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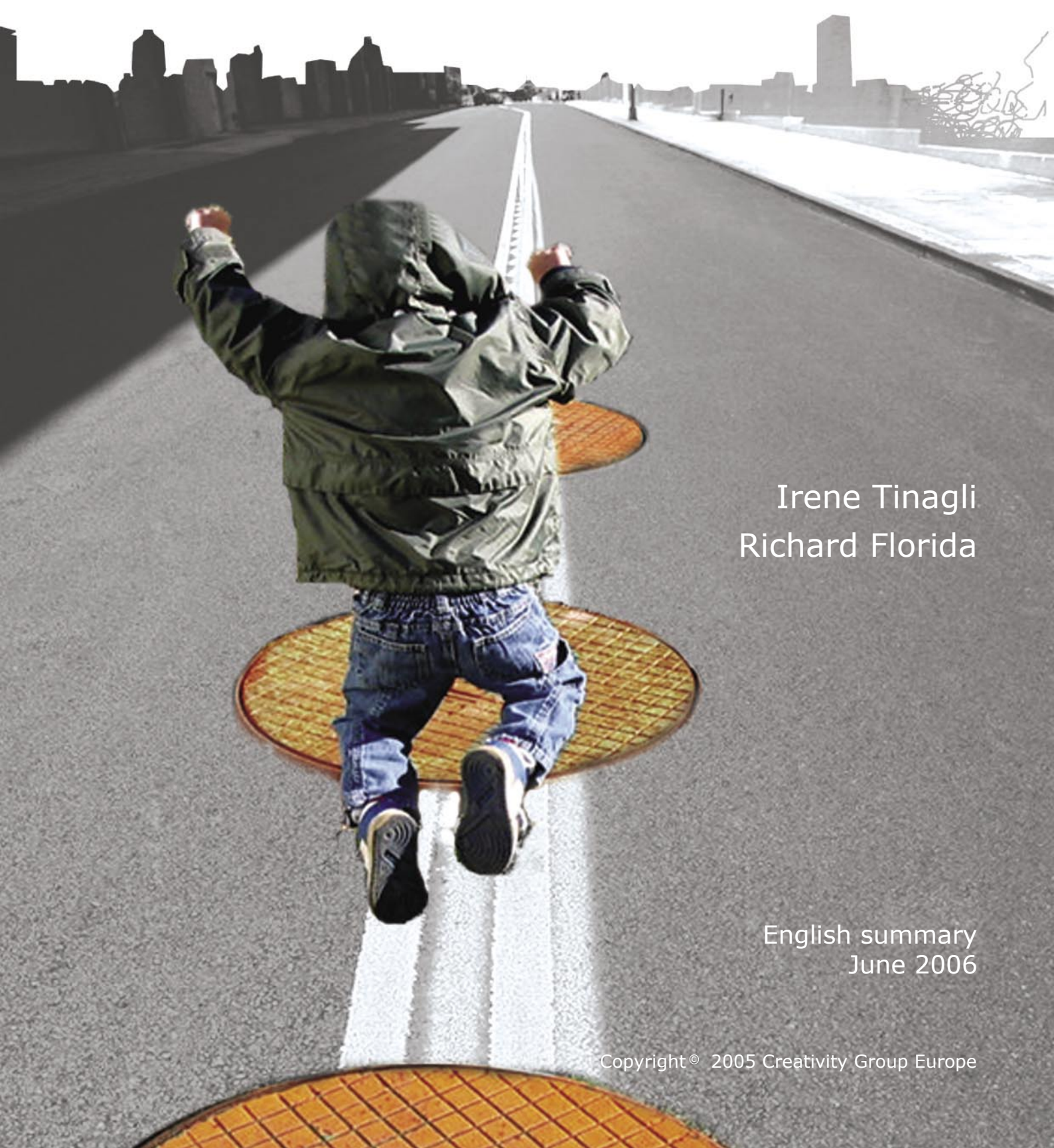
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ITALY IN THE CREATIVE AGE

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Richard Florida

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Italy in the Creative Age

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Preface

This research report¹ proposes a new approach to the study of cities.

Such an approach is based on the 3T model of technology, talent and tolerance elaborated by the American economist Richard Florida, a partner of Creativity Group Europe.

The ideas and thoughts proclaimed within his book *The Rise of the Creative Class* have triggered debate within Italy and have attracted curiosity from local authorities that each day must confront the transformations and the challenges of cities within a rapidly changing economy, namely local administrations, economic development agencies, universities, industry associations, chambers of commerce, and so forth.

All such entities are in search of new solutions. One frequently asked and fundamental question is: what must a city do or have to grasp the opportunities of a knowledge economy?

Our report does not give absolute answers however should be considered more appropriately as a directional compass.

We would like to thank the seven local authorities that promoted the “Creative City” project for giving us the opportunity to build this compass.

Over time’s course, we hope to render it more and more precise.

In fact, work is still incomplete and our collaboration with local entities involved across Italy and Europe within local economic

development, and with those companies interested in the creative economy, will continue into the future over the following months and upcoming years.

Apart from this study, the “Creative City” project allows for the development of personalised reports to local entities which would allow them to acquire relevant information on policy issues and actions to implement within the various territorial contexts, within the areas of attraction and within both creative and human capital training and education.

The message contained within is simple: today, an economy and its society are permeated by the power of creativity. The number of jobs and professions increases whereby individuals are allowed to apply their lifelong-developed know-how and place it in the service of companies and organisations that recognise such value.

