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A Multi-dimensional Approach to the Measurement of Terriorial Attractiveness:

Towalds a Synthetic Isdicator

by Dario Musolino and Stephany Volget



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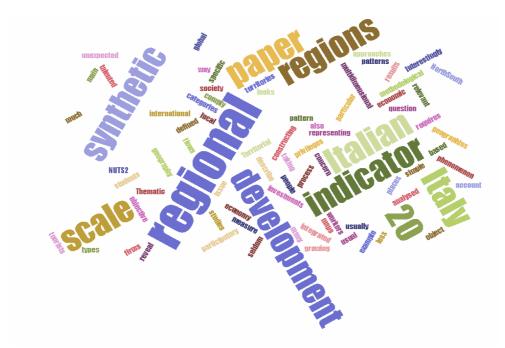
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A Multi-dimensional Approach to the Measurement of Territorial Attractiveness: Towards a Synthetic Indicator

by Dario Musolino and Stephanie Volget

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ABSTRACT

Attractiveness of firms, investments, tourists, students, workers, talented people, and other categories, is a very relevant issue for the regional and local economic development. This growing concern about this question requires a synthetic indicator that measure the global attractiveness of territories and places (not only their attractiveness for specific types of flows). Territorial attractiveness has been the object of many studies, in particular in Italy, but seldom this phenomenon has been analysed in an integrated and multidimensional way.

This paper has this objective, taking the 20 Italian NUTS2 regions into account. The paper is based on the main methodological approaches defined at the international scale, and it privileges a participatory process for constructing the synthetic indicator. Thematic maps representing the results for the 20 regions reveal not only usual, but also unexpected patterns. Interestingly, for example, the North-South pattern of regional development does not comply with the attractiveness of Italy at the regional scale. The geography of attractiveness looks much less simple than other geographies that usually describe the Italian economy and society.

Keywords: Territorial Attractiveness; Synthetic Indicator; Budget Allocation Process; Participatory Process; Italian Nuts2 Regions.

JEL classification: R10; R12; R30.

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1. Introduction

Territorial attractiveness is an increasingly relevant issue for regional economic development. Mobility and attractiveness of firms, investments, tourists, talented people, students, creative people, *etc.* is an extremely important phenomenon, since the growing interconnection between countries and territories results in a considerable increase in relations and flows, not only of goods and services, but also of capital and people, and tangible and intangible resources (Fratesi and Senn, 2009).

Recently, many studies have been carried out on the territorial attractiveness in Italy, but usually either they only took into account only one of the dimensions (typologies) of attractiveness, or these dimensions were analysed separately and exclusively. For example, many analyses have been conducted especially on the territorial attractiveness for foreign direct investments (FDI), for which there is a wide international literature; and on the territorial attractiveness for tourists, topic to which actually an entire discipline (tourism economics) is devoted to. Given its increasing importance, it may well be worth examining this phenomenon in an integrated and multidimensional way, to analyse and evaluate the overall, global, attractiveness of territories. Therefore, following the same logics of the studies concerning territorial competitiveness (a concept which evidently has been investigated and studied much more in depth in the regional sciences), for which there are already several cases of construction of synthetic indicators, among which the best known perhaps is the Regional Competitiveness Index by the European Commission (Annoni and Dijkstra, 2013).

In this paper we have therefore sought to build a synthetic indicator that measures the overall attractiveness of Italian regions, i.e. the ability of regions to attract different types of flows (investments, people, immigrants, students, *etc.*) from other regions (internally) and from other countries (internationally).

In the first chapter, we present a brief overview of the literature on territorial attractiveness, with particular reference to the analyses of this phenomenon conducted in a multidimensional perspective in the latest years. In the second chapter, we illustrate the variables used for the construction of the synthetic indicator, and we present the data for each of them at the regional level.

In the third chapter, then we introduce and explain the methodology used for the creation of the final indicator, in particular which method of standardization, weighting and aggregation we used. In the case of weighting, we wish to underline that a participatory approach has been followed, "going down the field", i.e. asking a set of experts to attribute weights to the various dimensions of attractiveness. In the same chapter, there is also the presentation of the final results concerning the synthetic indicator, either at the global, national and international level, with the help of choropleth maps for an immediate visual comparison of the differences found.

