFRD	European Agricultural Fund for Rural Development
EC	European Commission
EGTC	European Group of Territorial Cooperation
EMFF	European Maritime and Fisheries Fund
ENI	European Neighbourhood Instrument
EP	European Parliament
ERDF	European Regional Development Fund
ERTMS	European Rail Traffic Management System
ERVET	Emilia Romagna Valorizzazione Economica del Territorio
ESF	European Social Fund
ESIF	European Structural and Investment Funds
ESPON	European Territorial Observatory Network
ETC	European Territorial Cooperation
EU	European Union
FSC	Fondo di Sviluppo e Coesione – National Development and Cohesion Fund
FUA	Functional Urban Area
GDP	Gross Domestic Product
GIS	Geographic Information System
I&N	Infrastructure and Networks
ICT	Information and Communication Technology
IG	Inclusive Growth
IP	Inner Periphery
ITI	Integrated Territorial Investments

YEI	Youth Employment Initiative
LAP	Local Action Plan
MATTM	Ministero dell'Ambiente e della Tutela del Territorio e del Mare – Ministry of Environment and Territory and Sea Protection
MEF	Ministero dell'Economia e della Finanza – Ministry of Economy and Finance
MFF	Multiannual Financial Framework
MEGA	Metropolitan European Growth Area
MIBACT	Ministero per i Beni e le Attività Culturali e il Turismo – Ministry of Cultural Heritage and Tourism
MILPS	Ministero del Lavoro e delle Politiche Sociali – Ministry of Labour and Social Policies
MISE	Ministero dello Sviluppo Economico – Ministry of Economic Development
MIUR	Ministero dell'Istruzione, dell'Università e della Ricerca – Ministry of Education, University and Research
MS(s)	Member State(s)
NEET	Neither in Employment nor in Education or Training
NOP	National Operational Programme
NOP-E&C	National Operational Programme Enterprises and Competitiveness
NOP-EDU	National Operational Programme on Education
NOP-IN	National Operational Programme for Social Inclusion
NOP-I&N	National Operational Programme Infrastructure and Networks
NOP-Metro	National Operational Programme on Metropolitan Cities
NOP-Culture	National Operational Programme on Culture and Development
NOP-R&I	National Operational Programme Research and Innovation
NOP-SME	National Operational Programme Small and Medium Enterprises Initiative
NOP-SAEP	National Operational Programme Systems for Active Employment Policies
NOP-YEI	National Operational Programme Youth Employment Initiative
NUTS	Nomenclature des Unités Territoriales Statistiques – Nomenclature of Territorial Units for Statistics
OPs	Operational Programmes
PGTL	Piano Generale dei Trasporti e della Logistica – General Transport and Logistics Plan
PI	Principal Investigator
PNR	Programma Nazionale di Riforma – National Reform Program
PRIN	Progetto di ricerca di Rilevante Interesse Nazionale – Research Project of National Interest
PTR	Piano Territoriale Regionale – Territorial Regional Plan
R&D	Research and Development
R&F	Resources and Funds
RC	Reddito di Cittadinanza – Citizenship Income
ReI	Reddito di Inclusione – Inclusion Income
RDP	Rural Development Programme
RIS3	Research and Innovation Strategy for Smart Specialisation
ROP	Regional Operational Programme
S3	Smart Specialisation Strategy
SAM	Social Accounting Matrix
SESAR	Single European Sky Air Traffic Management System
SEZ	Special Economic Zone
SG	Smart Growth
SIA	Sostegno per l'Inclusione Attiva – Support for Active Inclusion
SDGs	Sustainable Development Goals
SME	Small Medium Enterprise
SNAI-NSIA	Strategia Nazionale per le Aree Interne – National Strategies for Inner Areas
SNSS	Strategia Nazionale per lo Sviluppo Sostenibile – National Strategy for Sustainable Development
SPAO-SAEP	Sistemi di Politiche Attive per l'Occupazione – Systems of Active Employment Policies
STeMA	Sustainable Territorial economic/environmental Management Approach
STFT	Systemic Territorial Functional Typologies
SuG	Sustainable Growth
SVIMEZ	Associazione per lo Sviluppo dell'industria nel Mezzogiorno – Association for the Development of Industry in Southern Italy
TC	Territorial Cohesion
TEN-T	Trans-European Networks – Transport
TIA	Territorial Impact Assessment
TOs	Thematic Objectives
U	PRIN Unit
UNEP	United Nations Environment Programme