The novelty with respect to the past is that more and more companies and projects are promoted by the facultative creativity of people, by their capacity to recognise and resolve complex problems.

From this, a sort of expanding creative ethos results: in a knowledge economy, where competition is based more frequently on immaterial factors, intangibles are awarded, such as research and acquired creative skills, personal talent and the capacity to bring it to fruition within a team.

The same choices and lifestyles are influenced by this ethos to the point that the decision of “where to live” becomes as important as the



¹ Report released by Creativity Group Europe on September 2005. The report is part of a broader project, “Creative Cities”, sponsored by the local governments of Rome, Milan, Bari, Trento, Capannori, and agencies Torino

decision of “whom to work for”.

A city as a creative habitat, therefore, becomes a place that favours the deployment and the development of human creativity.

A habitat that provides an easy inclusion of individuals within a creative and knowledge-based economy, or to the contrary, that does not succeed in imposing ostracism.

This study applied the interpretive 3T model grid, including the first necessary adaptations to the Italian context.

The objective was to evaluate the creative potential of cities and their capacity to retain and attract people who apply creative skills within the labour force.

However, the resulting index is not a rating, but moreover one of the many manners in which a compass may be used to understand which decisions must be made, such as what must be done to attract talent in search of a creative habitat and, subsequently, the appropriate contributing opportunities these people need to develop and apply their own creative resources.

Giovanni Padula
CEO and Director of Creativity Group Europe

1. Objective of the Study

This work extends and adapts to the Italian context the conceptual framework and indicators introduced by Richard Florida in his book *The Rise of the Creative Class*, as well as other works such as *Europe in the Creative Age* and *Global Creativity Index*. It is based on the 3T model of economic development – talent, technology and tolerance – and thus used to analyse and compare 103 Italian cities.

An Italian Creativity Index (ICI) was developed, based on a wider set of indicators than those used in previous studies in the past. This set of indicators has proven a powerful tool not only to ‘measure’ and rank Italian cities, but, most importantly, to assess their context, evaluate their potential, as well as their challenges, and understand their dynamic.

This research represents the first systematic effort to apply the 3T framework at the city level outside North America.

2. Methodology

The performance of Italian cities along the 3T framework was measured using the following set of indicators:

1. **Talent** The talent index is based on three indicators:

- Creative class: percentage of creative occupations on total employed. Creative class is defined without “technicians”. The definition includes: entrepreneurs, managers (both in public and private sectors), professionals (engineers, chemists, architects, etc.), intellectuals and artists with ‘high specialisation’, professors and teachers (excluding primary schools teachers);
- Human capital: percentage of population with a Bachelor degree or higher;
- Researchers: Number of researchers per 1000 employed.

2. **Technology** The technology index is composed of three indicators:

- High-tech industry: relevance of high-tech industry as percentage of total employment. The definition of high-tech is the same as that of the Milken Institute, but is reclassified into three components:
 - Hardware and physical products (production of PCs, pharma, aerospace, surgery and medical devices, microelectronics, etc.);
 - Software and services (software, information systems’ consultancies, engineering and technical consultancies, databases, data management etc.);
 - TLC & audio-visual (telecommunications, cinema production and distribution);
- Innovation index: Number of patent applications to the Italian Patent Office per 10,000 population;
- Connectivity (broadband): Percentage of population reached by the following services:
 - ADSL line (fast internet connection);
 - UMTS (mobile phones, third generation).

3. **Tolerance** The tolerance index is based on three dimensions:

- Diversity index: This is an index that evaluates two aspects of immigration:
 - Percentage of foreign-born (“quantity” of foreigners);
 - Diversity index, which measures the degree of ethnic diversity of foreigners based on

their country of origin (the diversity index has been built according to the “fragmentation index” formula);

- Integration index: The integration index attempts to measure the degree to which diversity is embedded – or the likelihood in becoming more integrated - within the social and economic context of a city and/or region. In order to do so, three aspects were measured:
 - Percentage of “mixed marriages”: the percentage of marriages in which one spouse is Italian while the other is foreign-born;
 - Foreign talent: percentage of foreign-born individuals included within the labour force that have a “tertiary education” (bachelor degree or university diploma);
 - Education level of foreign children: an index built as follows: the proportion of foreign children (0-14) over total foreigners multiplied by the proportion of foreign children that are currently enrolled in public schools. This index is intended to measure how deeply foreign population is rooted within the society through the presence of children and their level of education;
 - Gay tolerance index: based on a survey promoted by a major Italian gay web site. The survey involved approximately 10,000 gay individuals scattered throughout all Italian provinces and subsequently rated gay tolerance for all the Italian provinces.

The research study also collected and analyzed the following data:

- Total university population in each city (students enrolled in all the universities of a given city):
- Foreign student enrolment:
- Trend data about high-tech industries (data from 1991 as compared with 2001);
- Trend data about creative class and occupations (data from 1991 as compared with 2001);
- Cultural and entertainment activities in major cities (theatre, recreational expenditure, etc.).

These data are not part of the research indicators but have been included for a deeper understanding of the overall context of certain Italian cities and/or regions.

3. Main findings on the 3Ts

1. Creative Class and Talent:

Compared to 1991 census data, the overall creative class in Italy has increased by 128%, including in 2001, over four million people (about 4,300,000) from less than two million in 1991. As a share of the total workforce, creative class has gone from an average of 9% to 21%.

