



Approaching the Barcelona metropolitan region

The views of high-skilled employees, managers
and transnational migrants

ACRE report 8.2



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Joaquín Turmo Garuz
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Accommodating Creative Knowledge – Competitiveness of European Metropolitan
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EXECUTIVE SUMMARY

This report synthesises the main findings of previous research developed in the framework of the ACRE project. This project aims to understand the elements that allow the development of creative and knowledge economies in European cities, analysing the role of different location factors as elements for the attraction of companies and qualified workers. The report presents what are the main factors for attraction and retention in the Barcelona Metropolitan Region for companies and workers in the knowledge and creative economy, departing from three different reports previously edited. The first of them, *Why in Barcelona?*, presents the perspective of workers in the creative and knowledge sectors about the city-region, their reasons to remain in it and their assessments on the quality of life and the environment as attractive factors of Barcelona. The report is based on quantitative data collected through a survey. The second report, *Main drivers for settlement in the Barcelona Metropolitan Region*, is based on qualitative analysis of interviews with managers and owners of companies in the creative and knowledge sectors to understand their willingness to develop their business in the region and their perceptions about their most attractive elements. Finally, the third report, *The Magnetism of Barcelona*, analyses from a qualitative perspective the assessments and trajectories of qualified foreigners developing their careers in the metropolitan region.

Thus, the present report analyses the results from a transversal perspective, detailing which are the key factors for attraction and retention in the Barcelona metropolitan region. In order to do that, in chapter 1 an introduction to the region is presented. Barcelona Metropolitan Region embraces 164 municipalities in 4,320 hectares, and has a strong industrial tradition since the eighteenth century. In the last decades the city of Barcelona has seen a major shift towards services and added-value activities whereas in the metropolitan region industrial activities have remained cornerstones of the economy.

The shift of Barcelona, linked to the entrance of Spain into the EU and to the celebration of the Olympic Games, started to attract visitors and investments. Moreover, since then there has been an international image of the city as a place with a good quality of life linked to Mediterranean culture, an element that may be considered as a key factor for attraction.

To assess the weight and the role of this and other factors in the attraction and retention of different groups we have developed a methodology to integrate the different quantitative and qualitative results collected in previous stages of the research. In chapter two the methodological approach is explained. The synthesis of the results has been based in two consecutive steps. Firstly, we have analysed the role of different location factors for workers, companies and foreigners through a transversal analysis. Chapter three summarises the main findings in this direction. Although workers, managers and foreigners show different patterns of attraction and retention, there are some common classic factors of attraction playing a role, such as the existence of a significant labour market, the relevant role of education and training institutions or the existence of international communication infrastructures. Furthermore, the role of soft or new location factors is salient in attracting and retaining people and companies

to the region. The size of the city, its weather, and the quality of life linked to their services, and everyday life are relevant elements for all the groups interviewed.

Secondly, we have analysed the role of the factors in a more general way taking into consideration their weight in the attraction capacity of the region in comparison to other factors. The aim of this second step is to assess which are the factors that are influencing the emergence of the creative and knowledge economy in the Barcelona Metropolitan Region. In this regard, chapter four acknowledges the strong role of soft factors in the attraction capacity of the region. Nevertheless, this strong role is possible only after years of policies directed to foster these factors. For instance, the urban renewal of the waterfront of Barcelona has reinforced the image of the city as a Mediterranean harbour. On the other hand, although significant lacks in classic location factors are perceived, policy developments in the last five years bring possibilities for a greater weight of these factors in the attraction and retention of both companies and talent. For instance, the region is facing a major transformation of its internal transport infrastructures as well as an improvement of its international connection. Chapter five summarises the main findings and proposes some elements for policy development in the near future.

1.1 Structure of the report

One of the main aims of the ACRE project, which provides the framework for this report, is to understand the role of different location factors in the decisions taken by companies and individuals to pursue their professions and businesses in particular cities and metropolitan regions. Relevant questions in this regard include: To what extent are traditional location factors significant for creative and knowledge companies? What is the role of ‘soft’ location factors such as climate, social diversity and the cosmopolitanism of a city? Indeed, current research on economic development at the local level is now highlighting the role of new location factors in attracting both qualified workers and companies from the creative and knowledge sectors (Florida, 2003, Scott, 2002).

From this starting point, the ACRE project has analysed the role of these factors in different groups or collectives, such as workers and graduates, managers and qualified migrants involved in the creative knowledge economy. The analysis has been performed for each of the cities involved in the project as case studies¹ and the report aims to achieve a comprehensive understanding of the decisions and assessments regarding the Barcelona Metropolitan Region which have come from the various actors participating in the creative and knowledge industries. The report also analyses the weight of the various location factors in the decisions taken by these actors. By doing so, the report summarises and synthesises the results of prior research in the ACRE project, presenting an integrated approach to three previous reports, each based on a different group: workers, managers and transnational migrants.

In the first report *Why in Barcelona?* (2007), we analysed the reasons why creative and knowledge workers and graduates from the Barcelona Metropolitan Region (BMR) pursue their professional and personal life in the region. The report also included their opinions on the region as a place to live and work, as well as their willingness to remain in the region or leave in the near future. The methodological basis for the report was a survey of 200 workers and 50 graduates from three specific sectors of the creative and knowledge economy: computer games and web design, consultancy and other businesses, and the media (motion pictures, video, radio and television). The second report, entitled *Main drivers for settlement in the Barcelona Metropolitan Region* (2008), presents an analysis of the reasons why companies choose to settle and develop their businesses in the BMR. The report takes a qualitative approach, building on 20 in-depth interviews with managers in creative and knowledge companies from the same three specific sectors as in the previous research. Finally, in *The Magnetism of Barcelona* (2009), we take a qualitative approach to analyse the

¹ In addition to Barcelona, the cities involved in the project include Amsterdam, Birmingham, Budapest, Dublin, Helsinki, Leipzig, Munich, Milan, Poznan, Riga, Sofia, and Toulouse.

reasons why qualified transnational migrants decide to come to the Barcelona Metropolitan Region to pursue their careers.

In this report we offer a synthesis of the results based on an analysis of two main dimensions. Firstly, we analyse the influence which different hard and soft location factors have on the different target groups' decisions, attempting to highlight the key factors attracting these groups to the region and retaining them there. As a second step, we examine more generally the strengths and weaknesses of the Barcelona Metropolitan Region in attracting creative knowledge actors. As the previous ACRE research has shown, there are significant differences between the creative and knowledge sectors in terms of both the influence of location factors and the evaluation of the city region. For this reason, our synthesis takes into consideration the differences between the two sectors. Finally, a summary of the main location factors for the different groups and their evaluations of the city region provide a basis to compare the BMR with other European city regions in terms of their respective capacity to attract and retain a creative knowledge workforce as well as companies.