Finally, some concluding remarks, deriving from this first tentative application of the synthetic indicator, are made in the final chapter.

2. Territorial attractiveness: a theme with many faces, rarely addressed from a unique perspective

Territorial attractiveness is a topic of research that intrinsically lends itself to different interpretations. There is first a question of conceptualizing the attractiveness, which can be seen from different perspectives (Ballotta, 2004; Dubini, 2004 and 2006; Russo et al., 2012; Musolino, 2016). It can be intended as "revealed attractiveness", which is associated with the quantity and quality of incoming flows in a geographical area (which therefore "reveal" implicitly its attractiveness). Or it can be termed as "perceived attractiveness", when it refers to how people, or groups, see, perceive and evaluate a geographical area for which they have a particular interest (entrepreneurs interested in investment opportunities, potential migrant workers, tourists, etc.). Alternatively, it can be even understood as real or actual attractiveness, meaning in this respect the "real" endowment of tangible and intangible resources - infrastructures, services, human capital, innovative capacity, etc. - which, for example, make an area attractive for investments (otherwise called attractiveness factors, or location factors).

The multiple "facets" of the concept of attractiveness also correspond to its different dimensions, that is, the typologies of flows that a territory can attract. For example, we refer to investment flows (financial resources to start or obtain the control of an enterprise, or to invest in real estate), or tourism flows, or immigrants (labour force), or attraction of other categories of people, such as researchers, talented people, the so-called "creative class", college students.

Finally, it should also be considered that territorial attractiveness can be examined at the different spatial scales, from the macro scales (countries) to the micro ones (municipalities and cities).

However, seldom the territorial attractiveness has been studied in a broad and all-encompassing way, trying to include and synthesize all of its different "facets", its various dimensions.

For example, in the case of the revealed attractiveness, which is the object of our analysis, studies were generally concentrated, as was said in the introduction, only on one of the many typologies of flows. For each of them there is a wide literature (see, for example, literature on FDI1, immigration, brain drain², and attraction of talented people), so that they almost represent discipline on their own.

In the case of the territorial perceived attractiveness, for example, studies have generally been focused on specific dimensions of attractiveness (for example, investments), and were generally conducted at the country-level or at the macro-regional level. In the case of Italy, we can find several surveys targeting the international business community in order to investigate the relevant location factors for explaining the attractiveness of Italy(see, for example, AmCham Italy 2013, Annushkina and Dubini, 2004 and 2007, IPSOS, 2008), or there are some surveys on the Mezzogiorno aimed at interpreting its attractiveness for business or tourism (Nord Est Foundation, 2002; GPF & A, 2003). Only some specific works (in this case, on the perceived attractiveness for potential investors) focused on the regional and local scale, in particular on the administrative regions and provinces (Musolino, 2015).

In the few cases where a broad and all-encompassing approach was followed, it has been accomplished in any way in part, or overlapping the different meanings of attractiveness.

For example, in the study on Italy realized by The European House-Ambrosetti (2016), an indicator called GAI (Global Attractiveness Index) was created in order to measure the country's global attractiveness according to different issues and dimensions (openness, innovation, endowment, and vulnerability), the first of which includes and synthesizes the different types of flows. The point is that such synthetic indicator was calculated at the country level, not at the sub-national scale (hence, territorial), and there is an apparent "confusion" between the different concepts of attractiveness, as they do not distinguish between attraction of flows and attractiveness factors.

In the remarkable and interesting study by Russo et al. (2012), in turn, they focused only on attraction of residents and visitors at the

¹ See, for example, as regards Italy and the Mezzogiorno, Barba Navaretti *et al.* (2009); Bentivogli *et al.* (2015); Daniele (2005); Daniele e Marani (2011); Osservatorio Siemens-Ambrosetti (2007); Resmini (2014); Santangelo (2004).

² See, for example, Brandi (2014), Beine *et al.* (2013), Cersosimo *et al.* (2015), De Angelis *et al.* (2017), Dotti *et al.* (2013), Halme *et al.* (2012).

Nuts2 EU regions level, with the aim of understanding which are the major determinants of territorial attractiveness³.

