
**TÍTULO DE LA COMUNICACIÓN: The geography of creative industries in Europe: Comparing France, Great Britain, Italy and Spain**

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**RESUMEN:** *The research tackles the lack of cross-country comparative studies on the geography of creative industries and provides their comparative geography in four European countries: France, Great Britain, Italy and Spain. We use local labour markets as territorial units of analysis and divide creative industries in traditional and non-traditional. This allows to overcome the limitations of the region as unit of analysis and to better understand the type of creativity embedded in each country and territory. The results reveals differentiate national profiles regarding the type of creativity and its spatial distribution, and that the employment in creative industries is more concentrated than in the rest of sectors. Large creative hubs emerge around London, Paris, Madrid, Milan, Barcelona and Roma.*

**PALABRAS CLAVE:** *creative industries, local creative systems, spatial concentration*

## 1. INTRODUCTION

The creative economy is a relevant economic phenomenon. In 2005, it generated $2,706 billion GDP and exports of creative goods and services reached $424 billion, which represents 6.1% of the world GDP and 3.4% of total world trade (Howkins 2007; UNCTAD 2008). For this reason, the creative economy has become a topic in economic research since the latter 1990s, after the publication of the DCMS *Creative Industries Mapping Document* reports (1997 and 2001) and the later success of the Florida's book *The rise of the creative class* (2002). Whereas Florida's distinctive sign is the creative class, this is, those creative workers directly related to the creative process, the creative industries entail in practice a sector-based approach to the phenomenon of creativity.

Creative industries and creative people tend to concentrate spatially**.** The spatial patterns of distribution of creativity remark the importance of the place for the economic creative process. Studies on the creative class have addressed the geographical dimension in Florida (2002), Florida and Tinagli (2004), Boschma and Fritsch (2009) and Clifton and Cooke (2010). Studies on the geography of creative industries are still at an early stage and are starting to draw a picture of how such activities are unevenly distributed geographically using a variety of methodologies and relying on the best possible data available in various countries (Lazzeretti et al. 2008; De Propris et al. 2009; Power and Nielsen 2010). In general, and despite the importance of space in the creative process, there is little research on the geography of the creative industries, and there is a lack of cross-country comparative studies, so that it is difficult to assess the particularities of each model of creativity. Furthermore, the little disposal of centralized data restricts comparisons to the use of regions as spatial unit of analysis, even if regions are, in many cases, too large to capture with precision the processes of spatial distribution of creative industries.

The purpose and main contribution of the present research is to provide a comparative geography of creative industries in four European countries: France, Great Britain, Italy and Spain. In addition, the research introduces two particularities: first, the use local labour markets as territorial units, which allows to overcome the problems of the region as territorial unit of analysis, and to focus the attention on local creative systems (LCS). Second, creative industries are divided in traditional and non-traditional, in order to better understand the type of creativity embedded in each country and local creative system.

Our measurements show that France, Italy and Spain are more specialised in traditional creative industries, whereas Great Britain stands out because the relative importance of non-traditional creative industries. A second result is that employment in creative industries is much more spatially concentrated than in the rest of industries and great creative hubs emerge around the main local creative systems in each country. Despite this fact, their distribution follows different spatial patterns: monopolar, bipolar and distributed models emerge depending on the country at the same time that some places are specialized in a particular type of creativity and other places show a more diversified creative pattern, producing a diverse and complex picture.

## 2. CREATIVE INDUSTRIES AND LOCAL CREATIVE SYSTEMS: A REVIEW OF THE LITERATURE IN FRANCE, GREAT BRITAIN, ITALY AND SPAIN

The term "creative industry" is increasingly used in the context of policy making across developed countries (OECD, 2007; UNCTAD 2008). The term originated in Australia with the report "*Creative Nation: Commonwealth Cultural Policy*" (DCA 1994) although was popularized by the Department of Culture, Media and Sports in United Kingdom (DCMS 1997) and extended by UNCTAD (2004 and 2008), KEA (2006), and LEG (2000).

DCMS (2001, p.5) defines creative industries as "industries which have their origin in individual creativity, skill and talent and which have a potential for wealth and job creation through the generation and exploitation of intellectual property". UNCTAD (2008) defines creative industries as "cycles of creation, production and distribution of goods and services that use creativity and intellectual capital as primary inputs; constitute a set of knowledge-based activities, focused on but not limited to arts, potentially generating revenues from trade and intellectual property rights; comprise tangible products and intangible intellectual or artistic services with creative content, economic value and market objectives; are at the cross-road among the artisan, services and industrial sectors; and constitute a new dynamic sector in the world trade". The term "creative industries" exceeds the limits of the cultural sector to include media and

ICTs following the structural changes due to the growth and development of the new technologies.

Capone (2008) and Lazzeretti et al. (2008) propose the concept of "local creative system" (LCS) as a socio-territorial entity characterized by the high concentration of creative industries and by specific features and identity that facilitate the generation and diffusion of creativity. The local creative system is an analytical concept for advance our understanding of the creative processes from the point of view of the place, and in this sense, that creativity can be understood as a localized and locally embedded process. In the LCS, creative industries benefits from local external economies and the rules, conventions and local institutions that nourish creation and diffusion of creativity (Lazzeretti et al. 2009). In practice, the operative definition LCS is also used to differentiate those places relatively specialized in creative industries and with a significant number of these industries from simple agglomerations of creative industries.

Studies on the creative industries at the country level, or focused on case studies, have been produced around the world, e.g. Australia (DCITA 2002), USA (Brinkhoff, 2006; Markusen et al. 2008), East Asia (Yusuf and Nabeshima 2005), Arabic countries (Harabi 2009). In Europe, general studies on creative industries have been elaborated by KEA (2006) and LEG (2000), although only a recent study by Power and Nielsen (2010) has explicitly addressed the geography of creative and cultural industries.

Power and Nielsen (2010) use regions (NUTS 2, when available) and a definition of creative industries close to the DCMS and UNCTAD ones (Advertising, Architecture, Broadcast media, Design and Fashion design, Gaming software and new media, Film, The "finer" arts, Heritage, Music, Photography, Print media, Object d'art). The results suggests that the largest concentration of employees in creative industries are found in the regions of Île de France (301,000), Inner London (235,000, plus other 80,000 in the Outer London), Lombardy (195,000), West-Nederland (195,000), Madrid (172,000), Catalonia (153,000), Denmark (124,000) and Lazio (118,000).

The concept of local creative system has been applied to Italy and Spain (Capone 2008; Lazzeretti et al. 2008). The same empirical procedure has been reproduced by the Propris et al. (2009) to identify creative clusters in Great Britain. Even if the three studies are not strictly comparable, they suggest the existence of different number and spatial distributions of local creative systems in each country.

The studies on creative industries at the national level in France, Spain and Italy are rare or directly non-existent. Research on cultural industries fills the part of creative industries more related to the traditional creativity although the other remains unexplored and there lacks an integrated approach. Great Britain is a different case, as there is a large and rich body of research originated from the later 1990s. These differences also imply that there are no national policies for creativity or creative industries in the former countries whereas this has been developed in Great Britain.

**2.1. France**

The geography of creative industries in France is still incomplete. The studies have mainly focused on culture, the most traditional part of creative industries.