The integration exercise proposed in this report draws on differing methodological approaches. Because the data collected in the previous reports is based on quantitative and qualitative methodologies, it is necessary first to construct a system of indicators to enable the qualitative and quantitative data to be combined. In the second chapter, the methodological strategy for integration is presented in-depth. The report is subsequently structured according to the steps followed in the process of integration. In the third chapter, therefore, we present the evaluation of the city region from the perspectives of the different target groups, while the fourth chapter turns to an evaluation of the city region based on local conditions and policies.

1.2 An introduction to the Barcelona Metropolitan region

The region formed by Barcelona and the surrounding cities covers 4,320 square kilometres and contains 164 municipalities. The Barcelona Metropolitan Region (BMR) is one of Spain's most important industrial regions and is among the ten most important industrial regions in Europe (Oliver, 2006). The development of the BMR's industrialisation was based to a great extent on the emergence of small and medium-sized companies. These small companies created a strong network which prevented the emergence of large firms. The activity of the Catalan bourgeoisie, then, was based on small family businesses linked to each other inside a territorial network. To a great extent this tradition endures today and is one of the main features of the region's economic profile (Trullén and Boix, 2003). This model, based on interrelated small companies, created multiple centres of economic growth in the region's cities and indeed these small and medium-sized cities have played a major role in the region's economic development. Nonetheless, the city of Barcelona has strengthened its position as the region's economic centre in recent decades, through its transformation towards a service-oriented economy.

The economic transformation of Barcelona began in the 1980s and became consolidated in the following decade. It was based to a great extent on attracting tourism and new economic activities. The city council used Barcelona's nomination to host the 1992 Olympic Games to

promote urban regeneration and to create new neighbourhoods. This policy received support from the civil society and many private agents. With the Games, Barcelona established itself on the international map and became attractive as a global city, not only as a city to visit but also as a city in which to invest. Thanks to this process, the city's economic profile changed into a service-oriented economy. The City Council aimed to make the economy of Barcelona a knowledge-oriented economy, and launched several urban renewal projects designed to fulfill this objective. The most important was the transformation of the city's old industrial district into a district for activities linked to the "new economy". This project was planned during the nineties but was not implemented until the next decade; the immediate action of the city council was more short-term, focusing on promoting the city as a pole of attraction for tourists and visitors and also for new businesses and activities. As a result, the number of visitors rose from 3.85 million visitors in 2001 to 5.06 million in 2005.

During the 1990s, the rest of the regional economy remained industry-based, with textile and automobile industries as the main sectors. During this period Spain went into recession, causing crises in these two sectors and a certain diversification of industrial economic activities in the region. The crisis did not mean the end of the industrial economic activity in the BMR: in fact, the region is still the main contributor to Spain's industrial export capacity (Trullén, 2001). Indeed, the BMR today is considered one of Europe's most dynamic economic areas on account of its advanced industrial and tertiary activities (Trullén, 2001). In the first five years of the new century the regional economy grew steadily, as reflected both by its GDP and its labour market (Oliver, 2006). Nevertheless, the growth was based to a great extent on low innovation and low productivity patterns, with little investment in R&D (Vives and Torrens, 2004). The region's economic development during the 1990s started to attract foreign migrants, mainly from Latin America and northern Africa, and also from northern Europe. The migrants were employed mainly in unskilled jobs in the services and real estate sectors, although a minority started to fill qualified positions.

After the 1992 Olympic Games the new project for economic growth in the region was based on promoting the 'information society'. During the second half of the 1990s the region strengthened its position as an industrial region with growing diversification and conversion of its economic pattern towards the knowledge economy. The role of strategic planning at government level was key in this transformation. In the city of Barcelona, the plan "Barcelona 22@" was approved in 2000. This plan, under study since the mid-nineties, involved the urban renewal of 200 hectares of an old industrial district in Barcelona with the aim of attracting creative and knowledge capital (ICT, research, and video and cinema activities). The idea of the 22@ project was to create a mixed-use technological district with facilities, economic activity and housing. The project promoted five strategic clusters: ICT, media, biomedical, energy, and design. During the first half of the decade, the project remained basically focused on urban renewal, with the creation of infrastructures and equipments for "new economy" companies. Since 2006 the 22@ project has organised an annual "urban clusters symposium" with the aim of sharing strategies for attracting talent and business to the city. This organisation reflects the project's entry onto a new stage as it aims to attract companies. In the rest of the region similar urban renewal projects on a smaller scale are being launched in order to attract talent from abroad.

Summarising, the region's recent success, both in terms of economic growth and its relevance in the European hierarchies, has attracted visitors and workers. Nevertheless, as previous research in the framework of the ACRE project has shown, the growth of tourism and the lack of policy coordination may be obstacles to the inflow of innovation from abroad². Besides, the economic crisis has had devastating effects on the whole Spanish economy and in the economic development of the BMR. In Spain the main features of the financial crisis are the burst of the speculative bubble in the real estate sector and the decrease of demand in all the other sectors. For the last ten years the Real Estate sector was the main economic sector of Spain, acting as a locomotive of the other economic sectors. The financial flexibility in obtaining credit from the banks reinforced the dynamism of the sector with increasing prices of dwelling. Whereas in some regions of Spain the real estate sector was by far the most relevant activity, the BMR remained more diversified and with several economic activities. Nevertheless, the crisis has also affected the region with a decrease in the demand of goods and services and a decrease in tourism.

The impact of the crisis is clearer in the industrial municipalities of the region. In some of them, like Sabadell or Terrassa, the unemployment tax has reached almost 20 per cent and the small and medium network of companies is being especially affected. The crisis in the industrial sector is due to the downfall of demand in both internal and external markets.

1.3 The state of creative and knowledge industries in the BMR

Following national statistics, the creative and knowledge sectors employ more or less 22 per cent of the total working population in the province of Barcelona. As can be shown in figure 1.1 the evolution of the employment in these sectors has varied slightly in the last years, with variations of 3 per cent (including job destruction between 2000 and 2003). It is important to point out that, following the available data, the jobs in the creative and knowledge sectors are not declining despite the strong crisis started in 2007.