The overall rank of the creative class index reveals that the first positions are held mainly by large metropolitan areas, including some large cities of southern Italy such as Naples and Palermo, which can be found in the top 10.

Considering the other talent indicators (human capital and researchers), Rome is the city with the highest talent index, topping each of the three indicators adopted: creative class, human capital and scientific talent.

It is interesting to note that, besides Rome, all other top positions on the overall talent index are covered by large cities: Trieste, Genova, Bologna, Milano, Firenze. These cities performed well not only on the creative class index but also on human capital and scientific talent (researchers). Such results suggest that these cities have an overall ability to generate, cultivate and attract talent as well as to set in motion a virtuous cycle that grants them good results on all the various aspects of the talent index.

A finding that also emerges from the analysis is that traditional industrial cities (typical of northern Italy) tend to attain lower levels on the talent index and, particularly, of human capital. This result indicates the existence in these cities of an industrial context that has maintained strong traditional features and that is not able to absorb new talent. This inability prevents the further creation, attraction, and retention of talent in these areas.

2. Technology

Milan holds first place on the technology index, mostly thanks to a considerable concentration of high-tech industries and a good innovative potential. All top places, however, are occupied by large northern cities. Bologna, Torino, Roma, Modena, Genova, Trieste, Parma and Padova are all in the top 10.

Southern cities seem to lag behind within this dimension. The first southern city to appear in the ranking is Palermo, in 28th position, thanks to a good connectivity index, followed by Bari which seems to have some potential in high-tech industries.

However the most interesting insights come not from the technology rankings alone, but from its cross-comparison with talent and innovation data. For example, it is noted that in most southern

cities high-tech industries are highly unbalanced towards more “service” activities, with very little, and sometimes non-existent, industry for the creation and production of new technological products. This fact explains why many of these southern cities do not manage to grow and have difficulties in becoming innovative despite often having significant pools of creative talent. Simply, creative class and talent of these cities are embedded in an industrial system that is still too traditional and technologically under-developed to make this “talent” truly productive and innovative, thus hindering the ability of these cities to grow and develop.

Also, when comparing a city’s technology performances to its performance on the innovation (patent) index, another interesting phenomena is observed, namely the fact that many of the top places on the innovation index are actually cities with a very low presence of both scientific talent and/or high-tech industry (such as Macerata, Udine, Vicenza and Pordenone).

This observation confirms that in such places innovation tends to be more concentrated on process innovation and improvements, rather than new technological products development and commercialization – a trend that characterizes an Italian innovation system at large.

3. Tolerance

Large cities seem to have an advantage in developing multicultural and open societies: Roma, Milano, and Firenze are in the top three positions of the tolerance index. Other relatively large cities like Bologna, Trieste, Genova, and Torino, also rate high within the overall ranking.

Large cities and metropolitan areas are also best in their ability to attract educated immigrants. The two cities topping the ‘foreign talent’ indicator are, in fact, Rome and Milan

However, many medium-sized cities show positive results, especially in their ability to integrate foreign-born families into the local social network.

There also appears to be a certain gap between northern and southern cities: southern ones lag behind in their ability to build a multicultural and open society, even the largest city centres such as Naples or Palermo.

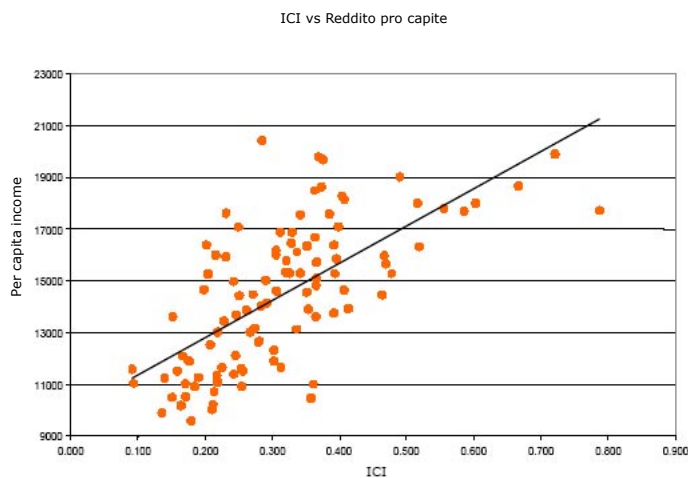
4. Assessing the 3Ts together: the Italian Creativity Index (ICI)

Before getting into the results and their analysis it is important to acknowledge that the ICI has a merely descriptive and interpretive role. The purpose of the index is simply to synthesize multiple measures into one single figure that gives a snapshot of every city. It is only by following a deeper analysis of each dimension individually and in relation to the others that we can best appreciate and evaluate the creative potential and performance of each city. Few general insights emerged from the synthetic index:

- The highest scores correspond to the largest cities (Roma, Milano, Bologna, Firenze, etc.), which are better able than smaller ones to balance each of the three Ts and have good performances on all of them.

- Yet, we can also observe a good competitive edge from medium-sized cities, although they appear to have a lower balance between the three Ts. In general, the medium cities that are at the top of the ranking owe their positioning to rather tolerant and open environments, and in some cases, also to a strong and quite innovative industrial context (like Modena, Parma, and Padova).
- There still exists a significant northern/southern divide within Italy. In particular, southern cities show major weaknesses in their technological capability as well as in their cultural environments, which appear very traditional and still far from open as is the case within most multicultural societies.
- However, many traditional industrial cities in the north-east also seem to struggle in the creation of creative economies and societies (like Rovigo, Cuneo, and Vercelli) where the traditional economic structure is accompanied by a similarly traditional social structure.