Also interesting is the work by Baldazzi *et al.* (2015), which develops a composite tourist attraction indicator at the provincial level, combining the perception of the attractiveness of the provinces by tourists, with the actual tourist flows, the tourist supply (tourist accommodations), and factors of environmental and cultural attractiveness.

There are then some studies that examine the issue of attractiveness with a global perspective, but with an extremely limited and focused geographical scope. For example, one can mention the study by Politecnico di Milano *et al.* (2009), in which the perceived attractiveness of Milan is investigated from different analytical perspectives (business community, tourists, etc.). Or, a study on Letgallia, a region in Latvia (Ezmale, 2012), where the perceived attractiveness of residents, tourists and businesses potentially interested in settling in that territory was analysed4. Or, also some works on islands, such as Cyclades in Greece (Spilanis *et al.*, 2003),that approaches attractiveness in a multidimensional way, but in the end they only deepen the determinants of attractiveness for residents, trying to identify the most significant location factors.

As far as we know, the only study that was able to encompass all the multiple typologies of flows (revealed attractiveness, in this case, as we did in our work), conducting an analysis at the regional and local scale, is the work realized by Rizzi and Pianta (2012), where they built a synthetic indicator of revealed attractiveness for Italian administrative regions and provinces. Although they in particular focused their attention on the role of some explanatory variables on the territorial attractiveness, such as cultural heritage, environment and social capital. This study is therefore one the key references of our work.

3. The variables for the construction of the synthetic indicator

The types of flows that characterize the regional attractiveness, and which we decided to take into account here are the following: direct in-

³ The study identifies some major categories of determinants: environmental capital (protection); Human and economic capital (welfare and work); Anthropic capital (tourist attraction); Socio-cultural capital (welfare and social cohesion); Institutional capital (public services).

⁴ In this work has been argued that for different subjects priorities are different. For example, for the inhabitants security, health, employment and welfare are extremely important; while for entrepreneurs it is more important that the territory is accessible, have tax incentives, good infrastructure quality, and a considerable supply of adequate workforce.

vestments from foreign countries⁵, and from other Italian regions; immigration, internal and external (from abroad)⁶; incoming, domestic and foreign, tourist movement; enrolled university students, coming from other Italian regions and from other countries⁷.

Table 3.1 – *List of indicators by type of flow*

National Attractiveness	International Attractiveness		
1. Attractiveness of foreign direct investment (or from other Italian regions)			
1a) Incidence of employees of local business	1b) Incidence of employees of foreign-		
units with headquarter outside the region	owned enterprises (2013).		
(2010).	Source: Banca dati Reprint, Politecnico di		
Source: Rapporto Unioncamere 2012, Istat.	Milano - ICE, Istat.		
2. Attractiveness of tourists			
2.a) Domestic tourist rate (2013/2015 aver-	2.b) Foreign tourist rate (2013/2015 aver-		
age).	age).		
Source: Istat.	Source: Istat.		
3. Attractiveness of university students			
3.a) Incidence of Italian students enrolled in	3.b) Incidence of foreign students enrolled		
the population (2013).	in the population (2013).		
Source: Istat.	Source: Istat.		
4. Attractiveness of immigrants			
4.a) National immigration rate (2013/2015	4.b. International immigration rate		
average).	(2013/2015 average).		
Source: Istat.	Source: Istat.		

These are obviously types of flows that describe significant phenomena, which reach numbers in our country⁸, and for which data availability is sufficient⁹.