In figures 1.2 and 1.3 we can observe the contribution of each creative and knowledge sector to the overall employment in the creative and knowledge economy. As far as the creative sectors are concerned, there is a continued decrease of employment in the designer fashion sectors. This decrease is mainly related to the fact that most of the companies of this sector were part of the local textile industry, a former motor of the regional economy that has declined without a major transformation towards the creative economy. Employments in arts and antiques trade decreased until 2005 and then they saw a slight recovery. Regarding the rest of the sectors, the most salient is that including the media industries, that is, video, film music and photography, which has grown 2 per cent over total creative and knowledge employment. Employment in computer games and web design activities has grown by more than 2 per cent as well. Conversely, the financial crisis, which in Spain was linked to a real

² In fact, results in the ACRE research show that a certain model of massive tourism can hinder the possibilities for development of creative and knowledge industries in the region. Moreover, the lack of coordination is a major concern for entrepreneurs and policy-makers (Pareja-Eastaway et. al., 2008)

estate speculative bubble, has had a negative impact on the employment in architecture, which has decreased. The rest of the activities remain stable. Nevertheless, as can be seen in the figure, there is a great diversification of activities in the creative economy, with eight out of nine sectors accounting for from two to eight per cent of total employment in the creative knowledge economy.

Figure 1.1 - Employment in the creative and knowledge economy in the province of Barcelona (%)

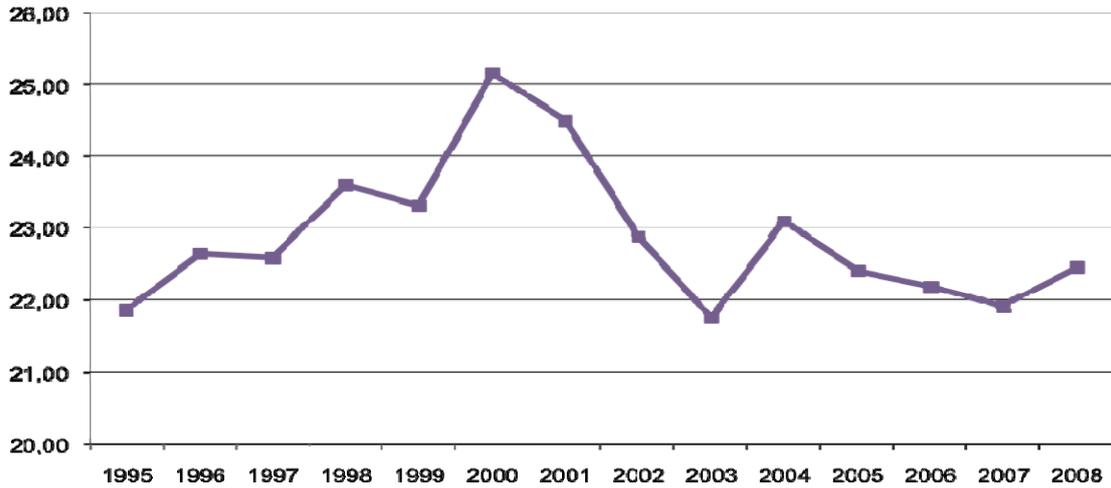
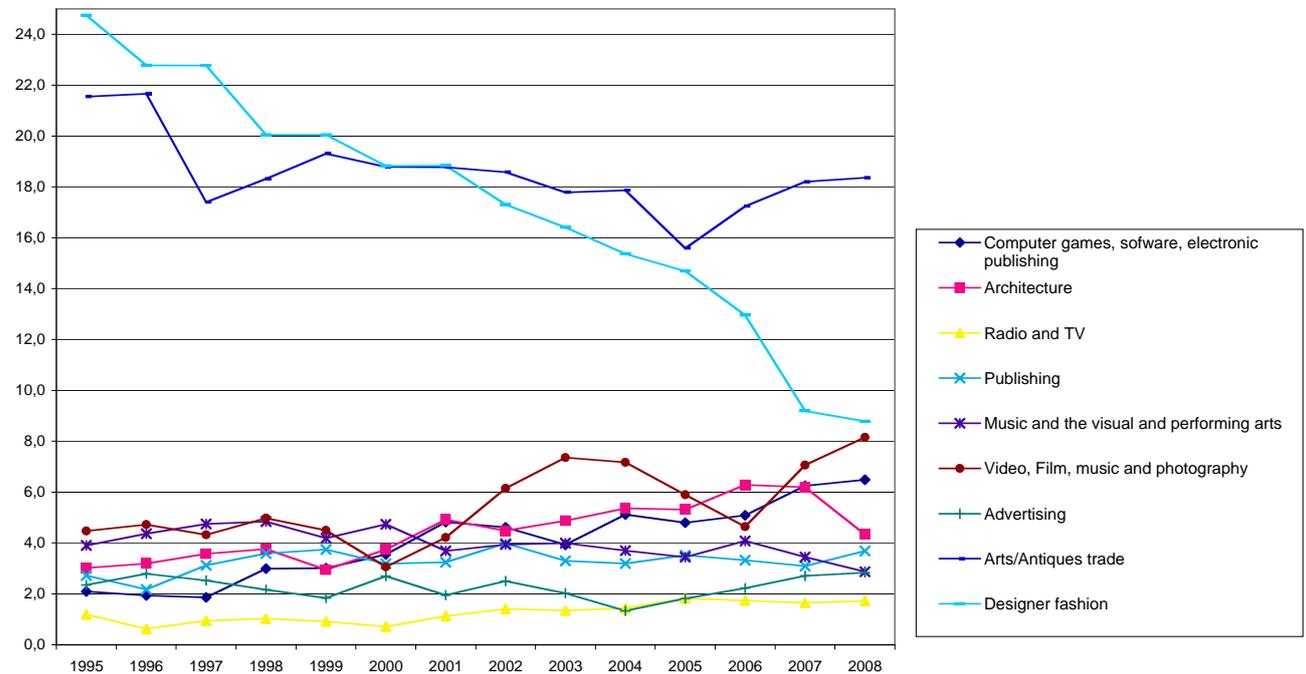
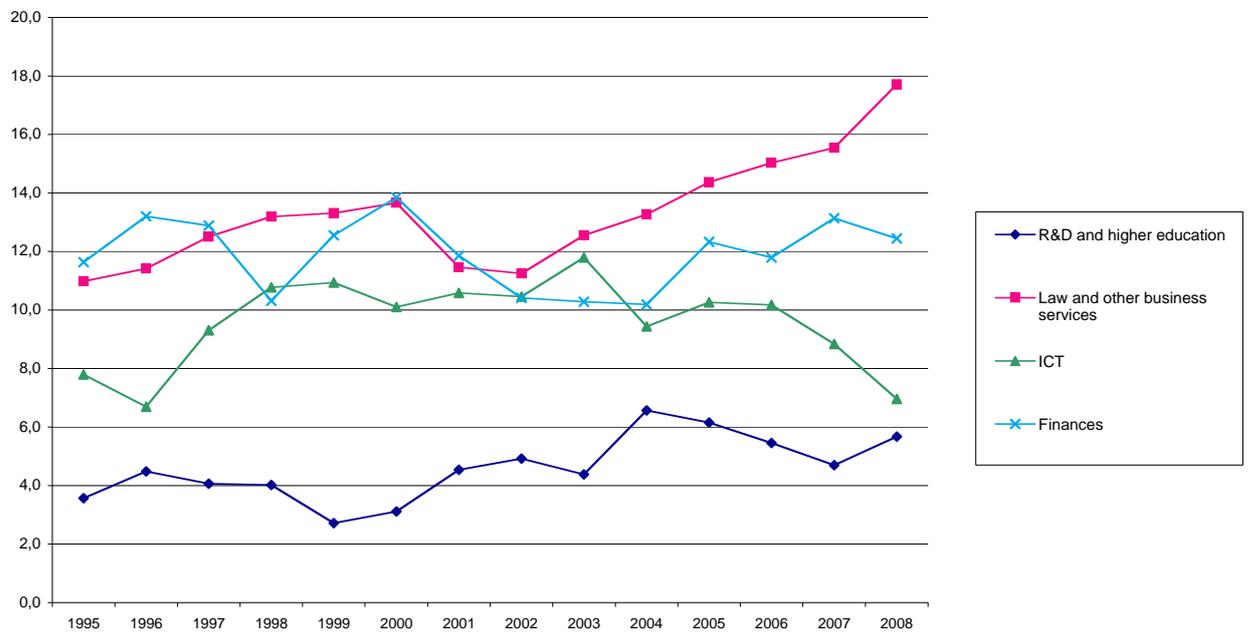