Figure 1. ICI vs. average per capita income



4. Conclusions

The data collected and analyzed in Italy confirm some trends and correlations that have been identified in previous analyses conducted in the United States and other countries worldwide:

- Although Italian cities show a lower presence of creative class when compared to most of their European and US counterparts, the emergence of a creative class appears to be an emerging phenomenon in Italy as well. In fact, compared to 1991 census data, the overall creative class in Italy has increased by 128%, including, in 2001, over four million people (about 4,300,000) from less than two million in 1991.
- The analysis of the Italian context also confirms the existence of a positive relationship between talent and technology, similar to that which emerged in previous works that used data from the United States, Canada, and other European countries. Such positive correlation can be interpreted, on one hand, as the relevance of talent for the development of sound technological capabilities. On the other hand, however, it also suggests that areas technologically advanced can be more attractive for talented and creative people. In this regard, it is interesting to point out the existence of a positive correlation between creative class and connectivity infrastructures: cities with high access to communication technologies are also cities where high percentages of creative and talented people tend to be concentrated.
- It is also very interesting to note that, similar to what had been found in previous studies, there is a positive correlation between gay tolerance index and technology index. Generally, we find a positive correlation between tolerance index and technology index. Tolerance index is also positively correlated with talent index (all these relationships are shown in figures 10 and 11 in the full report).
- Foreign talent is particularly concentrated in places that also exhibit high levels of overall human capital and high diversity. This relationship is quite interesting as it supports the idea, already expressed and tested in previous works, that places with high levels of talent and diversity (openness) are attractive for more talent coming from abroad.

However, the analysis of the Italian context also pointed out some peculiarities that are worth mentioning as they have important implications for new policy design and implementation.

1. A first one is the existence, in many cities, of a gap between creative class and other measures of talent: while in previous studies all three components of talent index tended to be positively correlated, in Italy many cities show discrepancies among the three indicators. For example, there are cities with good performances on scientific talent but with low levels of creative class (like Trento, Sassari, or Matera), and cities that, instead, have good levels of creative class that are not accompanied by similar good levels of human and/or scientific capital (like Naples, Palermo, or Catania). Such a gap characterizes various Italian cities and is probably related to two main features. On one hand, the presence of strong public research institutions loosely related to the productive structure of a city/area might be the reason why such areas exhibit high levels of scientific talent but are not able to leverage this asset to develop higher levels of human capital and creative class. This could be the case of some important “university towns” such as Padova or Trento.

On the other hand, the high diffusion of small firms with low technological innovativeness might lead to, in certain cases, high levels of creative class (which includes entrepreneurs and managers) without affecting significantly the level of overall human capital and/or scientific talent. As a partial test for this hypothesis (many entrepreneurs and managers with low human capital), we analyzed occupational data by educational levels at the national and regional level.

The results support the hypothesis in that they show how the average education level of entrepreneurs and managers are surprisingly low: as shown in table 6, only 14% of them hold a bachelor degree or above.

2. Another peculiarity, already mentioned above, is the detachment between innovation and technology that is found in various Italian cities. This suggests that most of the innovation produced in these cities is not technology driven.

3. A final remark concerns the results emerging from the tolerance index, which was measured through a much broader set of indicators than had ever been used before. This greater depth provided useful insights on this dimension. In fact, the Italian data seem to suggest that there are ‘two faces of integration’.

Firstly, we find high-end integration, developed through education and status, which appears to be taking place more easily in large cities. Conversely, we have a more diffuse, ‘community-based’ type of integration that is more gradual, and probably more difficult to achieve, but possibly more deeply rooted within the community. This kind of integration tends to develop more in small and medium-sized cities. Both types are important components of a truly ‘multicultural society’. It is important to keep in mind that neither has more importance over the other, though each may require different policies and actions to be developed, administered and enhanced.

The findings captured the existence of a much greater variety in regional and urban centres than any national level research could get. The city-level data and information gathered provided a solid basis for designing and developing more informed and better targeted policies both at the national and the regional/urban level.

Creativity Group Europe is now working with local governments on the follow-up of the present study, supporting them in the full understanding of the implications and the opportunities highlighted by the main findings of the research.