- ⁵ Foreign direct investments refers to incoming investment flows at the international level, namely the acquisition of shares in an Italian company (brown field), or the establishment of a subsidiary in Italy (*greenfield*), by a foreign investor (according to IMF and OECD, FDI are defined as investments in an enterprise located in a foreign country for which the investor holds at least 10% of ordinary shares with the aim of establishing a "lasting interest" in the country, a long-term relationship, and a significant influence on the management of the enterprise). On the other hand, all investments directed from one region to another, or even here, to the creation of new units of local units in other Italian regions, can be defined as internal direct investments.
- ⁶ Immigration means the permanent transfer or temporary movement of persons in a country different from the country of origin (according to the definition by Istat with reference to immigration from abroad, they are all residents who are born abroad with citizenship foreign). In our case, we mean the ability of a territory to attract human resources / workforce from other regions or from abroad. Here, for the sake of synthesis, we have not distinguished on the basis of characteristics such as the level of education, or the professional profile.
- ⁷ Finally, as far as the attractiveness of university students is concerned, we refer to foreign students who choose our country for their university education by enrolling in Italian universities, or Italian students moving from their region of origin, to study at universities based in another region.
- ⁸ Consider, for example, with reference to FDIs, that although Italy is less attractive than other European and world countries, in 2014 the incoming FDIs amounted to about 22 billion of euro (with 291 investment operations) (Source: Rapporto Italia Multinazionale, 2015).

These different typologies of flows were taken into examination, distinguishing between the national and the international level. With regard to the national attractiveness, the indicators defined for each of these types of flows are as follows (**Table 3.1**):

- Incidence of employees in local business units with headquarter outside the region: the ratio of employees working in local units with their headquarter outside the region, to employees of all local units located in the region;
- Domestic tourist rate: the ratio of domestic overnight stays in a region, to the total population of the same region;
- Incidence of Italian students enrolled in the population: the ratio of Italian students enrolled in the universities in a region, to the total population of the same region;
- National immigration rate: the ratio of residents coming from other Italian regions to the total population of the same region.

As for international attractiveness, instead:

- Incidence of employees of foreign-owned enterprises: the ratio of employees working in foreign-owned enterprises to the total number of employees working in firms located in the region;
- Foreign tourist rate: the ratio of foreign overnight stays in a region, to the total population of the same region;
- Incidence of foreign students enrolled in the population: the ratio of foreign students enrolled in the universities in a region, to the total population of the same region;
- International immigration rate: the ratio of foreigners settling in a regional territory, to the total population of the same region.

From a first mere observation of the above indicators calculated for the twenty Italian regions (**Table 3.2**)¹⁰, we can see that the best performances in terms of attraction are recorded in North and Central Italy, while the South results to be less attractive.

With regard to attractiveness at the national level, the very good performance is recorded Aosta Valley and Trentino Alto-Adige, which

While, with reference to immigration from abroad, it is sufficient to note that, according to Eurostat, on 1 January 2015 Italy was the fifth EU country for immigrant population or born abroad, with 5.8 million immigrants. On the subject of attractiveness of tourist flows, this type of flow is equally important. It is enough to consider that our country, according to the OMT, in 2015, with more than 60 million arrivals, resulted to be the fifth world tourism country of destination (after France, USA, Spain and China).

⁹ While there are other types of incoming flows at the regional level, absolutely relevant from the economic point of view (for example, investment in real estate, as well flows related to health services, the so-called "health tourism"), they were not taken into account in this work, because of the lack of systematically detected and available data at the regional scale. Data were.

 10 As far as the years taken into account, we calculated the three years 2013-2015 average (of course, for indicators for which data for these years were available). Otherwise, we considered the latest year available.

shows very positive data for attractiveness of tourists, students and immigrants. As far as international attractiveness is concerned, apart the result of Lombardy based on the high attractiveness for FDIs, what draw attention is Lazio, that is characterized by a high level of attractiveness of foreign investment, foreign tourists, and foreign immigrants. Very positive figures also emerge in other regions like Tuscany, Piedmont and Friuli VG, in terms of attractiveness both at the national and international scale.

Table 3.2a – Attractiveness indicators by type of flow and by region, at the national and international scale