At the national level, the main contributions come from the French Ministry of Culture (2005, 2006a). These reports includes as cultural industries the sectors of publishing, film and video activities, performing arts, architecture, museums, archives, libraries and wholesales of cultural products. The main conclusion is that there are more than 400,000 employees in creative industries in France (2% of the total employment). Cultural industries are particularly important in services, in which represents 8.5% of the production and 4% of the employment. The French Ministry of Culture (2006b) analyzes the creation of cultural enterprises in the French regions between 1998 and 2004 and reports that Île-de-France concentrates the main proportion of new cultural industries (33.7%) and specializes in publishing and audiovisual. Other outstanding regional shares belong to Provence-Alpes-Côte dÁzur (11.5%), Rhône-Alpes (7.9%) and Languedoc-Roussillon (5%).

Lacour and Puissant (2008) focus on the analysis of creative services in the functional urban areas of France, including: art, banking insurance, producer services, trade, trade in Industry, Management, Information, Data processing in Industry, research, Telecommunications and Transport. The main results show that the urban area of Paris is mainly specialized in Information and Producer service sectors. Large urban areas are specialized in Research, while the medium-size urban areas are specialized in Management, telecommunications, trade, banking and Insurance and Art.

Baumont and Boiteux-Orain (2005) analyzes the cultural employment in the region of Île-de-France, showing that it is 2.8% of the total employment. They observe that the city of Paris concentrates the 67% of the cultural employment of the region. Scott (1997, 2000) analyses the cultural economy of the metropolitan Paris. His research focus on media, clothing industries, newspaper publishing, advertising, architectural services and recreation, cultural and sporting activities. The results show that Paris concentrated about 100,000 employees in cultural industries and these industries show a disperse localization pattern across the city.

### 2.2. Great Britain

The debate on creative industries in the UK has proceeded along two parallel lines. One the one hand, the Department of Culture, Media and Sport has led the policy debate in catalysing the attention of various stakeholders around a part of the economy that had until then been 'hidden' (Miles and Green, 2008). Indeed, the DCMS mapping document unearthed a sector that was not only growing in terms of employment, but also performing very well in itself in terms of exports, as well as positively impacting on the innovation capability of other sectors.

Drawing on the work of Florida in the US and Cunningham in Australia, the studies commissioned by the DCMS and NESTA have explored how creative industries contribute to the economy in their own right by producing and supplying creative outputs (goods or services) that are consumed by the final consumers; this is related to the reshaping of demand around customised or unique pieces with a high value-added content or around patterns of conspicuous consumption, e.g. entertainment and free time. At the same time, it has become increasing understood that creative industries also impact indirectly on other non-creative industries through channels of inter-sectoral innovation and creative knowledge spillovers -such as design and digital- (DCMS, 2007; HM treasury, 2005; Tether et al. 2009). The work of the think-tanks such as NESTA and the government funded *Creative Economy Programme* are keeping these themes at the top of the policy agenda which has since tricked down at the level of regions, where regional development agencies have been actively pursuing initiatives to support local creative industries, such as the *Manchester Digital* or *01Zero-One* in

London. Regional development agencies have indeed embraced this agenda and focused their attention on their creative industries, sometimes however pushing for the development of one or the other in the absence of real embedded assets or anchoring factors.

There is no doubt that the policy agenda in the UK towards creative industries has developed within a techno-scientific paradigm which privileges technology–intensive sectors as against more traditional ones. Two have been the consequences of this. One is that some of the creative industries targeted coincide with technology platforms, as it is the case for digital, design, and software, for instance. Creative innovation in these industries feed creative knowledge across a wide range of other industries, with therefore significant multiplier effects. The other one is that in reality the 'creative economy' pushed forward by policy has concentrated in urban areas and around centres of excellence such as universities neglecting rural economies.

In parallel to the policy discourse, the scholarly debate has made contributed with deeper conceptual analysis and case studies, in view of reaching a better and more articulated understanding of the linkages, spillover effects and inter-sectoral synergies that creative industries were generating -see for instance, Turok (2003) on the Scottish film industry; Grabher (2002) and Pratt (2006) on advertising sector; GLA (2004) and Freeman (2007) on creative industries in London more broadly; Knell and Oakley (2007) on creative occupation; Crewe (1996) on the Nottingham Lace Market; Nachum and Keeble (2003) on the London media cluster and Sunley *et al* (2008) fashion design.

More recently, De Propris *et al* (2009) have carried out an extensive mapping analysis of UK creative industries using both the DCMS and the Frontier Economics classifications –i.e. with a fine-grained analysis at the 5-digit SIC sectors. This analysis has utilized local labour markets as well as much more minute geographical units of analysis at the super-output area level. The findings are that creative industries are spatially unevenly distributed and some sectors are more thinly spread than others, as it is for instance arts and antiques as against architecture which is extremely lumped. Another finding confirms that creative industries benefit from urbanisation economies as they tend to concentrate in cities, especially, London, followed by Brighton, Manchester, Birmingham, Bath, Oxford-Cambridge and Cardiff.

The policy attention paid by the UK government to creative industries has meant that data tends to be available at a very fine-grained level, which is not case in other

European countries. In order to carry out an international comparison, the UK data utilised is compatible with the NACE classification making employment data comparable across countries.

### 2.3. Italy

In Italy, studies on creative industries have primarily focused on cultural industries due to their importance. Creative industries are usually analyzed as a normal extension of the cultural sector as a whole (Bodo and Spada, 2004) or as specific growing industries such as ICT services (Sforzi and Lasagni, 2008).

Tagliacarne Institute (2007) proposes a different approach to the definition and measurement of cultural and creative industries focused on the link and involvement of economic activities with the cultural and environmental heritage and its exploitation and enhancement. The classification of the industry, which differs from the international classifications used in other countries, identifies five groups of activities: cultural heritage, cultural industry, food and wine, industrial and artisan production, architecture and construction.

The first book commissioned by public bodies that focuses on creative industries in Italy is the recent *White Paper on Creativity* (Santagata, 2009). According to the report, the macro-sector of cultural and creative industries exceeds 9% of GDP and accounts for 2.5 million jobs. The report deals with all activities based on creative contents and culture as factor of production, intellectual property protection and new communication technologies. Three main types of creative industries are recognised, related to the material culture (fashion, design, handicrafts, industry of food and taste), ICT and information (software, publishing, TV and radio, advertising and cinema), and cultural heritage (Music and performing arts, architecture, artistic and cultural heritage, contemporary art). Fashion is the most important economic sector and together with related activities (fashion, design, handicrafts, and food and taste industries) contributes more than 50% of employment above the whole sector.

Some authors have focused on specific cities like Turin (Amadasi and Salvemini, 2005) or Florence (Lazzaretti, 2007) analyzing the degree and the percentage of employees and firms in the different creative industries. Sedita and Paiola (2008) focus on the creativity from the point of view of the physical and cognitive aspects of the place, even if more centred on cultural industries. Capone (2008) analyzes the concentration of creative industries in local creative systems, which is also developed in a benchmarking on the presence of creative clusters in Italy and Spain (Lazzeretti et al. 2008).

### 2.4. Spain

As in France and Italy, research on creative industries is anecdotal in Spain. The dominant approach is still the "economics of culture". The Ministry of Culture (2008) differentiates between cultural industries (heritage, archives, libraries, printing and publishing, performing arts, film and video) and intellectual property intensive industries (printing and publishing, performing arts, film and video, software, and advertising). The latter could be considered as a proxy of the "creative industries" defined according to the WIPO approach (UNCTAD 2008). Creative industries are also divided in "core activities" and "auxiliary activities". Core activities are divided by phases to provide the value generated in each stage of the process: creation and production, manufacturing, diffusion and distribution, promotion and control activities, and educational activities.