Table 1. Creative Class

	Province	% Creative Class		Province	% Creative Class		Province	% Creative Class
1	Roma	24.62%	36	Bari	20.41%	71	Potenza	19.18%
2	Genova	23.99%	37	Pesaro-U.	20.41%	72	Foggia	18.99%
3	Trieste	23.63%	38	Arezzo	20.30%	73	Forlì C.	18.99%
4	Napoli	23.38%	39	Vibo V.	20.28%	74	Novara	18.96%
5	Bologna	23.26%	40	Matera	20.22%	75	Caltaniss.	18.93%
6	Pescara	23.24%	41	Ascoli P.	20.16%	76	Latina	18.93%
7	Firenze	22.87%	42	Trapani	20.12%	77	Frosinone	18.91%
8	Milano	22.87%	43	Siracusa	20.11%	78	Aosta	18.63%
9	Palermo	22.52%	44	Piacenza	20.08%	79	Verona	18.62%
10	Messina	22.51%	45	Sassari	20.08%	80	Rieti	18.52%
11	Pisa	22.32%	46	Benevento	20.07%	81	Vicenza	18.52%
12	Reggio C.	22.24%	47	Udine	20.03%	82	Bolzano	18.44%
13	L'Aquila	22.23%	48	Campob.	20.00%	83	Reggio E.	18.41%
14	Salerno	22.18%	49	Pavia	19.94%	84	Viterbo	18.37%
15	Catania	22.09%	50	Lecce	19.94%	85	Pordenone	18.35%
16	Terni	22.04%	51	Macerata	19.93%	86	Cremona	18.26%
17	Rimini	21.85%	52	Venezia	19.92%	87	Belluno	18.24%
18	Cosenza	21.80%	53	Torino	19.91%	88	Nuoro	18.01%
19	Perugia	21.61%	54	Prato	19.83%	89	Ragusa	17.91%
20	Padova	21.54%	55	Gorizia	19.81%	90	Sondrio	17.83%
21	Parma	21.54%	56	Grosseto	19.68%	91	Biella	17.79%
22	Siena	21.44%	57	Trento	19.63%	92	Brescia	17.70%
23	Catanzaro	21.40%	58	Chieti	19.60%	93	Mantova	17.69%
24	Savona	21.36%	59	Varese	19.55%	94	Verbano	17.56%
25	Avellino	21.13%	60	Pistoia	19.44%	95	Bergamo	17.46%
26	Crotone	20.91%	61	Enna	19.42%	96	Taranto	17.32%
27	Cagliari	20.86%	62	Modena	19.36%	97	Lodi	17.15%
28	Isernia	20.75%	63	Alessandria	19.31%	98	Oristano	17.11%
29	Massa C	20.73%	64	Lecco	19.31%	99	Asti	16.96%
30	Caserta	20.71%	65	Treviso	19.30%	100	Vercelli	16.82%
31	La Spezia	20.66%	66	Imperia	19.28%	101	Brindisi	16.65%
32	Ancona	20.62%	67	Como	19.26%	102	Rovigo	16.48%
33	Livorno	20.57%	68	Teramo	19.24%	103	Cuneo	16.37%
34	Lucca	20.53%	69	Ravenna	19.24%			
35	Agrigento	20.51%	70	Ferrara	19.22%			

Table 2. The table index

	Province	TALENT INDEX	Creative Class	Human Capital	Researchers		Province	TALENT INDEX	Creative Class	Human Capital	Researchers
1	Roma	1.000	1	1	1	53	Venezia	0.249	52	63	35
2	Trieste	0.697	3	4	2	53	Varese	0.249	59	44	45
3	Genova	0.629	2	5	3	55	Udine	0.246	47	59	74
4	Bologna	0.594	5	2	11	56	Ferrara	0.245	70	28	64
5	Milano	0.563	7	6	12	57	Ravenna	0.243	68	24	92
6	Firenze	0.517	6	7	40	58	Modena	0.241	62	40	47
7	Pescara	0.488	4	36	7	59	Forli-C.	0.240	72	31	31
8	Napoli	0.448	11	9	22	60	Lecce	0.233	49	67	68
9	Pisa	0.444	13	10	24	60	Agrigento	0.233	35	82	58
10	L'Acquila	0.433	20	8	24	62	Crotone	0.231	26	91	83
11	Parma	0.423	19	13	17	63	Grosseto	0.225	56	69	55
12	Perugia	0.412	9	38	8	63	Trapani	0.225	42	80	42
13	Palermo	0.411	10	14	61	65	Alessandria	0.219	63	52	87
14	Messina	0.410	22	11	23	66	Potenza	0.211	71	73	28
15	Siena	0.397	20	15	13	67	Novara	0.209	74	53	67
15	Padova	0.397	16	20	27	68	Como	0.203	67	64	95
17	Terni	0.384	18	18	34	69	Treviso	0.202	65	71	73
18	Cosenza	0.375	53	16	4	70	Lecco	0.196	63	70	100
19	Torino	0.374	15	35	19	71	Enna	0.195	61	79	72
20	Catania	0.373	17	21	37	72	Rieti	0.194	80	45	92
21	Rimini	0.372	12	26	78	72	Prato	0.194	54	96	31
22	Reggio C.	0.366	14	34	42	72	Foggia	0.194	72	78	24
23	salerno	0.364	32	11	44	75	Verona	0.188	79	53	89
24	Ancona	0.356	1	1	1	76	Latina	0.186	75	65	97
25	Savona	0.337	24	25	55	77	Pistoia	0.182	60	86	70
26	Catanzaro	0.325	23	39	50	78	Reggio E.	0.178	83	66	53
27	Trento	0.319	57	41	5	79	Cremona	0.171	86	61	81
27	Cagliari	0.319	27	50	15	80	Bolzano	0.170	82	68	74
29	Pesaro-U.	0.316	36	17	61	81	Aosta	0.167	78	n.d	36
30	Matera	0.312	40	30	14	82	Pordenone	0.158	85	72	94
31	La Spezia	0.310	31	26	47	83	Frosinone	0.156	77	88	74
32	Isernia	0.303	28	32	55	84	Vicenza	0.153	80	81	64
32	Massa-C.	0.303	29	41	30	85	Viterbo	0.152	84	76	89
34	Livorno	0.301	33	29	50	86	Caltaniss.	0.140	75	98	80
35	Avellino	0.300	25	62	37	87	Brescia	0.133	92	85	20
36	Pavia	0.292	49	19	58	87	Belluno	0.133	87	83	88
36	Sassari	0.292	44	57	9	89	Ragusa	0.128	89	83	53
38	Piacenza	0.284	44	23	79	99	Mantova	0.128	93	75	83
39	Caserta	0.283	30	74	16	91	Lodi	0.123	97	77	21
40	Lucca	0.281	34	47	64	92	Sondrio	0.109	90	93	60
41	Gorizia	0.278	55	22	61	93	Nuoro	0.099	88	99	89
42	Bari	0.277	36	51	40	94	Bergamo	0.095	95	89	83
43	Benevento	0.268	46	37	70	95	Verbano	0.094	94	92	74
44	Campob.	0.266	48	49	37	96	Taranto	0.087	96	87	96
45	Macerata	0.263	51	32	81	97	Biella	0.087	91	97	101
46	Vibo V.	0.262	39	60	46	98	Asti	0.075	99	94	50
47	Ascoli P.	0.261	41	46	83	99	Vercelli	0.060	100	90	103
48	Arezzo	0.259	38	55	69	100	Brindisi	0.059	101	101	29
49	Teramo	0.257	68	58	10	101	Cuneo	0.037	103	95	97
49	Siracusa	0.257	43	55	47	102	Oristano	0.032	98	102	99
51	Imperia	0.255	66	43	18	103	Rovigo	0.030	102	100	102
52	Chieti	0.253	58	48	31						