Figure 1.2 - Employment in the creative industries as a % over creative and knowledge



As can be seen in figure 1.3, most of the people working in the creative and knowledge economy are working in the knowledge sectors. Two sectors in the knowledge economy are salient: Law and Finances. Law and other business services to companies account for roughly

Figure 1.3 - Employment in the knowledge industries as a % over creative and knowledge



18 per cent of the total employment, whereas finances employ 12 per cent of the total. The other two sectors account for less than 10 per cent of employment each. Employment in ICT has decreased since 2006 whereas research and development and higher education remain stable.

This data allows us to understand the changing framework of the creative and knowledge economy in the province of Barcelona. The most relevant sectors in terms of employment are Arts and antiques trade, law and other business services and Finances. These three sectors include 50 per cent of the jobs in the creative knowledge economy. There are also some emerging sectors linked to the media industries and the production of digital contents. Nevertheless the analysis of data deserves a consideration in terms of data availability. Firstly the data provided is for the whole province of Barcelona. The Barcelona metropolitan region represents 85 per cent of the province but more weight of creative sectors in the employment can be expected, especially in Barcelona. Secondly, the data available is based in the old classification of industrial activities. The new NACE codes will allow for more accurate investigation of creative and knowledge economies in the near future.

2 RESEARCH DESIGN AND METHODOLOGY

2.1 Qualitative and quantitative methodology

To date, studies conducted as part of the ACRE Project have produced results revealing the conditions which are required to create or stimulate ‘creative knowledge regions’. To arrive at these results, analyses have addressed the main location factors and other factors attracting individuals and businesses to the Barcelona Metropolitan Region (BMR). The research has focused on three key actors in the new knowledge economy: workers in new creative and knowledge companies¹, managers in companies operating in the new sectors² and, lastly, transnational immigrants holding qualified jobs in the two sectors³ (see table 2.1).

The analysis has drawn on a combination of qualitative and quantitative methods. By stark contrast with the viewpoint that quantitative and qualitative methods represent a dichotomy, we hold that the two methods are complementary. In recent decades, a number of authors have pointed out that they are not continuous nor can they be logically extrapolated. No operation can simply add them together. However, this in no way counters the advantages that can arise from drawing on both methods (Conde, 1990). In the current study, the quantitative and qualitative data are treated as necessary complements working mutually for verification, not exclusively of another, “The absolute opposition between quantitative and qualitative methods is a false one. Our aim rather is for complementarity, but on greater terms of equality, because the approaches to checking and verifying the validity of our research in each specific case must be proposed by us ourselves, ignoring neither the quantitative nor the qualitative (...)” (Pedone, 2000).

Qualitative methodology has been particularly useful in achieving the objectives of the ACRE project. Three intrinsic features of qualitative methodology have been fundamental in obtaining the project results. Firstly, the method represents a view of reality that permits comprehensive study of dimensions related to values, opinions and motivations. Secondly, it enables work on units of analysis which are linked to intangible factors, often related to key concepts in this study such as “soft factors”. Lastly, by contrast with the generalisations offered by quantitative data, which are used here to describe contexts and trajectories, it enables specific conclusions to be drawn with regard to the object of study and any interrelationships between the subject and object under examination.

The qualitative technique used in the fieldwork for the ACRE reports has been based on in-depth interviews. Interviews have provided an important method in acquiring a deeper

¹ See *Why in Barcelona? Understanding the attractiveness of metropolitan region for creative knowledge*.

² See *Main drivers for settlement in the Barcelona Metropolitan Region. The managers’ view*.

³ See *The Magnetism of Barcelona. The attractiveness of the Barcelona Metropolitan Region for transnational knowledge immigrants*.

understanding of the research topic. They have made it possible to gain a strong grasp of the reality under study, playing a crucial role in the detailed analysis of scientific research (Mayoraga Fernández, 2003). Participant observation has been particularly successful. It has been vital, for example, in forging a close interrelationship between the topics at issue and the researchers. Once the literature review had been conducted and our hypotheses formulated, we gathered and classified data from our immediate surroundings according to what had emerged as important in relation to the subject being studied. In addition, meetings were held with groups of experts to examine the main questions arising in the course of our research.

Quantitative methodology has been critical in providing a context for the object of study and explaining the primary economic, demographic and relocation trajectories. It was particularly important in the first stage of the research in order to describe the socioeconomic situation of the BMR, the creative and knowledge sectors and the main challenges now confronting the region⁴. The most commonly used methods have addressed statistical information, indicators and the cross-checking of quantifiable data. In addition, a survey was used in one of the primary stages of the project. The survey method has enabled us to quantify behaviour and extrapolate results from the sample group under study, which in this case included workers in the creative and knowledge sectors.

2.2 Methodological background of previous work

The first stage of the ACRE project focused on analysing how the creative and knowledge sectors are situated within the broader socioeconomic context of the BMR. The methodology used involved a literature and documentary search, theoretical analysis, and research and analysis of quantitative data and indicators. An initial piece of exploratory fieldwork made use of open interviews at institutions linked directly to the research topic⁵.

The second stage involved establishing a specific target group as an object of study: creative and knowledge workers and graduates in the BMR. The objective was to uncover their level of satisfaction in relation to the city, their environment and their job. It was necessary to gain an understanding of what lay behind their decisions when choosing a given job and residence, and to analyse the importance of soft factors and of location in the decision-making process.