CHAPTER 5

SMART GROWTH AND INNER AREAS FOR THE TERRITORIAL COHESION OF THE ITALIAN REGIONS

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5.1. THE DIFFICULT ENCOUNTER BETWEEN INTELLIGENT GROWTH AND PERIPHERAL AREAS: THE TERMS OF THE DEBATE IN EUROPE AND IN ITALY

In the post-economic recession phase following the 2007-08 global financial crisis, there is a growing divergence between European regions and, within them, between the more dynamic metropolitan regions and a growing number of peripheral areas in decline, so that territorial cohesion returns to being a main objective of European regional planning (EU, 2014). In particular, the last Europe 2020 Strategy places the convergence of lagging areas as the foundations to any strategy and precondition for the Union's competitiveness (European Commission, 2010).

The concept of Inner Peripheries (IPs) acquires a growing importance in European politics and in its Territorial Agenda. Italian government and its *Strategia Nazionale per le Aree Interne* (National Strategy for Inner Areas – NSIA) has made an important contribution to the debate concerning the challenges and the potentiality connected to peripheral areas in terms of re-gauging welfare systems and regional economic development (OECD, 2014; ESPON, 2017).

The NSIA in Italy has introduced specific methodologies to identify these so called Inner Areas (IAs), as well as guidelines and tools for development aimed at increasing the well-being of the communities, through an upgrading of the accessibility to basic services and the implementation of projects of local development. The IAs in Italy have been identified as territories characterized by depopulation and decline, as well as environmental problems mostly connected to risks of hydro-geologi-

* Whilst acknowledging that this is a shared work coordinated by Luigi Scrofani, it is attributed to: Arturo S. Di Bella the paragraph 3.1, Gianni Petino the paragraph 3.2 and Luigi Scrofani the paragraph 4.4 from University of Catania; to Alessandro Arangio the paragraph 3.3.1, to Elena Di Blasi the paragraph 3.3.2 and to Annunziata Messina the paragraph 3.3.3 from University of Messina; to Claudio Gambino the paragraph 3.3.4 from Università of Enna.

cal instability, placed at a considerable distance from the main centres or supply and gravitation of some specific basic services, such as education, health and transport. A limited number of municipalities has been selected as areas where pilot projects of local development can be tested, also recognizing the IAs as areas able to play a key role in pursuing greater territorial cohesion and to take on the challenges of smart, sustainable, inclusive growth.

The concept of 'smart growth' in Europe – unlike the North American context where it indicates the territorial planning policies aimed at reducing the phenomenon of urban 'sprawl' – is closely connected with that of smart specialization and regional development based on the knowledge economy, and focuses on innovation, education and research (McCann and Ortega-Argilés, 2013). The Smart pillar of Europe 2020 is related to the Smart Specialization Strategy (S3), conceived as a tool to strengthen the competitiveness and innovative capacity of European regions. The implementation of S3 required each region to identify and select a limited number of technological domains, where they are better able to maintain a competitive advantage through an effective link between research and innovation, concentrating resources and investments on them. Unlike the process of centralised identification of the investment sectors typical of the more traditional and top-down industrial development approaches, the regional innovation S3s are conceived as the result of an intense open and common participation process, which aims at identifying the priority domains of specialization from the bottom up through an entrepreneurial discovery process, carried out by regional innovation stakeholders (companies, universities, research institutions and trade associations). Central features of S3 are: *embeddedness*, i.e. the rooting of innovation policies with territorial vocations and available resources; *connectedness* between the actors, companies and business sectors at all levels and territorial scale that aims to improve knowledge exchanges and learning opportunities; and *relatedness*, which focuses on the promotion of related diversification paths and reciprocal contamination between different sectors, production areas and technologies (*cross fertilization*). The S3, therefore, does not aim only at a greater specialization, nor at a simple diversification, but rather at a "specialised technological diversification" in emerging and related economic sectors.