According to the Ministry of Culture, the contribution of intellectual property industries to the Spanish GDP is about 3.8% (cultural industries, excluding heritage, contributes 2.9% to the GDP) with an average growth rate over the period 2000 to 2005 of 5.1%.

Policy for creative industries does not exist as such at country level. There are several policies of support focusing on the traditional part of creative industries (cultural industries) and a recent Plan for the Promotion of Cultural Industries (2008). Regarding specific policies, Printing and publishing has a policy of support for the publication, translation or dissemination of books and cultural magazines in Spanish language. Books also benefit of particular price measures. The policy for Films and video focus on the creation of a protection fund and a reciprocal guarantee company (in order to improve the access of the production companies to funds) as well as a reserve of share of the viewing and funding to Spanish and European productions (25/1994 Act). Policy for the Music industry focus especially on the protection of the intellectual property, with the introduction of the Information Society Directive (34/2002 Act) and modifications of the Intellectual Property Act (23/2006 Act). On the other hand, the Plan for the Promotion of Cultural Industries introduces incentives for design, fashion, architecture, ICT and digital cultural contents; supports small and medium enterprises, fosters the internationalization of cultural industries, and adds new funds and financial instruments of access to the credit.

Some regional governments and cities have been active in the design of policies for creative industries. Catalonia has created the Catalan Institute for Creative Industries (20/2000 Act). The Basque Country has introduced the II Basque Culture Plan 2009-2012 and the creation of the Basque Institute for Arts and Cultural Industries. Andalusia has created the General Directorate for cultural and Performing Arts Industries. Galicia has created the Galician Agency for Cultural Industries. Asturias has developed a "White Paper on Cultural Industries". Regarding cities, Barcelona has been one of the most active by developing a Plan for the Culture Sector (2004) and using the public agency "Barcelona Activa" to foster creative industries.

## 3. METHODOLOGY

### 3.1. Operational definition of creative industries: traditional and non-traditional

There is not a commonly accepted list of the activities that form the "creative industry" and even the scope and criteria to consider an activity as creative are different. There is a group of creative industries common to the most important contributions (DCMS 2009; OECD 2005; Gordon and Beilby 2006; KEA European Affairs 2006; Towse 2007; Eurostat LEG 2000; UNCTAD 2008). Furthermore, cross-country comparison entails limitations in the sources of data and the particular characteristics of these industries in each country so that the list of creative industries has been limited to improve comparability.

In addition, we consider that some places can be specialised in more traditional cultural activities as a result of their historical evolution whereas a rapid development of non-traditional creative industries could take place in other locations. We suggest therefore to distinguish between “traditional creative industries” (Publishing; Architecture and engineering studies; and Music, film and performing arts) and “non-traditional creative industries” (Research and development; Software and computer services; and Advertising). We operationalise such classification by referring to NACE sector 2 digit codes as detailed in Table 1[5].

### 3.2. Selection of countries

The research focuses on France, Great Britain, Italy and Spain. The reason for this choice is twofold. The academic debate and the related policy discourse in these still European countries differs in some significant aspects, as the definition of creative industries, with Britain having favoured technology-intensive creative industries, whereas France, Italy and Spain having appreciated the role of cultural industries and tourism. On the other hand, the four countries also differ in the way policy-making has placed creative industries more or less at the centre of a general framework to promote innovation and competitiveness. The four countries form a continuum covering two Mediterranean countries (Italy and Spain), an Anglo-Saxon Atlantic country (Great Britain), and France which is located in the middle and contains the creative agglomeration of Paris.

### 3.3. Territorial level of analysis

The decision to refer to local labour markets (LLM) as territorial unit of analysis is consistent with our main interest on the place, more than on the simple concentration of activity. Indeed, other units (such as regions, provinces or municipalities) would be too

[5] Twelve different lists of creative industries, coming primary and significant reports, have been taken into account. The final proposal is quite similar to the DCMS (2009) operative list with two differences: first, designer fashion has not been introduced as the 17.7, 18 and 19.3 NACE sectors still more related to “manufacturing” than to “creation” in Italy and Spain. A similar discussion for the UK can be found in the *Creativity: London’s Core Business* (2004) remarking that it is not possible to distinguish, on the basis of NACE codes alone, manufacturing of clothing sector from the fashion industy. Second, following Howkins (2007) and UNCTAD (2008), some parts of the research and development sector have been considered as creative industries.

large or small to capture the socioeconomic processes of creativity over space. Secondly, LLM contain an area where the population lives and works, creating therefore an overlap between the agglomeration of firms and the community of people. The latter coincide with what the literature calls ‘local production system’ (Sfozi, 2009). LLM have already been used as territorial units for the analysis of creative industries in Italy and Spain (Lazzeretti et al. 2008) and Great Britain (De Propris et al. 2009).

LLM are based on daily commuting flows. The procedures to identify them are not homogeneous across the four countries, although their basis is the same, in the sense that they are self-contained areas where people live and work. In Italy and Spain, LLM have been identified by Sforzi-ISTAT (1997) and Boix and Galletto (2006) using the same procedure, which is very similar to the UK Travel-to-Work Areas defined by the ONS (Bond and Coombes 2007)[6]. In France, they are called “zones d’emploi” and are defined by the INSEE (1999). There are 384 LLM in France (year 1999, metropolitan France), 243 in Great Britain (year 2001), 686 in Italy (year 2001) and 806 in Spain (year 2001).

### 3.4. Data sources

The data used have been extracted from national Census of population and activity in the four countries, and provided by the respective national statistical offices. We use the more recent homogeneous data available for each data set, which is 1999 for France, 2001 for Italy and Spain, and 2007 for Great Britain[7].

We use the employment (number of jobs) as basic data for cross-country comparison as well as for the measure of specialisation-concentration due to several raisons. First, employment is a suitable measure in an industry (or group of industries) where the human cognitive activity is particularly important in the form of human capital or creative class. Second, where measures as GDP or turnover are not available at infra-regional levels for all the countries of our analysis, employment provides a good

[6] The differences in the procedure as well as the morphology and density of each country produce differences across the LLM. For example, the average surface by LLM is smaller in Italy (439 Km2) and Spain (626 Km2) than in the Great Britain (1,007 Km2), and they are particularly large in France (1,676 Km2).

[7] The use of Census data has some other restrictions as the sector’s detail and a certain delay in time although assures homogeneity.

proxy of economic activity. Third, we consider more appropriated to base the comparison on employment than in the number of firms because: a) the organizational structures are different across countries producing very different average firm sizes which will overweight small firm countries; b) the use of firms could overweigh small local labour markets producing high indicators of concentration with few employees.

### 3.5. Identification of local creative systems

The spatial agglomerations of creative industries are identified by calculating for each LLM the location quotients (LQ) of its creative activities. The picture that emerges for each country forms a pattern of LCS (local labour markets where there is a high concentration of employment in specific creative industries). LQs have been used to map "traditional" creative industries and cultural industries in Italy, Spain and the United Kingdom (Bassett et al. 2002; Capone 2008; García et al. 2003; Pratt, 1997; Lazzeretti et al. 2008; De Propris et al. 2009).

The basic LQ provides a measure of spatial specialisation that combined with other criteria (such as a lowest number of employees per LCS) simultaneously assures specialization and concentration, and makes such information comparable across countries[8]. Location quotients are calculates as follows

$$LQ_{ij} = \frac{L_{ij}}{L_i} \bigg/ \frac{L_j}{L}$$

,where $L_{ij}$ is the number of employees in the creative industry $i$ in a local labour market $j$, $L_i$ is the total number of employees in the creative industry $i$, $L_j$ is the number of employees in a local labour market $j$, and $L$ is the total employment in the country. An LQ above 1 indicates that the clustering of a creative industry $i$ in a place $j$ is greater than the national average, suggesting therefore that such local labour market is specialised in that specific creative industry, i,e, it is a LCS.