	Attractiveness of direct investiments		Attractiveness of tourists	
	National	International	National	International
REGIONS (NUTS2)	Incidence of employees of local business units with headquarter outside the region	Incidence of em- ployees of for- eign-owned en- terprises	Domestic tourist rate	Foreign tourist rate
ITALY	0,21	0,06	3,22	3,11
Valle D'Aosta	0,20	0,04	14,54	9,39
Piemonte	0,20	0,07	1,76	1,22
Liguria	0,25	0,04	5,20	3,44
Lombardia	0,06	0,11	1,53	2,04
Trentino-Alto Adige	0,09	0,05	17,40	25,11
Veneto	0,14	0,03	4,22	8,44
Friuli Venezia Giulia	0,20	0,05	2,93	3,42
Emilia-Romagna	0,11	0,04	5,96	2,21
Toscana	0,16	0,03	5,36	6,28
Marche	0,14	0,01	6,07	1,36
Umbria	0,15	0,03	4,13	2,39
Lazio	0,20	0,08	1,87	3,51
Abruzzo	0,19	0,07	4,18	0,67
Molise	0,31	0,01	1,31	0,14
Campania	0,17	0,01	1,70	1,43
Basilicata	0,23	0,00	3,31	0,36
Puglia	0,18	0,01	2,66	0,63
Calabria	0,18	0,01	3,21	0,83
Sicilia	0,15	0,00	1,49	1,40
Sardegna	0,16	0,01	3,70	3,23

Table 3.2b – Attractiveness indicators by type of flow and by region, at the national and international scale

	Attractiveness of university students		Attractiveness of immigrants	
	National	International	National	International
REGIONS (NUTS2)	Incidence of Italian students enrolled in the population	Incidence of for- eign students enrolled in the population	National immigration rate	International immigration rate
ITALY	0,03	0,00	0,02	0,00
Valle D'Aosta	0,01	0,00	0,04	0,00
Piemonte	0,02	0,00	0,03	0,00
Liguria	0,02	0,00	0,02	0,00
Lombardia	0,02	0,00	0,03	0,01
Trentino-Alto Adige	0,02	0,00	0,03	0,01
Veneto	0,02	0,00	0,02	0,00
FriuliVenezia Giulia	0,02	0,00	0,02	0,00
Emilia-Romagna	0,03	0,00	0,03	0,01
Toscana	0,03	0,00	0,02	0,01
Marche	0,03	0,00	0,02	0,00
Umbria	0,03	0,00	0,02	0,00
Lazio	0,04	0,00	0,02	0,01
Abruzzo	0,04	0,00	0,02	0,00
Molise	0,02	0,00	0,02	0,00
Campania	0,03	0,00	0,02	0,00
Basilicata	0,01	0,00	0,01	0,00
Puglia	0,02	0,00	0,01	0,00
Calabria	0,02	0,00	0,01	0,00
Sicilia	0,02	0,00	0,02	0,00
Sardegna	0,02	0,00	0,02	0,00

4. The methodology for the construction of a synthetic indicator

For the construction of the composite index that takes into account and synthesizes the four dimensions of national and international attractiveness of the Italian regions (that is to say, the four major types of flows that characterize the national and international attractiveness of the Italian regions), reference is made to the methodologies defined in the international literature¹¹.

An adequate standardization method was first defined, which would make all "sectoral" indicators comparable between themselves. Initially, we intended to use classical standardization (*z-scores*), which however produced some negative sign results, which is counter-

¹¹ See in particular OECD (2008), and Nardo et al. (2005).

intuitive¹². We have therefore opted for standardization using the Min-Max method¹³, which can be obtained as follows:

$$I^{x} = \frac{x - \min(x)}{\max(x) - \min(x)}$$

Where min (x) and max (x) are the minimum and maximum x of the data respectively. In this way, all data falls all within a range from 0 (corresponding to the min (x)), to 1 (corresponding to the max (x)).

After the normalization process, we have addressed the question of weighing. We have wondered whether all the dimensions of attractiveness have the same weight in the creation of the final synthetic indicator, that is, if they all had the same importance for the purposes of regional economic development. Being an extremely complex issue, which requires extensive expertise and experience on the subject of regional economic development, and by deliberating to address it using a transparent, clear and easily understandable weighting method¹⁴, we have been oriented to choose the participatory weighting method, known as BAP (*Budget Allocation Process*)¹⁵.

This method required to ask a number of regional economic development experts what relative importance in general they give to the four dimensions of attractiveness (typologies of flows) studied, in terms of relevance for regional economic development.