Several European institutional reports have emphasized the importance of the principles and recommendations introduced by the European regional innovation policy, based on the concepts of growth and smart specialization (Di Rosa Pires, Pertoldi, Edwards, & Hegyi, 2014; Teräs, Dubois, Sörvik, & Pertoldi, 2015). Firstly, the broad and varied conceptualisation of innovation, not only technological, but also organisational and practical, is well suited to the most recent experiments and experiences of economic development of peripheral areas strongly oriented towards ideas and practices of social and cultural innovation. Secondly, the process of entrepreneurial discovery underlying S3 implies an ample involvement of local actors and knowledge, which indicates a clear sign of discontinuity with the traditional forms of industrial support in favour of an approach which emphasizes the role of relationships both intra – and infra-sectorial, as well as specific communities of practices that operate as real learning and innovation networks. Thirdly, the emphasis on the role of the multiple types of regional connections in order to increase exchanges and the dissemination of knowledge is consistent with those development paradigms of peripheral and rural areas that indicate 'reconnection', as an essential element of encounter

and synergistic contamination between local and non-local resources and skills (Bock, 2016). Finally, the same technological innovation that represents the central element of S3-based policies is a decisive factor in reducing distances, spatial and otherwise, which negatively affect the trajectories of development of peripheral areas.

5.2. SMART GROWTH IN ITALY IN THE 2014-2020 PROGRAMMING

The theme of smart growth in Italy represents a policy-makers' objective developed through a multiplicity of institutional documents from both the central government level and the regional scale.

In Italy, the theme of smart growth develops hand-in-hand with that of smart cities, especially through the National Operational Programme on Metropolitan Cities (NOP-Metro), a program worth 893 million Euro, through which 14 metropolitan cities are referred to as the key territories understanding the challenges of smart growth and guide the transition of the national and local economy towards a post-recession phase, responding to the most pressing challenges concerning the government of the territory: from democratic quality to public health, from security to education, from environmental sustainability to a responsible management of the urban metabolism.

Another strategic document is the National Operational Programme on Research and Innovation 2014-2020 (NOP-R&I), an instrument through which Italy intends to upgrade the quality of education and research, technological development and innovation, placing the competitive repositioning of the Southern territories as its 'mission'. The program, managed by the Ministry of Education, University and Research affects the regions in transition (Abruzzo, Molise and Sardinia) and the less developed ones (Basilicata, Calabria, Campania, Puglia and Sicily), in line with the strategic objectives of the European Horizon 2020 Programme and in conjunction with the National Smart Specialization Strategy (NS3). Coherently with the indications of NS3, defined by reconstituting and integrating the regional strategic choices relating to smart specialization areas, the programmatic choice included in the NOP-R&I takes into consideration a limited set of investment priorities, which can be summarized in 5 national topics: Aerospace and Defence; Health, nutrition, quality of life, tourism, cultural heritage, made in Italy and creativity industry; the Digital agenda, Smart communities, intelligent mobility systems; intelligent and sustainable industry, energy and environment. They develop through three priority intervention axes (Axis I: Interventions in Human Capital, Axis II: Thematic projects, Axis III: Technical Assistance). The Human capital interventions (related to TO10 of ESF) concern: a) innovative Doctorates; b) attraction of senior researchers in territories lagging behind; c) mobility. Investment in thematic projects (related to TO1 of ERDF) was distributed among research infrastructures, clusters, and research projects on enabling technologies (KET's).