[8] We refer to Lazzeretti *et al.* (2008) for a detailed discussion on the advantages of using LQ indicator of specialisation and concentration, as against other indicators such as the simple concentration coefficient or Florida mixed indicator.

A LCS can be specialised in traditional or in a non-traditional creative industries, or else a combination of both. In order to clarify the specialisation of the LLM, we consider three criteria:

1. *Traditional LCS* are those where LLM present LQ above than 1 and a minimum of 250 jobs in traditional creative industries.
2. *Non-traditional LCS* are those where LLM present LQ above 1 and a minimum of 250 jobs in non-traditional creative industries.
3. *Diversified LCSs* are those for which # 1 and #2 occur simultaneously, namely where the LLM presents LQ that are greater than one and a minimum of 250 jobs in traditional and non-traditional creative sectors.

### 3.6. Indicators of concentration at the country level

Some basic comparable indicators are used to measure the degree of concentration of employment in creative industries at country level. First, the share of employment in creative industries concentrated in the 10% of LPS with more employees in creative industries by country (first decile). This criterion has been also applied using as sample for evaluate concentration the LCS and groups of contiguous LCS we call "creative hubs"[9]. Second, we rely on the calculation of standard indicators of concentration such as the Herfindahl, Gini and Theil indexes. The indicators been calculated both in their simple form (non-weighted) and weighted by the total employment in the LLM. The latter compares the distribution of the creative employment with the distribution of the total employment and informs if the creative employment is more or less concentrated that the economic activity as a whole.

[9] Although the observations are territorial units of analysis, the indicators of concentration are non-spatial. Creative agglomerations are introduced to overcome this limitation and to take into account that concentration could be better represented by a complex spatial unit. This also precludes a subsequent stage in the analysis: the introduction of metropolitan areas as a complementary unit of analysis.

## 4. THE GEOGRAPHY OF THE CREATIVE INDUSTRIES IN GREAT BRITAIN, FRANCE, ITALY AND SPAIN

### 4.1. General features of creative industries in France, Great Britain, Italy and Spain

Using the classification of tradition and non-traditional creative industries suggested in this paper, we find that Great Britain has about 1.49 million jobs in creative industries, France has 983,000, Italy 878,000 and Spain 673,000 (Table 2). Creative industries account for a significant share of these countries' employment: the larger is found for Great Britain with 5.66% and Italy with 5.60%, whereas the share is significantly smaller for France (4.30%) and Spain (4.10%).

Regarding the type of creativity predominant in each country, *traditional* creative industries account for the largest share across the four countries. However, these are more relevant in France, Italy and Spain where account for about 66% of the overall employment in creative industries. By contrast, Great Britain presents the smaller the largest share of non-traditional creative industries across the four countries, with around 42% of employment in these sectors (Table 2).

Thus, Great Britain emerges not only as the economy with the largest number and share of employees in creative industries but also as the one that is characterised by the importance of non-traditional creative activities.

In particular, we find that countries tend to specialise in different creative industries. Printing and publishing are especially important for Spain (29% of the overall creative industry employment) thanks to the strong ties with Latin-American market (Table 2). Architecture and engineering are particularly relevant for Italy (33.6%) and tend to be associated with history and heritage. Film, video and performing arts (21.2%) as well as Research and Development (14.3%) have a heavy weight in France. Finally, Great Britain is characterised by large shares of employment in Printing and publishing, Architecture and Engineering and Advertising which overall account for three quarters of the overall creative employment.

Figure 1 shows the maps with the distribution of local creative systems in the four countries according as they emerge from the LQ calculations. It is immediately evident that different spatial patterns emerge across countries. In France, there is a big concentration of creative employment around Paris with the remainder thinning spread on the rest of the country. Spain as well as shows an extremely concentrated pattern dominated by two polarities around Madrid and Barcelona. Great Britain shows a huge concentration of creative employment around London and neighbouring regions with other important 'hot spots' around Manchester and Leeds, as well as around Glasgow and Edinburgh. London together with the South East and the South West tend to concentrate a large amount of creative employment which is however quite well spread across their many LLM, so that the spatial pattern in Britain could be argued to be simultaneously as "concentrated" as it is "distributed". On the other hand, Italy shows another different pattern, one that is characterised by the existence of three big poles, Milan, Rome and to a lesser extent Turin. Besides, a more diffused and polycentric pattern is visible around the centre-north of the country, in Padua, Verona, Bologna and Florence.

### 4.2. Local Creative Systems in Great Britain, France, Italy and Spain

Whereas the figure 1 informs about the absolute concentration of creative employment, local creative systems in Figure 2 are characterized by their relative specialization in employment in creative industries. LCS shares more than two thirds of the employment in creative industries in each country. Their spatial patterns of distribution are again different across countries: polarized around Madrid and Barcelona in Spain, polarized in the south of England and in a minor extent in the south-east of Scotland, and distributed in France and particularly in Italy.

There are 58 LCS in *France* (15% of the LPS) which have 694,000 employees in creative industries (70.6% of the employment in creative industries). There are 20 diversified LCS that have 53.8% of employment in creative industries, 23 traditional LCS (9.2% of employment in creative industries), and 15 non-traditional LCS (7.6% of employment in creative industries).

There are 59 LCS in *Great Britain* (24% of the LPS) which have 1,054,000 employees in creative industries (70.5% of the employment in creative industries). There are 35 diversified LCS that have 60.1% of employment in creative industries, 18 traditional LCS (7.6% of employment in creative industries), and 6 non-traditional LCS (2.8% of employment in creative industries).

There are 61 LCS in *Italy* (10% of the LPS) which have 557,000 employees in creative industries (63.4% of the employment in creative industries). There are 8 diversified LCS that have 43.8% of employment in creative industries, 43 traditional LCS (12.3% of employment in creative industries), and 10 non-traditional LCS (7.3% of employment in creative industries).

There are 25 LCS in *Spain* (3% of the LPS) which have 437,000 employees in creative industries (65% of the employment in creative industries). There are 8 diversified LCS that have 53.3% of employment in creative industries, 17 traditional LCS (11.7% of employment in creative industries), and any non-traditional LCS.

### 4.3. Concentration

The general picture showed by Figures 1 and 2 is that the employment in creative industries is concentrated enough in the four countries and clustered around the largest cities of each country. However, the patters of concentration and specialization show notable differences across countries. To better evaluate some of these characteristics we depart from a global approach based on general indicators of concentration to arrive to a detailed approach based on the local trends.

Global approach is based on the use of some common non-spatial indicators of concentration (Table 3). Spain shows the most concentrated pattern as 88.4% of the employment in creative industries is concentrated in only the 10% of the LPSs, and the value of the Gini index is 0.91 (the index reach the maximum value at 1). Italy seems to be the second country where the employment in creative industries is more concentrated, as 75.8% is concentrated in 10% of the LCS (first decile) and the Gini index is 0.83. In France and Great Britain the employment in creative industries appears to be less concentrated in few LPS: the share of creative employment in the first decile is 69% in France and 70.9% in Great Britain, and the Gini index is 0.76 in both cases.