Experts have been selected among academics and members of the world of the Italian institutions dealing with studies on regional economic development, thus being able to assess the contribution of the various dimensions of attractiveness to regional economic development. They were mainly, but not exclusively, economists¹⁶, and in any case with a broad sub-disciplinary background focused not just on one of the four specific sub-topics associated with the four dimensions taken into consideration (tourism, FDI, immigration, university education). Our goal was indeed to avoid having too much distortion in favour of one of those sub-topics. Since a national database on such profiles is not available, experts, according to a non-probabilistic sampling principle, have been identified by selecting them from members of some of the major

¹² When you deal with attractiveness of incoming flows in a territory (without considering outflows), it is intuitive that negative signs do not make sense.

¹³ This choice was also dictated by the fact that for each of the eight indicators taken into account, neither any of them present values that fall within a very limited range, nor particularly extreme values (*outliers*) are present. (OECD, 2008, cap. 1.5).

¹⁴ OECD, 2008, cap. 6.5.

¹⁵ Op. cit.

¹⁶ Although the subject of economics is concerned, we decided to involve also experts with background in other areas (eg. geography, spatial planning), since regional economic development is typically assumed to be a multidisciplinary theme.

research bodies working on the matter¹⁷. We have also tried to maintain a certain representativeness in terms of geographical origin¹⁸.

An ad hoc electronic questionnaire, in Microsoft Excel format was created to be submitted to the selected experts (see **Appendix 1**). Experts, contacted by mail, have given a weight to the different types of attractiveness (typologies of flow) that can be attracted by a region, based on their importance for the regional economic development, using a total score amounting to 100. In other words, "allocating" a budget of 100 points among them (see **Figure 1** in the Appendix).

Based on the weights given by the experts, the average weight assigned to each category was as follows:

- Attractiveness of direct investment: 38.82%;
- Attractiveness of tourists: 26.82%;
- Attractiveness of university students: 19.53%;
- Attractiveness of immigrants: 14.82%.

As can be seen, the weighting given by the experts presents far results from a mere assignment of equal weights to the different dimensions. There is therefore a clear hierarchy in the economic relevance for the regional economic development of the different types of flows, which clearly sees the direct investments as the most important typology of flow, followed by the tourist movement. The final index was created using a linear aggregation method, whose formula is:

$$CI_C = \sum_{i=1}^n w_i I_{ic}$$

Where CI_c represents the composite indicator, n is the number of elementary indicators, and w_i is the weight associated with the i-th elementary indicator with:

$$\sum_{i=1}^{n} w_i = \mathbf{1}$$
 and $0 \le w_i \le 1$.

5. Results at the regional level

The calculation of the synthetic index of multidimensional attractiveness for the Italian regions obtained with our methodology shows a range from 0 (minimum value) to 1 (maximum value), and is illustrated in the table below.

 $^{^{\}rm 17}$ For example, Politecnico di Milano, IPRES Puglia, Università di Pisa, di Torino, $\it etc.$

¹⁸ Among the experts who replied to the questionnaire (in total: 18), 11 were from Northern Italy, three from the Centre, and four from the South.

Table 5.1 – *Synthetic index of multidimensional attractiveness by region (NUTS2)*

Regions	Index	Regions	Index
Trentino-Alto Adige	0,57	Umbria	0,34
Lazio	0,55	Veneto	0,34
Piemonte	0,47	Marche	0,33
Abruzzo	0,46	Molise	0,29
Liguria	0,45	Campania	0,23
Valle D'Aosta	0,45	Calabria	0,22
Friuli-Venezia Giulia	0,44	Sardegna	0,20
Lombardia	0,44	Basilicata	0,17
Toscana	0,43	Puglia	0,17
Emilia-Romagna	0,41	Sicilia	0,16

In the highest part of the regional rankings, apparently far from the other regions, there are Trentino-Alto Adige and Lazio. The strong and well-known tourist vocation, as well as the role of the Italian capital city as a "natural" investment attractor, appear to be the determining factors for this outstanding result of these two regions. However, the presence of important universities in these regions should not be neglected as well.