After the adoption in 2012 of the first National Italian Digital Agenda Strategy (IDA), in 2014 the Agency for *A Digital Italy* was established as the unique implementor of IDA and two national plans were drawn up, namely the Italian Strategy for the ultra-broadband and the 2014/2020 Digital Growth Strategy, as fundamental documents in the planning of European structural funds for everything related to the new technologies. The objective of the former is to reach an ultra-wide band connec-

tivity coverage corresponding to 85% of the population by 2020. The latter, instead, intended to coordinate interventions and resources for digital innovation by focusing on the digital skills of citizens and the digital development of businesses also through the progressive transfer of public services to digital, taking into consideration all the actions envisaged by European programming. This strategy was based on three lines of action: 1) cross infrastructural actions (digital identity, data centre rationalisation, a public connectivity system, security); 2) enabling platforms (register office of resident population, electronic payments, electronic PA billing, digital schooling, digital justice, digital tourism, digital agriculture, etc.); 3) digital growth acceleration programs (digital skills, intelligent communities, etc.).

5.3. STEMA SIMULATIONS AND SMART GROWTH IN THE ITALIAN PROVINCES

5.3.1. *The determinant Smart Growth and the UI and BUL indicators*

From the analysis of the determinant *Smart Growth* (SG) of the Italian regions developed within the Research Project of National Interest (PRIN) 2015 and through the elaboration of specific indicators at regional and provincial scales, the presence of a double fracture is highlighted: the North-South one, which confirms the concrete difficulties of the Southern territories; and the centre-periphery one, which outlines a substantially better situation than the metropolitan cities of the country. On examining the value of the indicators at NUTS 3 level, it is clear the greater difficulty of the islands' provinces (free municipal consortiums in Sicily) and of the South, while the most virtuous regions appear to be Emilia-Romagna and Veneto, where only Piacenza, Belluno and Rovigo show some problems. The orography of the territory seems to affect the determinant values, which are generally medium-low (C) and in some cases low (D) precisely along the Southern Apennine ridge and on the Alpine Arc. Insularity also appears to be penalised (7 of the 13 provinces with value D are on the two islands). However, while in the three Sicilian metropolitan cities of Palermo, Catania and Messina medium-high (B) values are found, at a NUTS 2 level, Sardinia is the only region of Southern Italy to have a medium-high value, although not exceeding in any case a C value at NUTS level 3. With regard to the 14 Italian metropolitan cities only Cagliari (Sardinia) and Reggio Calabria (Calabria) – both last, respectively, by number of inhabitants and population density – have a medium-low value. In all other cases the performances are good: a high value (A) for Turin, Genoa, Bologna and Florence, medium-high for the remaining. Perugia is the only non-metropolitan territory to register an A value, while the lowest returns (D) are found in only one NUTS 2 territory (Molise) and in 13 NUTS 3 (the provinces of Sondrio, Isernia, Benevento, Crotone, Vibo Valentia, Nuoro, Oristano, Olbia-Tempio, Ogliastra, Medio Campidano and the municipal consortia of Caltanissetta, Enna and Ragusa). It is precisely on these territories that the authors' attention has been focused on the analysis of individual indicators, with the main objective of improving the 14 D values present in *Smart Growth* ex ante data. Ultimately, the territorial performance of the determinant, which includes nine indicators grouped into four sectors and three types, can be summarized in Table 5.1.

Tab. 5.1 - *Smart Growth* ex ante data. territorial performance.

	A – High	B – Medium-high	C – Medium-low	D – Low
NUTS 2	0	7	13	1
NUTS 3	5	37	52	13

Source: author's elaboration

With regard to the first indicator, *Internet users* (UI), with respect to the 14 most significant statistical territorial units, only Benevento, Caltanissetta and Ragusa reach a C value. It should be noted that throughout the Italian territory, for this indicator, there are many provinces with a D value. By applying STeMA, a series of policies are identified capable, not only of passing the determinant of the 14 territories in question from D to C, but also of improving, throughout the national territory, the negative values of the UI indicator. These are: Supply of education, Human capital internationalization, Bridging digital division and digital transition, Internationalization of goods and services, Dissemination policies for transparency and efficiency of bureaucracy and Cultural integration. With regard to these last two policies, it should be noted that they are both necessary to increase the values of the indicator from D to C, to improve the performance of the determinant SG it is, instead, sufficient to implement one.