The second part of the Table 3 shows these indexes weighted by the share of total employment in the LPS and informs if the employment in creative industries is more concentrated than the total employment. In all the cases, the patterns of concentration of employment in creative industries are significantly higher than the patterns of concentration of total employment. In Spain and Great Britain the creative concentration in the first decile exceeds about 25% the share of total employment, suggesting that an important part of the creative concentration is explained by the global concentration of activity. In Italy, the index exceeds in 36% the global pattern whereas in France reach 55% above the first decile. Gini coefficients still steady about 0.75 for France and Great Britain and decreases to the same 0.75 for Italy and Spain, which confirms the latter results.

Finally, we take into account that in some cases LCS tend to cluster forming large agglomerations or hubs where London and Paris show impressive figures (Table 3). The largest hub is concentrated around London and is made up of 27 LCS which have 541,000 employees in creative industries (52.5% of the employment in creative industries in Great Britain). The second largest hub is located around Paris and formed by 21 neighbour LCS and 422,000 employees in creative industries (42.9% of the employment in creative industries in France). The third hub is Madrid, with 3 LCS and 208,000 employees in creative industries (31% of the country). It is followed by Milan, with 5 LCS and 171,000 employees in creative industries (19.5% of the employment in creative industries in Italy), and Barcelona with 9 LCS and 129,000 employees in creative industries (19.2% of the country). Roma is the sixth largest, although it is formed by only one LCS that has 117,000 employees in creative industries (13.4% of the country).

### 4.4. A comparison of the local creative systems of the largest cities

The largest cities appear as the most important LCS in each country. In order to deepen the investigation, we compare the three largest LCS for each country. This comparison includes the capital cities (Paris, London, Rome, Madrid), main industrial centres (Lyon, Manchester, Milan, Barcelona), and the third order cities (Marseille, Glasgow, Turin, Valencia). Three types of lectures emerge: firstly, the largest number of employees in creative industries is, naturally, in the largest cities (LCS). Secondly, creative industries are particularly important in the economy of the largest cities, where represent between the 7 and 11% of the employment. Thirdly, the most significant fact is maybe that the pattern of specialization of each large city is different.

Regarding the first fact, London is the largest LCS in the sample, with more than 400,000 employees in creative industries (Table 5). It is followed by Madrid (200,000), Paris (173,000), Milan (146,000), Rome (117,000) and Barcelona (100,000). The other LCS show significantly slower number of employees in creative industries: Turin (56,000), Manchester (53,000), Lyon (36,000), Glasgow (30,000), Valencia (25,000), and Marseille (16,000).

London shares 28.7% of the national employment in creative industries and Madrid 27.8% (Table 5). Other high shares are in Paris (17.6%), Barcelona (14.7%), Milan (13.3%) and Rome (11.4%). The other cities show a significant although small share: Turin (6.4%), Valencia (3.8%), Lyon (3.7%), Manchester (3.5%), Glasgow (2.3%), and Marseille (1.6%).

Regarding the second fact, creative industries are particularly important in the economy of Paris (10.8% of the local employment), Milan (9.5%), London (9.01%), Rome (9.5), Madrid (8.5%), Turin (8.4%) and Barcelona (7.4%) (Table 5). Although lower, the shares are also significant for Manchester (5.8%), Lyon (5.2%), Glasgow (5.1%), Marseille (4.4%) and Valencia (4.2%).

Regarding the distribution by type of creativity, traditional creative industries add up to more than 60% of the total employment in creative industries in Valencia (70.3%), Paris (69.5%), Marseille (69.3%), Barcelona (68.1%), Glasgow (67.5%), Madrid (61.1%), Lyon (62.1%) and London (61.4%) (Table 7). Non-traditional creative industries are particularly important in the economies of Turin (48.1% of the employment in creative industries), Milan (47.4%), Rome (43.7%) and Manchester (42.3%). Two facts are striking: the importance that traditional creative industries still having in the central LCS of London, and the large shares of non-traditional creative industries in the three largest Italian LCS.

Compared with the other LCS, Paris stands out for the relative importance of Film, video and performing arts, as well as of R&D. Marseille, Manchester and Glasgow are characterized by the relative importance of Architecture and engineering.

Rome, Milan and Turin stand out for the relative importance of Software and computer services on the local creative sector. Madrid, Barcelona and Valencia are distinguished by the Printing and publishing industry. Finally, London is characterized because shows the most diversified distribution of creative industries.

## 5. CONCLUSIONS

The research provides a comparative geography of creative industries in France, Great Britain, Italy and Spain. The use of local labour markets allows to detail the analysis to the infra-regional level, providing precise results, and to introduce the concept of local creative system. Creative industries are divided in traditional and non-traditional in order to better understand the profile of the places. This differentiation has proved to be effective as reveals the higher relative importance of non-traditional creative industries in the Great Britain whereas in the other countries traditional creative industries prevail. Creative industries are highly concentrated, particularly around the largest cities of each country and sometimes forming large hubs. London and Paris are the largest ones, followed in the ranking by Madrid, Milan, Barcelona and Roma. Despite the size of these creative agglomerations, other local creative systems are found around medium cities, generating a geography of creative industries that is diverse, heterogeneous and complex, and with a particular spatial distribution for each country. Furthermore, some places can be specialized in a particular type of creativity whereas other places show a more diversified creative pattern.

All these characteristics, related to the spatial dimension of creativity, have implications for the design and implementation of policy strategies. This fact is especially relevant in a context where there is not a European policy for creative industries and only the Great Britain specifically recognises creative industries as an objective for policies. What can be learned of this geography of the creativity is that the heterogeneity of the places and their creative characteristics and endowments (including the size and sectoral distribution of the creative sector) leads to a multiplicity of goals and tools of the policy for creative industries. Although these discussion exceeds the scope of this paper, we mention that these policies can be cluster specific, sector specific, depends of the size of the place and the local creative sector, can be independent or coordinated across places and levels of government, and possibly this complexity introduces the necessity of systems of governance for this type of policies.

The analysis has been restricted to a part of the facts that we considered the most significant for an introductory geography of creative industries, a selection of countries and a concrete list of creative industries. This introduces some limits to the conclusions and suggests to extend the research by introducing additional sources of data to enhance the list of creative industries, as well as to successively introduce other countries. The analysis can be also applied to each sector that forms the creative industries, so that detailed patterns of location and co-location can enrich the conclusions.

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*Table 1 Traditional creative and non-traditional creative industries (NACE Rev. 1)*

| Traditional creative industries | Non-traditional creative industries |
|---|---|
| **Publishing** | **Research and development** |
| 22.1 Publishing<br>22.2 Publishing and other activities related to publishing | 73.1 R&D experimentation in the field of natural sciences and engineering<br>73.2 R&D experimenting in the field of social and humanistic sciences |
| **Film, video, performing arts** | **Software & Computer Services** |
| 22.3 Reproductions from original sound registrations<br>92.1 Production and distribution of videos and films; film projection;<br>92.2 Radio and television activities, excluding the management of the radio and television transmission networks<br>92.3 Other entertainment activities | 72.2 Production of software and information consulting<br>72.6 Other activities related to computer services |
| | **Advertising** |
| | 74.4 Advertising |
| **Architecture and engineering studios** | |
| 74.2 Architectural and engineering activities and related technical consultancy | |

Source: our elaboration on DCMS (2001), OECD (2005), and Gordon and Beilby-Orrin (2006) and UNCTAD (2008).