Table 5.2 – Synthetic Index of multidimensional attractiveness, at the national and international scale, by region

NIST	1	Internal	:1
Natio	nai	Internat	ionai
Valle D'Aosta	0,57	Trentino-AA	0,70
Molise	0,50	Lombardia	0,69
Abruzzo	0,49	Lazio	0,65
Liguria	0,48	Piemonte	0,55
Lazio	0,45	Friuli VG	0,49
Trentino-AA	0,44	Emilia-Romagna	0,48
Friuli VG	0,40	Toscana	0,46
Toscana	0,39	Liguria	0,43
Piemonte	0,39	Abruzzo	0,42
Marche	0,35	Umbria	0,38
Campania	0,35	Veneto	0,37
Emilia-Romagna	0,34	Valle D'Aosta	0,33
Calabria	0,32	Marche	0,30
Sardegna	0,32	Calabria	0,13
Umbria	0,31	Campania	0,10
Basilicata	0,31	Molise	0,09
Veneto	0,30	Sardegna	0,09
Puglia	0,29	Puglia	0,06
Sicilia	0,26	Sicilia	0,06
Lombardia	0,19	Basilicata	0,04

Next, in a very narrow score range, between 0.47 and 0.42, there is a group of large and small northern and central regions, including also a southern region, Abruzzo. Again, tourism flows tend to play an important role, obviously together with the FDIs flows in large and highly developed regions such as Lombardy. After another small group of northwest regions, which are evidently less performing in the field of invest-

ment attraction, there are all other southern regions. Interestingly, they get rather different scores: some of them (Campania, Calabria, Molise and Sardinia) get a score even higher than 0.2. As far as attractiveness is concerned, Southern Italy results to be rather heterogeneous.

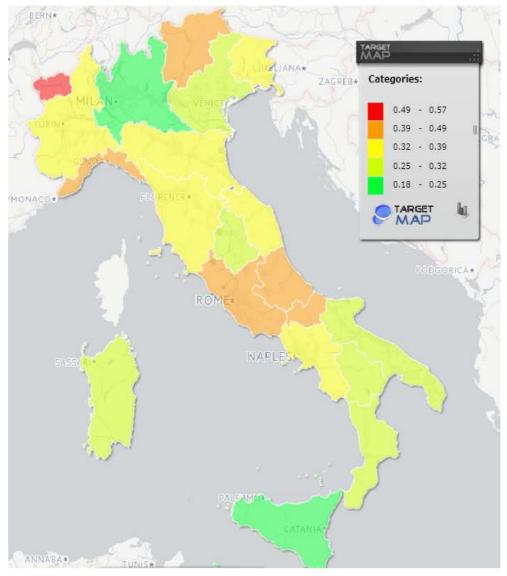


Figure 5.1 – *The thematic map of the synthetic index of multidimensional attractiveness, at the national scale*

Looking at the regional ranking obtained though the synthetic index of multidimensional attractiveness, it emerges on the one hand that the spatial patterns that traditionally mark the economic geography of the country (North-South divide) are confirmed. On the other hand, however, looking within the three macro-regions, and at the cases of individual regions, we can point out hierarchies and patterns that are not so usual and intuitive. A central region like Lazio is for example at the top

of the ranking, while in other kind of regional rankings in Italy it does not happen. Similarly, it is surprising that a strongly developed region like Veneto is far from other northern regions such as Lombardy and Piedmont, when the Padana area is assumed to be a relatively homogeneous area of socio-economic development. And, as concerns the Mezzogiorno, we can highlight differences in regional performances and "new" patterns, such as the fact that the central Adriatic (Eastern) regions, and the Tyrrhenian regions, result to be more attractive than the islands and the peripheral Adriatic (Eastern) regions.

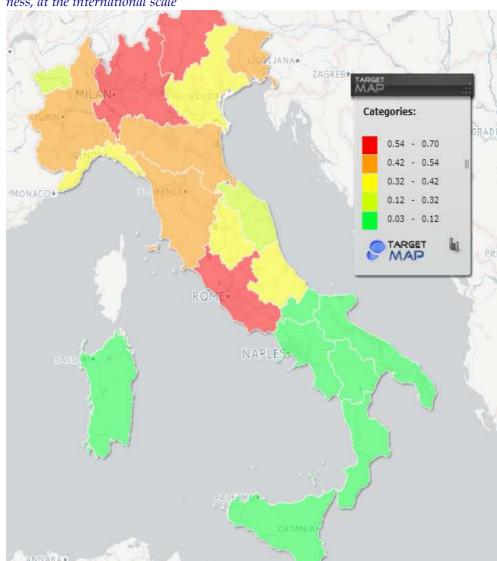


Figure 5.2 – *The thematic map of the synthetic index of multidimensional attractiveness, at the international scale*