The second indicator, *Ultra wide band access* (BUL), shows D values in 5 NUTS 2 territories (Sardinia, Abruzzo, Umbria, Valle d'Aosta and Bolzano) and in many NUTS 3 ones. Among the 14 territories with low performance in Smart Growth, 2 have a medium-high value (Isernia and Crotone), 5 medium-low, the remaining low. The policies suggested by STeMA to raise the values of the determinant under examination are: Supply of education; Human capital internationalization; Support enterprise creation; Support worker mobility. However, these alone do not allow the indicator in question to exceed the D value. To this scope it is necessary to also implement Policies for the dissemination of transparency and efficiency of bureaucracy; Internationalization of goods and services; Quality certification and assessment tools; Promotion of a global enterprise culture.

5.3.2. *The PAI, PL and RDI indicators*

The indicator *Internet in the Public body* (PAI) shows on a national level 33 D values, 9 of which concern the territories where the authors' analysis is mainly concentrated. In fact, in the provinces of Isernia, Benevento, Vibo Valentia, Nuoro and Oristano there are no low values (in Oristano there is even an A). STeMA application suggests the implementation of the following policies: Supply of education; Bridging digital divide and digital transition; R&D infrastructures; Policies dissemination for transparency and efficiency of bureaucracy; Cultural integration. These allow the D values of the determinant SG to rise to C, but not as high as those of the PAI indicator, which in no case improves their condition. To this scope, STeMA helps to select three additional policies: Quality certification and assessment tools; Promotion of a global enterprise culture and, finally, Internationalization of good and services.

The indicator *Structure education to the creation of knowledge* (PL) shows a situation that is not entirely optimal for the national territory. The ex ante data framework shows low values (D) regarding the NUTS 3 dimension, where a particularly critical state of many territories, including the Northern regions, can be seen. Among the 13 provinces that have the greatest difficulties in the determinant SG, only Ragusa and Benevento have a value higher than D. At NUTS 2 level, low values are found not only in Molise, but also in Valle d'Aosta, Basilicata and in the provinces autonomous of Trento and Bolzano. From a careful analysis of all the Regions of Italy, it is noted that Piedmont, Lombardy, Veneto, Emilia-Romagna, Lazio and Campania have values equal to A. Applying STeMA the choice among the policies falls on: Supply of education; Human capital Internationalization; Quality certification and assessment tools; Internationalization of goods and services; Use of renewable resources, Natural hazard prevention; Reinvolverment of ageing people. The value in ex post data is modified, with the passage from D to C in all cases, both at NUTS 2 and NUTS 3 levels; this improvement concerns both the determinant SG and the indicator PL. Finally, on examining the effects of policies in the ex post territorialized situation, there is an improvement in many territorial statistical units and the overcoming of all F values, however many E and many D remain.

Analysing *R&D Infrastructures* (RDI), 13 of the 14 areas where the low value of the determinant SG is recorded, also have a D value for this indicator. The only exception is related to the province of Benevento where a C is detected. Applying STeMA for upgrading these scores, the value of the RDI indicator passes from D to C and only for the province of Benevento from C to B. The suggested combination is as follows: Bridging digital divide and digital transition; Internationalization of goods and services; Reinvolverment of ageing people; Social inclusion; Support enterprise creation; Support worker mobility. However, in doing so, to the positive effects obtained on the values of the indicator do not match equally positive effects on those of the determinant. Replacing Bridging digital divided and digital transition with Promotion of a global enterprise culture, the best combination is obtained, given that both the values of the determinant SG and those of the RDI indicator pass from D to C.