Table 3. The technology index

	Province	Technology Index	High Tech Index	Innovation Index	Connectivity Index		Province	Technology Index	High Tech Index	Innovation Index	
1	Milano	0.775	1	2	9	53	Lucca	0.244	49	48	45
2	Bologna	0.656	14	1	15	54	Grosseto	0.240	74	76	37
3	Torino	0.557	2	6	16	55	Siracusa	0.234	19	101	49
4	Roma	0.500	5	17	6	56	Bolzano	0.233	63	25	59
5	Modena	0.492	60	3	12	57	Caltaniss.	0.228	39	22	66
6	Firenze	0.471	17	10	4	58	Messina	0.225	33	71	53
7	Genova	0.431	6	24	7	59	Reggio C.	0.220	60	76	50
8	Trieste	0.417	15	29	1	60	L'Aquila	0.218	7	62	72
8	Parma	0.417	9	12	18	61	Rieti	0.216	11	42	65
10	Padova	0.396	16	7	41	62	Brindisi	0.208	82	96	47
11	Vicenza	0.388	84	8	27	62	Cremona	0.208	77	41	57
12	Rimini	0.387	62	15	11	64	Sassari	0.205	35	84	58
13	Reggio E.	0.384	96	11	16	65	Alessandria	0.201	94	79	54
14	Ravenna	0.374	36	32	4	66	Rovigo	0.200	95	92	51
15	Livorno	0.365	56	58	2	67	Novara	0.193	66	55	62
16	Venezia	0.364	41	35	8	67	Frosinone	0.193	46	37	69
17	Prato	0.354	84	38	3	69	Trento	0.189	13	50	76
18	Verona	0.352	53	19	20	70	Foggia	0.184	99	88	55
19	Perugia	0.336	54	23	21	71	Matera	0.180	22	66	74
19	Forlì-C.	0.336	86	31	10	72	Lecce	0.169	90	55	70
21	Piacenza	0.329	43	18	30	73	Siena	0.167	86	71	66
21	Treviso	0.329	68	14	34	73	Caserta	0.167	29	88	75
23	Belluno	0.318	4	30	61	75	Teramo	0.163	101	81	64
24	Massa-C.	0.316	66	48	14	76	Ascoli P.	0.161	98	58	71
24	Macerata	0.316	86	5	66	77	Biella	0.158	91	66	73
26	Pordenone	0.312	91	9	55	78	Pavia	0.153	48	69	77
27	Udine	0.302	23	4	89	79	Catanzaro	0.143	27	51	87
28	Palermo	0.301	52	73	19	80	Salerno	0.140	54	75	79
29	Bari	0.297	37	53	24	81	Cosenza	0.139	17	85	86
29	Trapani	0.297	89	90	13	82	Sondrio	0.135	37	64	84
29	Napoli	0.297	34	69	23	83	Asti	0.132	70	44	83
32	Latina	0.293	12	55	32	84	Vercelli	0.128	40	53	88
33	Savona	0.291	50	16	48	85	Viterbo	0.127	82	58	81
34	Pisa	0.290	30	13	60	86	Lodi	0.126	10	85	93
35	Aosta	0.289	2	93	63	86	Chieti	0.126	103	46	78
35	Ancona	0.289	56	20	39	88	Lecco	0.122	58	79	85
37	Ferrara	0.288	97	44	22	89	Agrigento	0.121	72	99	80
38	Cagliari	0.284	8	73	35	90	Cuneo	0.117	99	63	81
39	Gorizia	0.282	68	58	25	91	Campob.	0.111	41	76	91
40	Terni	0.280	20	81	31	92	Bergamo	0.109	80	40	92
41	Pescara	0.276	74	39	29	93	Verbano	0.098	47	81	95
42	Arezzo	0.270	77	20	46	94	Oristano	0.093	44	100	94
43	Pesaro-U.	0.269	79	28	38	94	Avellino	0.093	31	91	97
44	Imperia	0.267	70	51	33	96	Como	0.091	76	42	98
44	Ragusa	0.267	64	68	28	97	Vibo Valent	0.090	20	93	100
46	Brescia	0.266	64	27	43	98	Crotone	0.088	93	96	90
46	La Spezia	0.266	24	46	39	98	Benevento	0.088	32	96	99
48	Taranto	0.261	81	95	26	100	Potenza	0.080	28	85	101
49	Mantova	0.258	102	26	41	101	Isernia	0.077	26	36	103
50	Catania	0.256	44	65	36	101	Nuoro	0.077	72	101	96
51	Varese	0.253	25	33	52	103	Enna	0.058	51	101	102
52	Pistoia	0.250	58	34	44						

Table 4. The tolerance index

Overall tolerance index as well as position for each of the three main components: integration, diversity, and gay tolerance.