If we distinguish between attractiveness at the national scale (internally) and at the international scale (see **Table 5.2** and **Figures 5.1** and **5.2**), always using the BAP method, it is easier to find an interpretation

of these patterns. We can immediately notice that the North-South cleavage concerns in particular the attraction from foreign countries. The Southern regions in fact "languish" in the lowest part of the ranking regarding the multidimensional international attractiveness, which results to be much more "stretched" than the general ranking. While in the – "short" – ranking in terms of multidimensional national attractiveness, the North-South gap almost fades, being some southern regions at the top of the rankings (Abruzzo and Molise), and regions of the Centre-North Italy in the bottom (Veneto and Umbria).

Therefore, while within the Italian borders, the territories of the Mezzogiorno are "competitive" like those of the North in attracting investment, tourists, students, and workforce, it is in the international scenario (the most important one, even in potential terms), that the South worst off its disadvantages. Starting, presumably, from its peripherality.

6. Concluding remarks

This first attempt to construct and apply a synthetic indicator of multidimensional territorial attractiveness has allowed us to observe how regions perform in terms of attraction of human, financial, entrepreneurial, etc. resources.

Interestingly, we pointed out that the traditional North-South pattern of regional development does not fully comply with the results presented. The geography of attractiveness seems much less simple than other geographies that typically describe the Italian economy and society. The same Southern Italy seems somewhat heterogeneous, thus denying a tendentiously homogeneous image that emerge from other analyses, presumably rooted in an stereotyped image of this part of the country (Musolino, 2016).

Unless, obviously, we do not focus on attracting resources at the international scale, where the South (all but Abruzzo) is far behind. If we consider that global markets are clearly the "place" of greater potential development in the future for several type of flows and economic relations, it means that yet the evaluation of attractiveness of Southern Italy cannot be positive at all. Therefore, peripherality, poor accessibility, presence of abnormal phenomena such as organized crime, inefficiency of public institutions, i.e. the location factors that typically penalize the Mezzogiorno more than other regions of the country as observed by several studies (Barba Navaretti *et al.*, 2009, Bentivogli *et al.*, 2015, Daniele, 2005; Daniele and Marani, 2011; Resmini, 2014), seem to matter even here, especially when Southern regions have to compete on global markets in attracting different kinds of resources.

Policies that follow should be focused on the weaker regions in the first place, in order to strengthen their infrastructural and institutional system, to enhance security and to improve the their image through appropriate territorial marketing activities to promote these areas in the world market for investments, human resources, and tourism flows.

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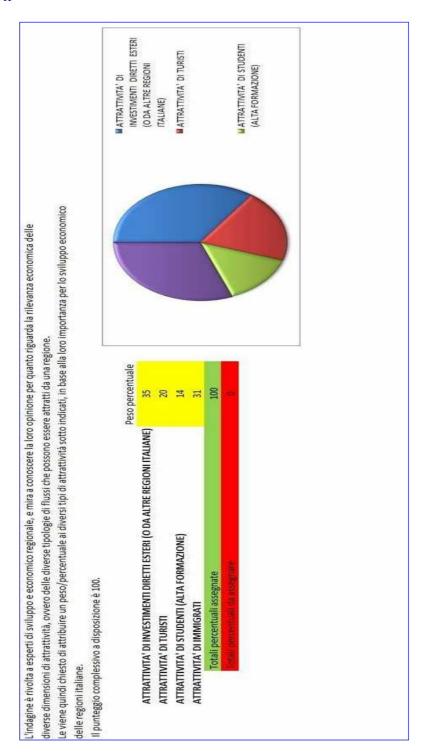
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Appendix 1

Figura 1 – Example of a response to the questionnaire by one of the experts involved in the BAP



Anno | Year 2018

«A Multi-dimensional Approach to the Measurement of Territorial Attractiveness: Towards a Synthetic Indicator»

by Dario Musolino e Stephany Volget