5.3.3. The IDI and PET indicators

With regards to the *Innovative dependency index* (IDI) indicator, the ex ante data condition, throughout the national territory, appears to be negative in 5 NUTS 2 and 28 NUTS 3 areas. The most negative performances concern the regions and provinces of the Central – South areas: D value is registered for regions like Lazio, Campania and Sicily and in metropolitan cities like Rome, Naples, Bari, Palermo and Catania. Starting from the found critical points, through the use of STeMA, various simulations were carried out that led to the choice of 6 policies that allow for the improvement of performance with regard to the determinant SG: Supply of education; Human capital internazionalizzando; Use of renewable resources; Reinvolverment of ageing people; Cultural integration; Support worker mobility. However, these policies do not allow improvements to the IDI indicator values. By implementing Support worker mobility policies, the values of the indicator also change from

D to C. Indeed, analysing the changes in the values, a completely positive picture is highlighted, the D value, at NUTS 2 and NUTS 3 level, has changed to C, while the value B has changed to A. It can be said that the combination of these policies is fundamental for obtaining positive results, since, when one of them is missing, the value is transformed again into D. Dwelling on the transformations which occurred in the table of the regional ex post territorialized results, the picture is not entirely positive, as there are improvements in the regions and provinces that previously had a D value, but at the same time, in other provinces such as Bolzano, Foggia, Barletta-Andria-Trani, Matera, Crotona, Olbia-Tempio the value is E.

As far as the indicator *Population with a three-year degree* (PET) is concerned, analysing the values in ex ante data, the situation seems negative in provinces of Piedmont, Sardinia, but also in Trento, Imperia, La Spezia, Sondrio, Belluno, Rovigo, Gorizia, Massa-Carrara, Fermo, Rieti, Isernia, Benevento, Matera, Crotona, Vibo Valentia, Caltanissetta, Enna and Ragusa. Considering this first analysis, the authors can try to hypothesize the choice of some policies and transform negative values into positive ones. Through the combination of specific policy choices related to Supply of education; Human capital internationalization; Support to BAT, Support worker mobility, the D value is positively transformed into C, but at the same time an improvement is achieved on the whole national territory with values that they fluctuate between A and B. It is important to underline that this result can only be obtained by maintaining these policy choices, when one of them is lost, the value in ex post data will return D both at NUTS level 3 and at NUTS level 2. Focusing on the data in ex post territorialized situation, there are negative aspects, especially in some provinces of Piedmont, Tuscany and Sardinia that have E values. Starting from these analyses carried out through STeMA it can be deduced that territorial diversity requires different solutions through a unitary policy that exploits the peculiar elements of a geographic-economic model or competitive for a smart growth.

5.3.4. *The PLL and RL indicators*

Among the 14 areas that have a low value in the SG determinant, the ex ante picture attributable to the *Population in lifelong learning* (PLL) indicator produces a significant level of criticality (D) for 9 of the 14 territories in question, while, among the remaining five, three have a C value and two a B (Isernia and Molise). Applying STeMA it was possible to identify a set of policy choices able to increase these values. In detail, STeMA suggests as a priority, to activate policies for the Reinvolved of ageing people, an element, however, that is not enough on its own to invert the negative trend of the indicator. Therefore, it was necessary to integrate the activation of further policies indicated by SteMA: Quality certification and assessment tools; Promotion of a global enterprise culture; Internationalization of goods and services; Policies dissemination for transparency and efficiency of bureaucracy; Support equal opportunities. This combination allows, in the ex post phase, to obtain, for the *Population in lifelong learning* (PLL) indicator, the following result: for the 14 territories with an ex ante low level, 9 obtain C, 3 B and 2 A, thus achieving the intended objective.

The indicator relating to the *Telecommunication Development level* (RL) shows for the 14 territories with low performance in the determinant SG in ex ante a subdi-