	Province	Tolerance index	Integrazione (posizione)	Diversity (posizione)	Gay (posizione)
1	Roma	0.858	12	1	4
2	Milano	0.822	5	3	3
3	Firenze	0.768	13	7	5
4	Bologna	0.747	8	17	1
5	Rimini	0.709	1	22	12
6	Parma	0.707	19	13	9
7	Bolzano	0.701	2	24	13
8	Brescia	0.697	52	6	11
9	Trieste	0.692	10	15	16
10	Perugia	0.684	7	8	27
11	Reggio E.	0.678	69	5	10
12	Modena	0.671	20	9	22
13	Verona	0.670	43	10	15
14	Pisa	0.656	34	29	2
15	Imperia	0.630	3	18	40
16	Siena	0.629	11	20	24
17	Torino	0.624	25	43	7
18	Prato	0.624	79	2	25
19	Padova	0.606	45	45	6
20	Genova	0.604	4	47	23
21	Ravenna	0.604	24	38	14
22	Varese	0.592	27	31	21
23	Pesaro- U.	0.592	27	33	20
24	Bergamo	0.581	65	19	18
25	Piacenza	0.573	31	21	30
26	Lucca	0.563	32	49	19
27	Treviso	0.561	60	11	37
28	Terni	0.554	14	52	27
29	Forlì-C.	0.548	42	52	17
30	Grosseto	0.544	9	48	34
31	Pistoia	0.543	57	25	28
32	Novara	0.531	40	37	29
33	Arezzo	0.522	30	16	52
34	Vicenza	0.518	54	4	59
35	Trento	0.513	59	23	36
36	Biella	0.502	46	40	35
37	Alessandria	0.496	5	46	50
38	Cremona	0.489	41	31	44
39	Savona	0.488	21	55	39
40	Asti	0.476	37	29	49
41	Venezia	0.475	49	66	26
42	Pavia	0.471	34	56	38
43	Mantova	0.463	50	14	63
44	Verbano	0.455	63	65	29
45	Catania	0.453	83	76	8
46	Ancona	0.451	22	35	57
47	Ferrara	0.450	26	77	31
48	Sondrio	0.447	68	78	18
49	Macerata	0.446	38	12	73
50	Cuneo	0.440	50	28	55
51	Lecco	0.435	64	42	46
52	Como	0.433	43	38	54

	Province	Tolerance index	Integrazione (posizione)	Diversity (posizione)	Gay (posizione)
53	Gorizia	0.426	53	41	53
54	Vercelli	0.417	27	36	64
55	Udine	0.413	73	51	41
56	Pescara	0.411	16	73	48
57	Pordenone	0.404	56	26	65
58	Teramo	0.400	62	57	48
59	Aosta	0.395	17	61	62
60	Rieti	0.391	23	61	61
61	Livorno	0.386	33	64	58
62	La Spezia	0.383	15	59	69
63	Viterbo	0.375	36	50	66
64	Lodi	0.364	38	43	72
65	L'Aquila	0.357	61	34	71
66	Latina	0.357	57	61	61
67	Bari	0.330	71	80	45
68	Napoli	0.328	93	81	32
69	Lecce	0.325	72	86	43
70	Ascoli P.	0.318	18	52	86
71	Sassari	0.317	67	82	51
72	Cagliari	0.304	78	90	42
73	Massa-C.	0.298	48	60	79
74	Enna	0.282	95	101	33
75	Caltaniss.	0.268	101	99	33
76	Ragusa	0.260	102	27	74
77	Salerno	0.257	90	94	47
78	Cosenza	0.251	70	95	60
79	Trapani	0.245	103	69	56
80	Chieti	0.243	55	70	83
81	Belluno	0.242	66	58	88
82	Rovigo	0.225	47	73	89
83	Palermo	0.224	96	68	68
84	Frosinone	0.221	76	71	77
85	Catanzaro	0.206	87	79	70
86	Messina	0.206	93	67	75
87	Taranto	0.204	77	97	67
88	Crotone	0.182	86	91	70
89	Caserta	0.181	99	72	76
90	Siracusa	0.161	91	88	74
91	Vibo V.	0.158	75	88	84
92	Campob.	0.151	85	93	78
93	Brindisi	0.150	84	85	82
93	Oristano	0.149	74	100	80
95	Matera	0.148	80	84	85
96	Reggio C.	0.148	96	75	84
97	Isernia	0.143	89	92	78
98	Agrigento	0.136	98	83	81
99	Avellino	0.120	82	96	87
100	Potenza	0.113	81	103	85
101	Nuoro	0.105	100	98	80
102	Foggia	0.098	92	87	90
103	Benevento	0.095	87	101	87