Table 2. Employment in creative industries in 2001

| | Employment | | | | % on total employment | | | | % on creative industries | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | France | Great Britain | Italy | Spain | France | Great Britain | Italy | Spain | France | Great Britain | Italy | Spain |
| Traditional | 649,694 | 868,071 | 579,855 | 457,864 | 2.98 | 3.29 | 3.70 | 2.80 | 66.80 | 58.05 | 66.00 | 68.00 |
| Printing and publishing | 224,206 | 287,491 | 173,391 | 196,951 | 1.03 | 1.09 | 1.10 | 1.20 | 23.05 | 19.23 | 19.70 | 29.20 |
| Architecture and engineering | 218,620 | 366,407 | 295,289 | 142,459 | 1.00 | 1.39 | 1.90 | 0.90 | 22.48 | 24.50 | 33.60 | 21.20 |
| Film, video and performing arts | 206,868 | 214,173 | 111,175 | 118,454 | 0.95 | 0.81 | 0.70 | 0.70 | 21.27 | 14.32 | 12.60 | 17.60 |
| Non traditional | 322,967 | 627,324 | 299,107 | 215,499 | 1.48 | 2.37 | 1.90 | 1.30 | 33.20 | 41.95 | 34.00 | 32.00 |
| Software and Computer Services | 88,058 | 437,643 | 223,771 | 144,785 | 0.40 | 0.32 | 0.30 | 0.40 | 9.05 | 5.57 | 5.90 | 9.20 |
| Advertising | 95,824 | 83,350 | 52,240 | 61,949 | 0.44 | 1.66 | 1.40 | 0.90 | 9.85 | 29.27 | 25.50 | 21.50 |
| Research and development | 139,085 | 106,331 | 23,096 | 8,765 | 0.64 | 0.40 | 0.20 | 0.10 | 14.30 | 7.11 | 2.60 | 1.30 |
| Total creative industries | 972,661 | 1,495,395 | 878,962 | 673,363 | 4.46 | 5.66 | 5.60 | 4.10 | 100.00 | 100.00 | 100.00 | 100.00 |

Source: Elaborated from ISTAT (2001), INE (2001), INSEE (1999) and ONS Census (2007).

Table 3. Concentration coefficients of employment in creative industries

| | France | Great Britain | Italy | Spain |
|---|---|---|---|---|
| Non weighted | | | | |
| First decile LCS (share on total creative employment) | 69.2 | 70.9 | 75.8 | 88.4 |
| Creative LCS (share on total creative employment) | 71.4 | 70.5 | 63.4 | 65.0 |
| 4 largest creative hubs[1] (share on total creative employment) | Paris (43.0)<br>Lyon (3.7)<br>Toulouse (2.8)<br>Marseille (2.5) | London (52.5)<br>Glasgow-Edinburgh (4.7)<br>Manchester (3.5)<br>Leeds (3.0) | Milan (19.5)<br>Roma (13.4)<br>Turin (7.3)<br>Bologna-Firenze (5.2) | Madrid (31.0)<br>Barcelona(19.2)<br>Valencia (3.7)<br>Bilbao (3.4) |
| Herfindahl | 0.04 | 0.08 | 0.05 | 0.12 |
| Gini | 0.76 | 0,76 | 0.83 | 0.91 |
| Theil | 1.51 | 1.51 | 2.11 | 3.06 |
| Weighted by total employment | | | | |
| First decile[2] | 1.55 | 1.25 | 1.36 | 1.22 |
| Herfindahl [3] | 3.76 | 2.22 | 4.11 | 3.50 |
| Gini | 0.77 | 0.74 | 0.78 | 0.75 |
| Theil | 1.24 | 1.19 | 1.28 | 1.17 |

[1] A creative hub is defined as a group of contiguous (or very close) LCS or an only LCS containing an important share of creative employment. **Barcelona** (Barcelona, Sabadell, Mataró, Vilafranca del Penedès, Manresa, Igualada, Sant Sadurní d´Anoia, La Garriga, Capellades); **Bilbao** (Bilbao); **Bologna-Firenze** (Bologna, Firenze, Ravenna, Forlì, Faenza, Borgo San Lorenzo, Firenzuola); **Glasgow-Edinburgh** (Glasgow, Edinburgh, Livingston & Bathgate, Dunfermline, Stirling & Alloa); **Leeds** (Leeds, Bradford, Harrogate & Ripon) **London** (London, Guildford & Aldershot, Reading & Bracknell, Bristol, Wycombe & Slough, Oxford, Cambridge, Southampton, Luton & Watford, Crawley, Milton Keynes & Aylesbury, Warwick & Stratford-upon-Avon, Swindon, Portsmouth, Stevenage, Brighton, Harlow & Bishop's Stortford, Tunbridge Wells, Worcester & Malvern, Bath, Cheltenham & Evesham, Basingstoke, Newbury, Salisbury, Worthing, Chichester & Bognor Regis, Wells & Shepton Mallet); **Madrid** (Madrid, Guadalajara; Seseña); **Manchester** (Manchester); **Milan** (Milan, Bergamo, Como, Varese, Albino); **Paris** (Paris, Nanterre, Boulogne-Billancourt, Montreuil, Versailles, Saint-Denis, Orsay, Créteil, Vitry-sur-Seine, Lagny-sur-Marne, Orléans, Évry, Cergy, Dourdan, Évreux, Meaux, Pithiviers, Montargis, Fontainebleau, Vernon, Coulommiers); **Lyon** (Lyon); **Marseille** (Marseille-Aubagne, Aix-en-Provence); **Roma** (Roma); **Turin** (Turin, Ivrea, Aosta, Fossano, Saluzzo, Saint-Vincent, Dogliani); **Toulouse** (Toulouse); **Valencia** (Valencia).[2] Percentage of employment in creative industries in the first decile divided by the percentage of total employment in the first decile.

[3] Herfindahl index in creative industries divided by Herfindahl index of total employment.

Source: Elaborated from ISTAT (2001), INE (2001), INSEE (1999) and ONS Census (2007).

Table. 4. Employment in creative industries for the largest cities (LCS) in the country

| | France | | | Great Britain | | | Italy | | | Spain | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Paris | Lyon | Marseille | London | Manchester | Glasgow | Rome | Milan | Turin | Madrid | Barcelona | Valencia |
| Traditional creative industries | 120,724 | 22,773 | 10,956 | 249,156 | 30,557 | 20,380 | 66,159 | 76,979 | 29,039 | 127,220 | 67,509 | 17,516 |
| Printing and publishing | 42,062 | 6,043 | 2,652 | 78,314 | 8,149 | 5,812 | 16,798 | 34,819 | 9,817 | 54,178 | 38,003 | 7,607 |
| Architecture and engineering | 23,297 | 11,389 | 4,585 | 73,138 | 15,352 | 9,875 | 18,793 | 27,187 | 14,852 | 34,980 | 15,872 | 5,662 |
| Film, video and performing arts | 55,365 | 5,341 | 3,719 | 97,704 | 7,056 | 4,693 | 30,568 | 14,973 | 4,370 | 38,062 | 13,634 | 4,247 |
| Non traditional creative industries | 52,888 | 13,880 | 4,861 | 156,433 | 22,373 | 9,844 | 51,348 | 69,289 | 26,922 | 77,730 | 31,668 | 7,393 |
| Software & Computer Services | 14,056 | 5,034 | 751 | 104,558 | 16,250 | 6,281 | 44,525 | 49,929 | 19,779 | 53,901 | 20,873 | 4,564 |
| Advertising | 19,245 | 3,711 | 1,466 | 36,455 | 5,053 | 2,429 | 4,239 | 15,879 | 4,454 | 21,990 | 10,016 | 2,348 |
| R&D | 19,587 | 5,135 | 2,644 | 15,420 | 1,070 | 1,134 | 2,584 | 3,481 | 2,689 | 1,839 | 779 | 481 |
| Total Creative Industries | 173,612 | 36,653 | 15,817 | 405,589 | 52,930 | 30,224 | 117,507 | 146,268 | 55,961 | 204,950 | 99,177 | 24,909 |
| Non creative industries | 1,427,203 | 672,979 | 345,894 | 4,095,580 | 858,871 | 562,128 | 1,182,975 | 1,394,903 | 639,390 | 2,196,308 | 1,238,319 | 563,165 |
| Total | 1,600,815 | 709,632 | 361,711 | 4,501,169 | 911,801 | 592,352 | 1,300,482 | 1,541,171 | 55,961 | 2,401,258 | 1,337,496 | 588,074 |

Source: Elaborated from ISTAT (2001), INE (2001), INSEE (1999) and ONS Census (2007).