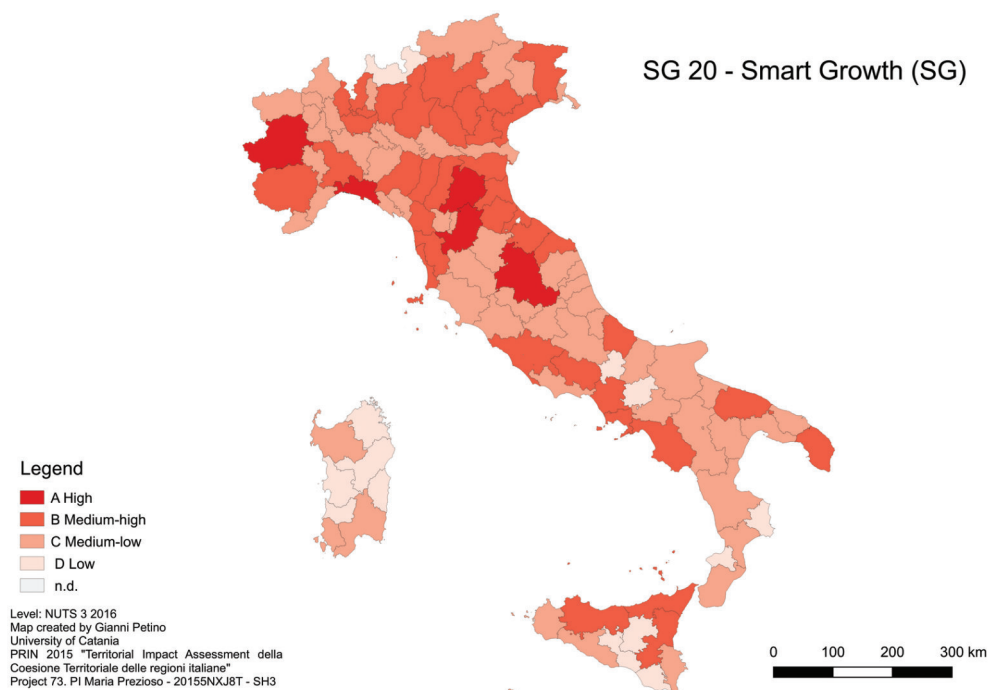


Fig. 5.1 - Map of the *Smart Growth* determinant ex ante data according to STeMA method at Italian NUTS3 level.

Source: Author's elaboration

vision between the following values: 9 D, 3 C and 2 A. Also in this case the indications received from STeMA appear to be suitable and the most efficient policy combination is the following: Human capital internationalization; Support Local productive identity; Support equal opportunities; Bridging digital divide and digital transition; Development of energy networks; Increase of physical accessibility; Internationalization of good and services; Reinvolverment of ageing people. It is pointed out that this specific combination of the eight chosen policies actually turns out to be particularly effective not only in reference to the *Telecommunication Development level* (RL), but comparing the ex ante and ex post frameworks, it clearly emerges that the aforementioned policy choices have a positive impact on most of the indicators related to the areas under scrutiny.

5.4. SMART GROWTH AT THE SERVICE OF THE TERRITORIAL COHESION OF THE ITALIAN REGIONS: FROM SMART CITY TO SMART LAND

With respect to the issue of smart growth, the picture of the Italian regions, and even more so of its peripheral and inner areas, appears to be characterized by a lower performance than most EU countries in terms of digitalization of the economy and

society, as well as of technological innovation and use of the Internet. Nonetheless, the first signs of progress are also evident, which concern both national and regional politics.

Recently, an acceleration in expenditure has been with regard to the implementation of the Digital Agenda, through the provision of infrastructural interventions, in particular of those connected to the laying of ultra-broadband, and those concerning services aimed at citizens, businesses and public administrations.

The analytical picture concerning the determinant *Smart Growth* becomes, however, more complex focusing on the multiple, deep spatial fractures – North/South, metropolitan cities/small municipalities, urban/rural – which continue to tear the infra- and intra-regional cohesion in Italy.

On the one hand, in fact, the evidence cannot be overlooked that, with respect to the issue of Italian IAs, most of the investments concerning innovation and research policies, through the NOP-Metro and the NOP-R&I tend to concentrate in urban areas and above all in the larger ones, with the risk of increasing the existing gap between metropolitan and medium-small towns, as well as the fractures between the urban and extra-urban world, both in terms of digital infrastructure and more generally of the digital divide, and therefore to produce inverse effects with respect to the objective of territorial cohesion. On the other hand, however, it is also opportune to recognise a growing attention to the issue of smart growth in Italian peripheral areas, both at regional and local scales.