Table 5. The italian creativity Index, ICI

ICI Position	Province	Italian Creativity Index (ICI)	Talent (rank)	Technology (rank)	Tolerance (rank)
1	Roma	0.786	1	4	1
2	Milano	0.720	5	1	2
3	Bologna	0.665	4	2	4
4	Trieste	0.602	2	8	9
5	Firenze	0.585	6	6	3
6	Genova	0.555	3	7	20
7	Torino	0.518	19	3	17
8	Parma	0.516	11	8	6
9	Rimini	0.489	21	12	5
10	Perugia	0.477	12	19	10
11	Modena	0.468	58	5	12
12	Padova	0.466	15	10	19
13	Pisa	0.463	9	34	14
14	Reggio E.	0.413	78	13	11
15	Ravenna	0.407	57	14	21
16	Terni	0.406	17	40	28
17	Verona	0.403	75	18	13
18	Siena	0.398	15	73	16
19	Piacenza	0.395	38	21	25
20	Pesaro-U.	0.392	29	43	23
20	Pescara	0.392	7	41	56
22	Prato	0.391	72	17	18
23	Imperia	0.384	51	44	15
24	Forlì-C.	0.375	59	19	29
25	Savona	0.372	25	33	39
26	Bolzano	0.368	80	56	7
27	Varese	0.365	53	51	22
27	Brescia	0.365	87	46	8
27	Ancona	0.365	24	35	46
30	Treviso	0.364	69	21	27
31	Venezia	0.363	53	16	41
32	Lucca	0.362	40	53	26
33	Catania	0.361	20	50	45
34	Napoli	0.357	8	29	68
35	Vicenza	0.353	84	11	34
36	Livorno	0.351	34	15	61
37	Arezzo	0.350	48	42	33
38	Macerata	0.342	45	24	49
39	Trento	0.341	27	69	35
40	Grosseto	0.336	63	54	30
40	L'Aquila	0.336	10	60	65
42	Gorizia	0.329	41	39	53
43	Ferrara	0.327	56	37	47
44	Pistoia	0.325	77	52	31
45	La Spezia	0.320	31	46	62
46	Udine	0.320	55	27	55
47	Palermo	0.312	13	28	83
48	Novara	0.311	67	67	32
49	Massa C.	0.306	32	24	73
50	Alessandria	0.305	65	65	37
50	Pavia	0.305	36	78	42
52	Cagliari	0.302	27	38	72

ICI Position	Province	Italian Creativity Index (ICI)	Talent (rank)	Technology (rank)	Tolerance (rank)
53	Bari	0.301	42	29	67
54	Pordenone	0.291	82	26	57
55	Cremona	0.290	79	62	38
56	Aosta	0.284	81	35	59
57	Mantova	0.283	89	49	43
58	Messina	0.280	14	58	86
59	Latina	0.279	76	32	66
60	Teramo	0.273	49	75	58
61	Sassari	0.271	36	64	71
62	Rieti	0.267	72	61	60
63	Bergamo	0.262	94	92	24
64	Trapani	0.256	63	29	79
65	Cosenza	0.255	18	81	78
66	Salerno	0.253	23	80	77
67	Lecco	0.251	70	88	51
68	Biella	0.249	97	77	36
69	Ascoli P.	0.247	47	76	70
70	Reggio C.	0.245	22	59	96
71	Como	0.242	68	96	52
71	Lecce	0.242	60	72	69
73	Belluno	0.231	87	23	81
74	Sondrio	0.230	92	82	48
75	Asti	0.228	98	83	40
76	Catanzaro	0.225	26	79	85
77	Ragusa	0.219	89	44	76
78	Viterbo	0.218	85	85	63
79	Siracusa	0.217	49	55	90
80	Verbano	0.216	95	93	44
81	Matera	0.213	30	71	95
82	Caltaniss.	0.212	86	57	75
83	Caserta	0.210	39	73	89
84	Chieti	0.207	52	86	80
85	Lodi	0.204	91	86	64
86	Vercelli	0.202	99	84	54
87	Cuneo	0.198	101	90	50
88	Frosinone	0.190	83	67	84
89	Taranto	0.184	96	48	87
90	Enna	0.178	71	103	74
91	Campob.	0.176	44	91	92
92	Isernia	0.174	32	101	97
93	Avellino	0.171	35	94	99
94	Vibo V.	0.170	46	97	91
95	Crotone	0.167	62	98	88
96	Agrigento	0.163	60	89	98
97	Foggia	0.159	72	70	102
98	Rovigo	0.152	103	66	82
99	Benevento	0.150	43	98	103
100	Brindisi	0.139	100	62	93
101	Potenza	0.135	66	100	100
102	Nuoro	0.094	93	101	101
103	Oristano	0.092	102	94	94

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Profile

Creativity Group Europe is a research consultancy founded in Milan in 2004 formed by American economist Richard Florida, author of the best-seller “The Rise of the Creative Class”, Giovanni Padula, expert of urban management and Irene Tinagli, research professor at Carnegie Mellon University in Pittsburgh.

Creativity is an idea and project laboratory focused on the creative economy and knowledge-based economies within Italy and Europe. Drawing from the experiences of its partners and from a selected group of international collaborators, Creativity Group Europe provides research and consultancy to both public and private sectors addressing particular attention to the creative potential of European cities and nations, to the study of industries and creative businesses and to the creative processes within companies and businesses.

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