The specific sectors chosen for the survey sample are not the most representative in the BMR, but the sample selection was made according to criteria that would enable comparison internationally. The three branches selected in the creative sectors were: software; TV, radio, video and motion pictures; and architecture. In the knowledge sectors, the three branches selected were law, finance, and R+D. Lastly, the survey also went to polytechnic graduates and arts and media school graduates, who together represented a quarter of the sample size. A

⁴ See: *The city of marvels? Multiple endeavours towards competitiveness in Barcelona. Pathways to creative and knowledge-based regions.*

⁵ Economic Promotion, Barcelona City Hall; Culture Institute, Barcelona City Hall; Catalan Institute of Cultural Industries, *Generalitat* of Catalonia; Economic District 22@; Barcelona Activa-Promotion of Innovation, Barcelona City Hall. Barcelona Strategic Plan.

total of 204 questionnaires were distributed, broken down as follows: 81 creative workers, 73 knowledge workers and 50 graduates. The regional distribution of companies in which survey respondents held employment followed the criterion of maintaining an equal balance between the core city of Barcelona, the immediate metropolitan area and the greater metropolitan area.

The aim of the second stage of the project was to analyse the main drivers of settlement in the BMR by companies in the creative and knowledge sectors. The study focused on the level of importance of classic location factors and soft location factors. The analysis also addressed the role of local and regional government in stimulating the establishment of these kinds of companies in the BMR.

In order to respond to these questions, the analysis turned its attention in the third stage to a specific target group: the managers of creative and knowledge companies. In-depth interviews were conducted with managers, using a semi-structured questionnaire. The objective was to gain an understanding of the reasons why their companies had chosen the BMR as their location and of any related advantages and disadvantages. The first criterion for sample selection was that the companies fall into the economic sectors specified by ACRE guidelines⁶. In this case, the companies selected all came from consultancy, in the knowledge sector, or the media (television, radio, video and motion pictures) and electronic publishing in the creative sectors.

Interviews were conducted with 18 managers, including 6 in each of the sectors noted above. Four additional interviews took place in networking organisations in the public and private sector⁷. Another important sample criterion was company size. Each of the three economic sectors chosen was further divided into 3 groups: freelance, small and large companies. Account was also taken of the location of the company regionally within the BMR. Nevertheless, the distribution of the sample was not equal across the region, but was skewed in function of the weight of the sectors within the core city.

The fieldwork in the third stage comprised a total of 22 in-depth interviews. Two comments, however, should be noted. The interviews performed in the first stage (see footnote four below) served to strengthen these later interviews. Also, while they were used primarily for qualitative analysis, they also served to supplement the research by providing quantitative information and indicators and by use in cross-checking the data.

The fourth research stage of the ACRE project focused on analysing the capacity of the BMR to attract talent. A key factor for the development and success of a “creative knowledge region” involves opening up the region to transnational immigrants. In this case, the target group under study comprised transnational immigrants holding qualified employment. The aim was to identify the main factors leading such immigrants in the creative and knowledge sectors to arrive and settle in the BMR.

⁶ As noted earlier, the economic sectors selected for the sample do not always coincide with the most significant sectors in the BMR, but they are significant in the overall set of 13 metropolitan regions in the case studies prepared as part of the ACRE project.

⁷ Barcelona Chamber of Commerce, El Vallés Science Park, Barcelona Biomedical Research Park (BIOCAT), Barcelona [22@Network](#) (Association of Businesses and Institutions of the Barcelona Economic District).

A total of 27 interviews were conducted with immigrants holding qualifications. Although they were “life history” interviews to some extent, the interviews were semi-open and structured around five large topics: initial situation and decision to come to Barcelona; working life and studies in the region; assessment of the city and its features; social networks, and plans for the future. Various criteria were used in sample selection. Firstly, immigrants were chosen from within the creative or knowledge sectors, with at least 6 months of experience in the BMR. Balance was maintained among the immigrants within the creative sectors (13 interviews) and within the knowledge sector (14 interviews). The next criterion for sample selection concerned the origin of interviewees: almost half came from EU countries or the United States, while the other half came from Latin America and Africa and, to a lesser extent, Asia. The intention was to obtain a representative sample reflecting the characteristics of the target group studied in the BMR. The greatest proportion of immigrants in the BMR is Latin American or African in origin, but immigrants from the EU and the US tend to occupy more highly qualified positions of employment. Lastly, gender and company size for each worker were taken into account.

In addition, four open interviews were conducted with experts from public and private institutions, who specialise in attracting talent or addressing immigration issues⁸. The interviews served to achieve an optimal approximation to subjects such as the BMR’s factors in attracting talent, the impact of the economic sectors under study, and the strategies pursued by the public and private sectors in attracting and retaining talent.

2.3 Integrating different approaches: Triangulation

The approach developed in this report synthesises different kinds of information including assessments of different groups collected with different techniques. Given that there is qualitative and quantitative information, the triangulation technique is especially useful. This technique allows us to combine different levels of analysis (quantitative and qualitative). It consists of analysing the same object with different approaches and in this way the results obtained can be integrated with different strategies. Triangulation can be applied for diverse purposes and in different steps of the research process. Behind the triangulation technique we can find the idea that ‘when the hypothesis survives the confrontation of different methodologies, it has a greater degree of validity than a hypothesis that comes only of one of them’ (Rodríguez Ruiz, 2005).

In terms of the ACRE project, the same object of analysis, –the relevance of certain factors to attract and retain talent to cities– is addressed differently for each group. In the case of workers, the survey was based on analysing their assessments of the city-region in terms of quality of life, environment and infrastructures. In the qualitative approach used with managers and qualified migrants there is a more direct focus on the role of the different factors as elements for attraction and retention, as well as on the role of policies and political action. Thus, in the case of the quantitative data we assume that positive assessments on

⁸ University of Barcelona, Terminal B-Fostering Arts and Design (FAD), *Fundació Digitalent*, IL3-Institute for LifeLong Learning.

certain aspects of the city-region can be translated into relevant factors for attraction and retention.

From a methodological point of view, in order to deal with the different kinds of information we have created two matrixes that are the pivotal elements of the report. The first matrix contains the relevant main hard and soft factors influencing the decision-making of target groups. From here we can obtain a relevant list of hard and soft factors that are influencing decisions for all the groups. The second matrix is based on this information, used to understand which are the strong and weak points of the city region in terms of hard and soft location factors. Thus, in this matrix the central element of analysis is the situation of the city, whereas in the first one it was the opinion of the target groups.