The same NSIA, by the funded pilot projects and the various activities created around them, such as those promoted by the National Forum of IAs, has created the basis for the development of a true community of Italian IAs innovation. Beyond the different reasoning on the infrastructural and digital gaps, which remain very strong, the overall picture shows that the challenge of innovation in the Italian IAs must begin from the exploitation of the many innovation practices already existing on the territory and from innovative projects and choices developed by the NSIA 71 pilot areas, from which one could also try to write a real Digital Agenda of the IAs. Innovation improves and transforms transport, education and health and generates economic development. And while it is true that many of the innovative practices regarding IAs tend to develop in the form of social and cultural innovation, even the technological one, closely connected to the concept of intelligent growth, is increasingly appreciated by national and local stakeholders.

The recent *Relazione annuale sulla Strategia Nazionale per le Aree Interne* (Annual Report on NSIA) of 2018 (Lezzi, 2018) emphasises the need to strengthen the role of the IAs as a space for experimentation and innovation and underlines how technological innovation is already playing a key role in the implementation of the various pilot projects, with particular reference to the theme of services and local welfare. For example, in the health sector, it was found that, while in many regions the Territorial Functional Aggregations model envisaged by the national reference standard has yet to be implemented, various project actions of the IAs, such as that of Vallo di Diano in Campania Region, are being proposed as pilot areas of implementation of new organisational models that make use of the support of ICT technologies for networking. The same happens in education and training, through the experimentation of school models as an innovative learning environment, able to fully exploit the potential of digital technologies to promote open and participatory

learning teaching models which are digitally supported (digital education and digital teaching), as in the case of Valle di Comino in Lazio, or to open up to the territory, through Fab-Lab, Living-Lab, Rural-Lab and Art-Lab models, supporting the needs of companies and the various actors operating in the sectors of agriculture, environment, Cultural Heritage, tourism and hospitality, as in the case of the Simeto Etna Area, in Sicily.

More generally also in Italy there has recently been a number of events, debates, initiatives and studies that mobilise new ideas about the intelligent territorial development (Bonomi, Masiero, 2014; Di Bella, Petino, Scrofani, 2019; Legambiente, 2019), and emphasise the need to expand the 'smart' paradigm to a broader conception of innovation, which includes but is limited to the technological one, and to vast territorial areas to include even the complex relationships that bind large and small municipalities, as well as the rural and urban worlds. It is only by adopting this approach that Smart Growth can offer the fundamental opportunity to reinvent the territory, embracing an idea of 'smart land', understood as a territorial area where widespread and shared policies can be experimented with, aimed at increasing the competitiveness and attractiveness of the territory with specific attention to the spreading of knowledge and creativity, to the accessibility of essential services and to the quality of living, the usability of the environment and the quality of the landscape, and to the social and territorial cohesion of the Italian regions.

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Part One

Chapter 1. *Territorial Capital: effects of national and regional cohesion policies*

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Oggetto: **Errata Corrige**

In qualità di editor (curatore) del volume *Territorial Impact Assessment of national and regional territorial cohesion in Italy. Place evidence and policy orientations towards European Green Deal*, Bologna, Pàtron, 2020. ISBN 9788855534864, attesto che per mero errore materiale alla pag. 132 del Cap. 5 "Smart Growth and Inner Areas for the territorial cohesion of the Italian Regions" sono da intendersi come segue:

- **Elena Di Blasi** inclusa tra gli autori del cap. 5
- **Nunziata Messina** e non Annunziata Messina
- **Nota * recante l'attribuzione delle parti agli Autori è relativa al cap. 5 e non 3 o 4:** Whilst acknowledging that this is a shared work coordinated by Luigi Scrofani, it is attributed to: Arturo S. Di Bella the paragraph **5.1**, Gianni Petino the paragraph **5.2** and Luigi Scrofani the paragraph **5.4** from University of Catania; to Alessandro Arangio the paragraph **5.3.1**, to Elena Di Blasi the paragraph **5.3.2** and to **Nunziata** Messina the paragraph **5.3.3** from University of Messina; to Claudio Gambino the paragraph **5.3.4** from Università of Enna.

La presente dichiarazione è resa per gli usi consentiti dalla legge.

In fede,

Roma, 15 ottobre 2020

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