Table. 5. Percentage of employment in local creative industries on national creative industries for the largest cities (LCS) in the country

| | France | | | Great Britain | | | Italy | | | Spain | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Paris | Lyon | Marseille | London | Manchester | Glasgow | Rome | Milan | Turin | Madrid | Barcelona | Valencia |
| Traditional creative industries | 18.6 | 3.5 | 1.7 | 28.7 | 3.5 | 2.3 | 11.4 | 13.3 | 5.0 | 27.8 | 14.7 | 3.8 |
| Printing and publishing | 18.8 | 2.7 | 1.2 | 27.2 | 2.8 | 2.0 | 9.6 | 20.1 | 5.7 | 27.5 | 19.3 | 3.9 |
| Architecture and engineering | 10.7 | 5.2 | 2.1 | 20.0 | 4.2 | 2.7 | 6.3 | 9.2 | 5.0 | 24.6 | 11.1 | 4.0 |
| Film, video and performing arts | 26.8 | 2.6 | 1.8 | 45.6 | 3.3 | 2.2 | 27.5 | 13.5 | 3.9 | 32.1 | 11.5 | 3.6 |
| Non traditional creative industries | 16.4 | 4.3 | 1.5 | 24.9 | 3.6 | 1.6 | 17.2 | 23.2 | 9.0 | 36.1 | 14.7 | 3.4 |
| Software & Computer Services | 16.0 | 5.7 | 0.9 | 23.9 | 3.7 | 1.4 | 19.9 | 22.3 | 8.8 | 37.2 | 14.4 | 3.2 |
| Advertising | 20.1 | 3.9 | 1.5 | 43.7 | 6.1 | 2.9 | 8.1 | 30.4 | 8.5 | 35.5 | 16.2 | 3.8 |
| R&D | 14.1 | 3.7 | 1.9 | 14.5 | 1.0 | 1.1 | 11.2 | 15.1 | 11.6 | 21.0 | 8.9 | 5.5 |
| Total Creative Industries | 18.6 | 3.5 | 1.7 | 27.1 | 3.5 | 2.0 | 13.4 | 16.6 | 6.4 | 30.4 | 14.7 | 3.7 |

Source: Elaborated from ISTAT (2001), INE (2001), INSEE (1999) and ONS Census (2007).

Table. 6. Share of employment in creative industries on local employment for the largest cities (LCS) in the country

| | France | | | Great Britain | | | Italy | | | Spain | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Paris | Lyon | Marseille | London | Manchester | Glasgow | Rome | Milan | Turin | Madrid | Barcelona | Valencia |
| Traditional creative industries | 7.5 | 3.2 | 3.0 | 5.5 | 3.3 | 3.4 | 5.1 | 5.0 | 4.2 | 5.3 | 5.0 | 3.0 |
| Printing and publishing | 2.6 | 0.9 | 0.7 | 1.7 | 0.9 | 1.0 | 1.3 | 2.3 | 1.4 | 2.3 | 2.8 | 1.3 |
| Architecture and engineering | 1.5 | 1.6 | 1.3 | 1.6 | 1.7 | 1.7 | 1.4 | 1.8 | 2.1 | 1.5 | 1.2 | 1.0 |
| Film, video and performing arts | 3.5 | 0.8 | 1.0 | 2.2 | 0.8 | 0.8 | 2.4 | 1.0 | 0.6 | 1.6 | 1.0 | 0.7 |
| Non traditional creative industries | 3.3 | 2.0 | 1.3 | 3.5 | 2.4 | 1.7 | 3.9 | 4.5 | 3.9 | 3.2 | 2.4 | 1.3 |
| Software & Computer Services | 0.9 | 0.7 | 0.2 | 2.3 | 1.8 | 1.1 | 3.4 | 3.2 | 2.8 | 2.2 | 1.6 | 0.8 |
| Advertising | 1.2 | 0.5 | 0.4 | 0.8 | 0.5 | 0.4 | 0.3 | 1.0 | 0.6 | 0.9 | 0.7 | 0.4 |
| R&D | 1.2 | 0.7 | 0.7 | 0.3 | 0.1 | 0.2 | 0.2 | 0.2 | 0.4 | 0.1 | 0.1 | 0.1 |
| Total Creative Industries | 10.8 | 5.2 | 4.4 | 9.0 | 5.8 | 5.1 | 9.0 | 9.5 | 8.0 | 8.5 | 7.4 | 4.2 |
| Non creative industries | 89.2 | 94.8 | 95.6 | 91.0 | 94.2 | 94.9 | 91.0 | 90.5 | 92.0 | 91.5 | 92.6 | 95.8 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 8.0 | 100.0 | 100.0 | 100.0 |

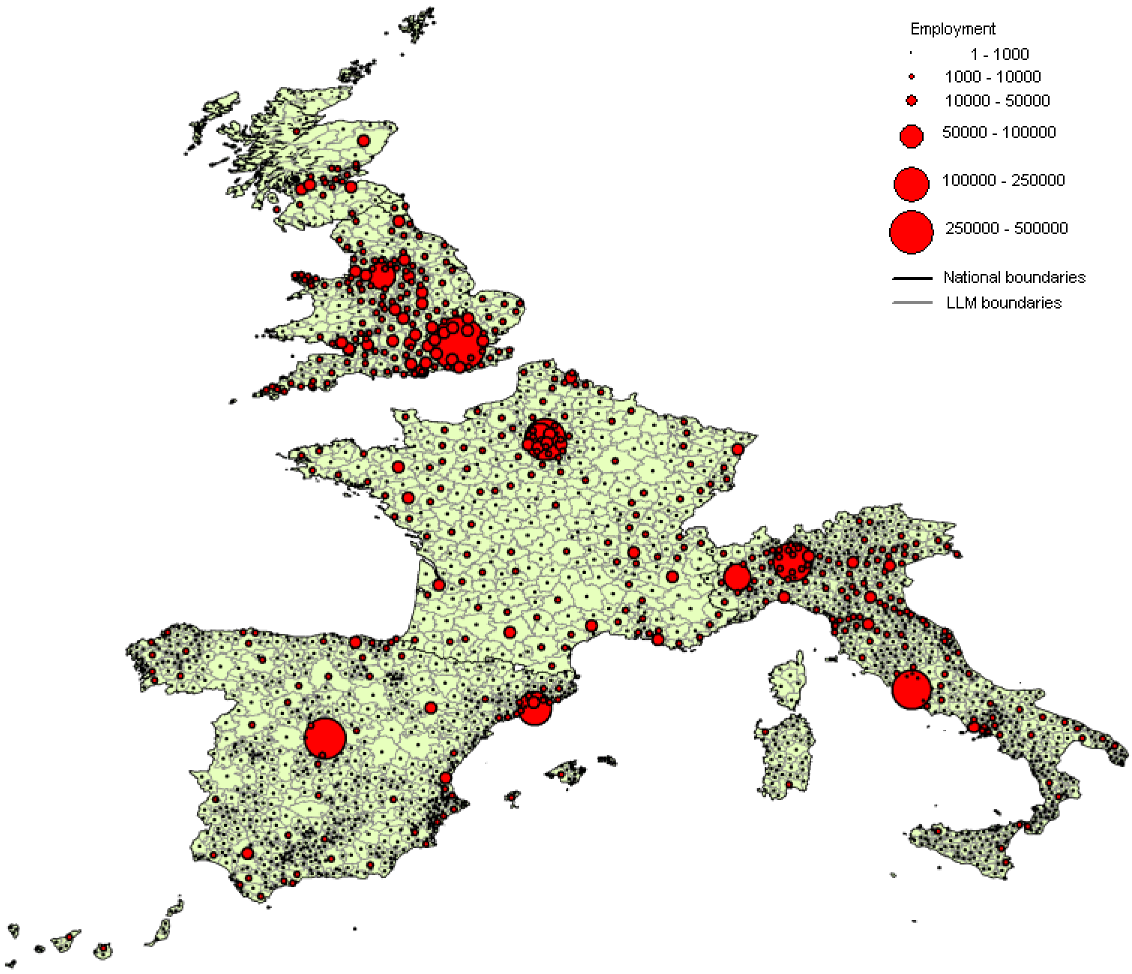
Source: Elaborated from ISTAT (2001), INE (2001), INSEE (1999) and ONS Census (2007).