Table 2.1 - Summary table of developed research

Stage	Report or study	Overall objective	Predominant method	Target group	Sectors and branches	Main technique	Detailed description
WP 2	The city of marvels? Multiple endeavours towards competitiveness in Barcelona	Description of context and situation of creative and knowledge sectors in the BMR	--	--	All the creative and knowledge industries	Bibliographic research, analysis of quantitative data	
WP 5	Why in Barcelona?	Analysis of the importance of soft and hard location factors in the BMR with respect to decisions taken by workers in creative and knowledge companies	Quantitative	WORKERS in creative and knowledge companies	CREATIVE: - Software - TV, radio, video and motion pictures - Architecture KNOWLEDGE: - Law - Finance - R+D	Survey	204 questionnaires to workers and graduates in creative and knowledge companies
WP 6	Main drivers for settlement in the Barcelona Metropolitan Region	Analysis of main drivers for company settlement in the BMR	Qualitative	MANAGERS of knowledge and creative companies	CREATIVE: - Media (TV, radio, video and motion pictures) - Electronic publishing KNOWLEDGE: - Consultancy	Interview	22 interviews of managers and networking institutions
WP 7	The Magnetism of Barcelona	Analysis of BMR's capacity to attract and retain talent	Qualitative	TRANSNATIONAL-IMMIGRANTS-Immigrants in qualified jobs in knowledge and creative sectors	All branches in creative and knowledge sectors	Interview	31 interviews of transnational immigrants and experts in attracting talent
WP 8	Approaching the Barcelona Metropolitan Region	Understanding and comparing the different (spatial) orientations of the target groups, and the of the strong and weak points of the region regarding their capacity to accommodate creative knowledge. (Synthesis of previous WP)	Qualitative and Quantitative	WORKERS, MANAGERS, TRANSNATIONAL IMMIGRANTS		Triangulation	Organització de la informació a partir de la creació de dos Matrius.

Source: Own elaboration

2.4 Methodological difficulties

This report brings together the results of the preliminary stages of the ACRE project. Both in the preliminary stages and in the methodology of the present study, a series of doubts and difficulties emerged which require clarification. It is important to mention the solutions adopted to deal with particular methodological dilemmas to understand the perspective from which certain themes are approached. The overall objective of the project was to analyse the importance of factors of localisation in the development of the creative and knowledge sectors in the territory. As we have repeated several times, we distinguish between traditional localisation factors - hard factors - and soft factors, linked to non-quantifiable components. The ACRE project aims above all to analyse the role of these new factors related with the intangible. Therefore, the information recorded during the study may be biased in favour of the soft factors as it has examined them in more depth than the hard factors.

As we have stressed, the project combines the extraction of data via quantitative and qualitative methods. In the study of the target groups the field and survey work were fundamental. The ACRE survey included an important part of opinion on the levels of satisfaction and the field work was based mainly on in depth semi-structured interviews. In these two methods subjectivity plays a key role. Therefore, the vulnerability of the information towards the context enters the analysis. It is important to bear in mind the current situation when we extract information using these methods. We should also analyse how the context can influence the opinion of our informants. For example, we should bear in mind that most of our field work was carried out before the beginning of the current worldwide economic crisis. The economic situation at the time, for example, presented harder conditions for entering the housing market, or, as far as the labour market is concerned, may have presented a better panorama in terms of job opportunities.

In any classification problems may appear, because they are subject to reformulations. This is the case in classifying economic activities as creative or knowledge activities, or in assigning contents to each of the factors of localisation. For example, the economic branch “Electronic publishing” could be classified as a creative or knowledge activity as it includes professions linked both to creative sectors (web designers) and knowledge-intensive sectors (programmers). When we performed the analysis and constructed the matrices, we chose to include it among the creative activities because the results of the interviews show a profile that is much more characteristic of the creative sectors.

We should also mention the complexity of each factor of localisation. The multitude of notions that could come under headings such as “Quality of life”, “Quality of environment”, “Technical Infrastructures”, and so on have obliged us to introduce conceptual limitations, not always reflecting the situation in each specific region, to allow comparisons at international level and the performance of the analysis. Nonetheless, we should note that the problems caused by the generalisations, necessary for the construction of the matrices, are qualified in the text.

Finally, a major challenge that the study took on was to compare the information extracted in each of the previous phases of the project. The structure of this report is based on the integration of data obtained in previous studies in the project. The final objective of the previous phases was not always the same and so the same type of contents have not always been obtained, or at least not with the same degree of relevance. In some areas, we have had to compare information that arrived collaterally and information obtained as the main subject. In the worst case scenario we have found some target groups without specific information on some of the subjects under study. But the comparability also affects the classification of sectors, as we noted above. In the analysis of each of the target groups, the creative sectors and the knowledge sectors, include different economic activities. For example, in the target group of employees the knowledge sector includes law and business services, finances, R&D, higher education, while in the managers target group only the economic branch of finances is included. In this case, we assume that the differences to be highlighted were the ones presented by the creative and knowledge sectors, understanding both sectors globally. Nonetheless, under the umbrella of creativity or knowledge these economic branches often present significant specific features which we stress in the text.

3 EVALUATION OF THE CITY REGION FROM THE PERSPECTIVE OF DIFFERENT TARGET GROUPS

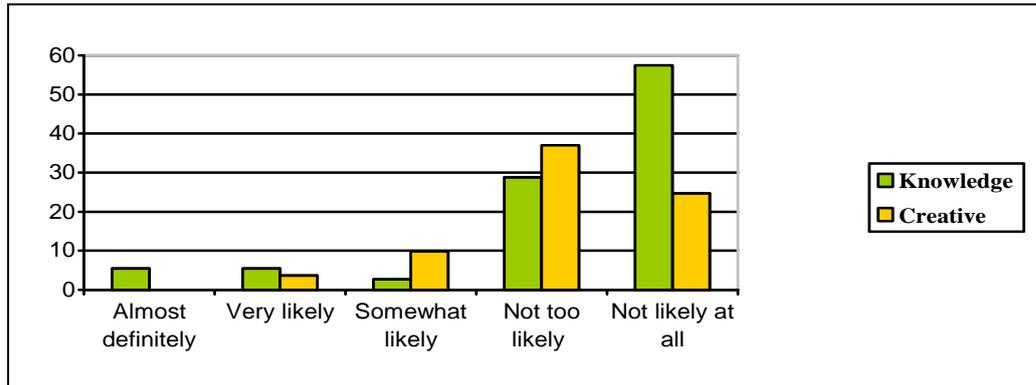
3.1 Introduction

In this section, we compare the opinions of the target groups analysed in the ACRE project regarding the elements that influence their decisions to live and work in the Barcelona Metropolitan Region.