Table. 7. Distribution of employment in creative industries by group for the largest cities (LCS) in the country

| | France | | | Great Britain | | | Italy | | | Spain | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Paris | Lyon | Marseille | London | Manchester | Glasgow | Rome | Milan | Turin | Madrid | Barcelona | Valencia |
| Traditional creative industries | 69.5 | 62.1 | 69.3 | 61.4 | 57.7 | 67.4 | 56.3 | 52.6 | 51.9 | 62.1 | 68.1 | 70.3 |
| Printing and publishing | 24.2 | 16.5 | 16.8 | 19.3 | 15.4 | 19.2 | 14.3 | 23.8 | 17.5 | 26.4 | 38.3 | 30.5 |
| Architecture and engineering | 13.4 | 31.1 | 29.0 | 18.0 | 29.0 | 32.7 | 16.0 | 18.6 | 26.5 | 17.1 | 16.0 | 22.7 |
| Film, video and performing arts | 31.9 | 14.6 | 23.5 | 24.1 | 13.3 | 15.5 | 26.0 | 10.2 | 7.8 | 18.6 | 13.7 | 17.1 |
| Non traditional creative industries | 30.5 | 37.9 | 30.7 | 38.6 | 42.3 | 32.6 | 43.7 | 47.4 | 48.1 | 37.9 | 31.9 | 29.7 |
| Software & Computer Services | 8.1 | 13.7 | 4.7 | 25.8 | 30.7 | 20.8 | 37.9 | 34.1 | 35.3 | 26.3 | 21.0 | 18.3 |
| Advertising | 11.1 | 10.1 | 9.3 | 9.0 | 9.5 | 8.0 | 3.6 | 10.9 | 8.0 | 10.7 | 10.1 | 9.4 |
| R&D | 11.3 | 14.0 | 16.7 | 3.8 | 2.0 | 3.7 | 2.2 | 2.4 | 4.8 | 0.9 | 0.8 | 1.9 |
| Total Creative Industries | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |

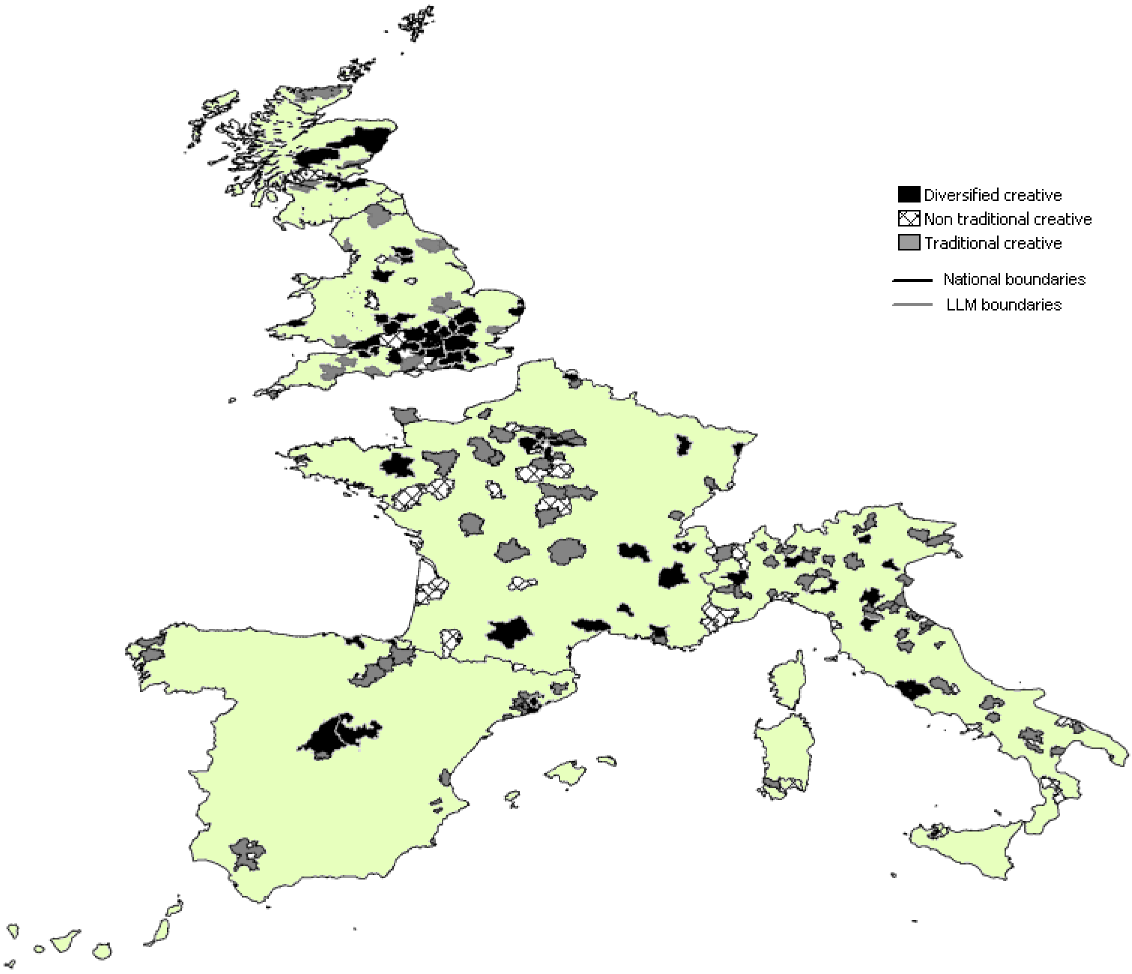
Source: Elaborated from ISTAT (2001), INE (2001), INSEE (1999) and ONS Census (2007).

Figure 1. Employment in creative industries by local labour market. Great Britain, France, Italy and Spain.




Source: Elaborated from ISTAT (2001), INE (2001), INSEE (2006) and ONS Census (2007).

Figure 2. Local creative systems. Location Quotient above 1 and minimum 250 employees in creative industries by LPS.




Note: LQs have been calculated for each country separately.