- Creative and knowledge workers and graduates
- Employers and managers
- International migrants

As stated in the previous chapter, a variety of methodological approaches were used to analyse the groups. In this section we will focus on the roles of factors that influence the groups' opinions and assessments. The final objective is to create a matrix that summarises the hard and soft factors that serve to attract and retain workers and employers in the creative and knowledge industries in Barcelona. However, in some of our target groups, we lack direct information on attraction and retention factors. In the case of workers and graduates in the BMR, the sample shows that most creative and knowledge workers in the region were born there, revealing that the levels of mobility in this skilled workforce are low: roughly 70 per cent of the interviewees were born in the BMR and another 20 per cent were born elsewhere in Spain. We find a similar situation in the case of managers, given that most are local entrepreneurs who set up businesses in the region. Hence, the only target group in which information on attraction factors can be recorded directly is the group formed by international immigrants.

In a nutshell, in most of the target groups, the interviewees did not choose to come to the region; they were born and grew up in it. Nevertheless, the information recorded can shed light on the relevance of soft and hard factors in the decision of these groups to remain in the metropolitan region. Moreover, their assessments of their satisfaction with the city as a place to live and to work can be taken as indirect indicators of attraction factors. In spite of this lack of mobility, during the study we identified a major difference between workers (both local and foreign) from the creative sectors and those from the knowledge sectors with regard to their willingness to move: both the survey and the qualitative analysis of interviews showed that people in the creative industries were more ready to move in the near future than knowledge workers.

Figure 3.1 - Willingness to leave the city in the near future

Source: Pareja et al., 2008

Figure 3.1 represents the willingness of local creative and knowledge workers to move according to the results of the survey. As can be seen, roughly 60 per cent of knowledge workers did not want to leave the region in the near future, compared with only 25 per cent of creative workers. The responses of the skilled foreigners are similar, in that creative workers show a greater willingness to move. It is important to take this element into consideration when we assess the factors attracting and retaining these professionals.

On the other hand, the fact that most of the target groups are comprised of local people suggests that personal factors such as family and social ties also play a role in the decision to remain in the region. For this reason, this element has been included in the analysis. The aim of the analysis presented in the next section is to understand the weight of different factors in each target group. The main results are summarised in a matrix showing the most relevant factors in each group. Our starting hypothesis is that, in the case of Barcelona, soft factors play an important role in attracting and retaining creative and knowledge talent. Nevertheless, hard factors are still relevant for the consolidation of the creative and knowledge economy. So soft factors do not substitute the classic factors, but complement them.

3.2 Comparing the spatial orientations and behaviour of the different target groups

3.2.1 The relevance of personal attachment and social relations

The analysis of the three groups reveals differences in their assessment of the region and in their reasons for living and pursuing their careers there. Nevertheless, certain elements are relevant to all interviewees: for example, attachment to the territory, and social ties. In fact, one of the elements of the BMR rated positively by all the groups is the social atmosphere and the city as a place where it is easy to meet new people. Nevertheless, the three groups show significant differences in their references to personal attachment. In the case of employees and graduates, who were mainly born locally, their strong ties (mainly family) are among the most important reasons for living in the region; the fact that the family lives in the city was mentioned by more than half of the sample surveyed. Similarly, the proximity to friends was

frequently mentioned; visiting friends is one of the most important leisure activities among these workers.

Employers and managers assessed personal attachment as relevant in different ways. During the interviews the managers in the creative industries stressed the relevance of social networks for their professional life, which allow them to establish informal contacts with customers and partners in order to develop projects. They refer to the importance of the weak ties in social networks (Granovetter, 1985) and stress the relevance of trust and confidence in their daily professional life. As we stressed in Pareja et al., (2008a), in the BMR the creative sectors analysed (computer games and web design activities and media industries) are based on small and medium companies operating in a large horizontal network. For the correct functioning of this kind of organisation, weak ties are fundamental. Nevertheless, for employers and managers in the knowledge-intensive sectors these weak ties are relatively unimportant. They stress that they are not able to pursue their professional careers in networks and that they need large knowledge companies that require their services. In fact, sometimes they consider that their sector is based on competition instead of collaboration, a situation that inspires a lack of confidence. To summarise, for the managers in the knowledge-intensive sectors the Barcelona metropolitan region does not present an opportunity for the emergence of relevant social networks in the professional sphere. In contrast, for the managers in creative sectors, the creation of large social networks to share professional projects is one of the cornerstones of the development of their industries.

The responses of creative skilled international migrants seem to corroborate the views of managers and workers in the creative industries. The migrants interviewed see the social atmosphere as an important factor in their decisions to settle and remain in Barcelona. Their definition of this atmosphere has an impact on both their personal and professional lives, which in fact are hardly distinguishable. As described in WP7, most migrants develop social networks during their studies at local institutions, and these relations become both professional and personal. In other cases they arrive in Barcelona following a relative or a friend who has already settled in the region. For most creative migrants the social networks are of the utmost importance for the development of their creative activity. Moreover, even though this group is highly mobile, for some of them these social networks constitute a factor that might encourage them to remain in the city. So personal attachment is closely related to the emergence of informal professional networks. The key point is that both qualified migrants and managers in creative industries consider that the social assets of the region facilitate the consolidation of these networks.

On the other hand, skilled migrants working in knowledge-intensive sectors, unlike the creative migrants, do not consider the social networks to be relevant. As they work mainly in large knowledge-intensive companies as ex-pats, social networks are less relevant. Nevertheless, they rate social networks in their working place as a positive element and value good working environments and the friendliness of colleagues in the workplace. These assessments are similar to those of creative and knowledge workers who stressed high levels of satisfaction with the friendliness in the working environment (85 per cent declared themselves to be satisfied or very satisfied) and with the ability to meet and network with professionals in their field (70 per cent of the sample stressed this element).

So personal attachment seems to combine relevance in the personal lives of workers and migrants and relevance in terms of professional development both within companies and in sectors organised in horizontal networks. In terms of personal life, social networks and strong ties are key factors in the retention of local talent in the region. Moreover, factors of this kind also attract qualified migrants following their friends or relatives. In the professional sphere, for those working in medium and large companies (especially in the knowledge sectors) friendliness in the working environment and the professional networks are factors that explain their satisfaction with their job and their willingness to remain in the region. For those who pursue their professional activities in a more horizontal framework, for instance in small companies in the creative sectors or self-employed creative migrants, social networks are key for the success of their activities.

As we will see in the next sections, social networks are considered in connection with other elements of the city. These elements allow the development of a certain kind of social relationship as well as certain forms of work. Perhaps the most obvious factors in this regard are location factors such as the weather and the size of the city; the latter are considered by the different target groups as major positive elements.

3.2.2 The relevance of hard factors

In general, hard factors are the classical factors of the localisation of economic activity in a country or region. They include both the factors that stimulate economic activity and those that derive from it. Among them we find the existence of communication and transport infrastructures, the job market, and the educational possibilities available. In order to better understand the influence of hard factors in the different groups, we have analysed different groups of factors, including: a) factors related with the labour market; b) Working conditions, including the diversity of types of contracts, and salaries; c) factors related with international accessibility to the city (for instance airport and railway infrastructures); d) The existence of higher education infrastructures, such as universities or business schools; e) Technical infrastructures of the region, mainly its internal connectivity and public transport facilities; f) Social infrastructures, including the healthcare system infrastructures, primary and secondary education institutions and other equipments; g) Factors related with the housing market, including the dwelling stock, the price of housing and the situation of the rental sector, and h) factors related with the living conditions, such as taxation system, cost of living or overheads.

All the groups analysed considered the existence of **employment opportunities** as relevant for their decision to settle and/or remain in the metropolitan region. Workers and graduates stated that employment and working conditions are generally the only hard factors that attract them to the BMR. A high percentage of the workers and graduates interviewed in the BMR stated that among the main reasons for living in BCN were their job, the good job opportunities, or the fact that either they or their partner were employed in Barcelona¹. In general the workers and graduates attributed high importance to their work and to job opportunities and their professional career, and to being able to achieve their objectives in

¹See Pareja et al (2008a) p.40.

Barcelona. These reasons can be grouped together as a “hard” factor of attraction for this group.

As has been stated, the workers and graduates had been born locally or had lived most of their lives in the region. As a result, their responses to other questions on their satisfaction with the city suggest that there are other factors, specifically soft factors, which are important in retaining them in the BMR. Though we do not have simultaneously crossed data on satisfaction with one’s job and with the city, we find that around 83 per cent of the same population that was interviewed reported a high or very high degree of satisfaction with their work (Pareja et al 2008a p. 47), and a high satisfaction with their immediate working environment in the city. There appears to be a combination of interconnected hard and soft factors that persuade the interviewees to remain in the city, that is, what we might consider to be factors of retention for workers and graduates in the BMR. The job opportunities offered by the area where they live represent a significant reason for remaining in the BMR. According to the ACRE survey, a third of the interviewees in the creative and knowledge sectors stated that they live in the BMR because of the job opportunities (Pareja et al., 2008)

Most are also largely satisfied with their pay, though they consider it insufficient in relation to the cost of certain necessary elements of life in the region, above all housing. Twenty per cent of the workers interviewed received the average salary in Spain² or less; but the majority received double the average salary (30 per cent) or more than double. However, the material aspects of their working conditions received the lowest satisfaction levels: 44 per cent of workers expressed satisfaction with their salary, and only 3 per cent expressed high satisfaction. Employers and managers coincide on the importance of work. Both those in the creative sectors and those in the knowledge-intensive sectors consider that Barcelona offers good job opportunities and professional development, and that the career opportunities represent an element that can attract talent. What is more, the soft factors, such as flexible working conditions, contribute to this attraction, particularly in activities related to design (web design, advertising, publishing, and so on). The range of jobs on offer and the professional opportunities are the BMR’s main hard attraction factor for highly-skilled immigrants, both in creative and knowledge activities. They stress the case of certain activities such as architecture, which is of special relevance in the city and the region³. However, the working conditions are not an important factor for attracting or retaining international migrants in Barcelona. Some of them consider the flexibility of the working conditions as a positive aspect, particularly the hours of work, but others consider that they could be earning more money in other cities or in the country of origin. Nevertheless other factors of the region, mainly soft factors, balance this negative element (Pareja et. al., 2009).

In general, the belief is that there is a disproportion between the salaries offered in the labour market and the high **cost of living** in the city. Also the workers in the creative and knowledge sectors in the BMR consider that they live in an expensive city, even though, as we mentioned, their salaries are above the Spanish average. Almost nine out of ten ACRE respondents consider that they live in an expensive or very expensive city (with 42.1 per cent

² At the time of the survey, the average salary in Spain was 1161.38 €(INE, 2005)

³ See Pareja et al. (2009), p. 46.

answering “very expensive”). Almost half of this target group believe that the quality of life has fallen in the BMR in recent years, the main argument being the increase in the cost of living. In the case of managers, there is dissatisfaction with pay, especially in the creative sectors and above all in the media. In the case of the media, the dissatisfaction derives from the structural deficiencies of the sector in the BMR, since it is a sector with limited demand in the region, very low levels of film production and with public, regional and local TV companies as the main customers for their products. The supply is made up principally by small firms of limited capacity, meaning that their main virtue is the human capital at their disposal. But the problem is that these firms do not have the capacity to pay their staff satisfactory salaries, and so many of these highly skilled workers leave the BMR.

The dissatisfaction with salaries is closely related with the **housing conditions**. Moreover, housing conditions have a negative impact on the capacity of retention of the region. This is especially true in the city of Barcelona where the prices are higher. Among the factors that make up housing conditions it is the price of housing that causes the most dissatisfaction. The opinions of the interviewees reveal that it may be one of the hard factors that discourage people from remaining in the BMR. Access to housing is the subject that most concerns the workers in the creative and knowledge sectors in the BMR. Eighty per cent of the workers and graduates surveyed admit having been very worried about the availability of affordable housing – a percentage three times higher than any other concern in the region. This concern can be detected also in the opinions of qualified migrants, especially those working in creative sectors. Often, they share flats and working spaces as collective answers to the problem of housing. Nevertheless, it must be said that the negative impact of this factor can be softened by the economic crisis in Spain, based on a crisis of the former motor of the economy: the building sector.

Conversely, the range of **educational programs** on offer in the BMR is a clear attraction factor. The relatively high educational level is reflected in the jobs on offer; in general, the large number of graduates in BCN is a positive element for attracting companies. Some managers, especially those in knowledge-intensive sectors, complain of the gap between the graduates’ training and the specific needs of the job market⁴, a criticism that is often heard in the business world. However, in some cases (for instance design) the schools in the BMR are a reference-point and the “main element of identity”⁵. The body of universities and higher education centres in BCN are a factor of attraction for highly-skilled immigrants. The number of postgraduates has grown steadily in recent years. Among Latin American graduates the range of educational programs on offer is a major selling-point because of the language. In some cases, foreign graduates stay in the BMR on completing their postgraduate studies. The table included below summarises the influence of these three factors in each group.

⁴ See Pareja et al. (2008b), p. 48

⁵ See Pareja et al. (2008b), p. 29

Table 3.1 - Influence of hard factors in the different groups (I)

	Labour market and working conditions	Housing conditions	Education
Workers and graduates	Relevant because provides working opportunities but dissatisfaction with the material working conditions	Negative factor influencing the place of residence and the retention	Relevant because allows to retain local workers and attract workers from abroad
Creative and knowledge managers	Relevant because provides skilled workforce	Not a direct effect on companies but land prices hinder clustering in 22@ district.	Relevant because allows to train workforce Relevant
Knowledge managers			
Creative migrants	Relevant because provides working opportunities. But sometimes bad working conditions in comparison with the origin countries.	Negative factor as makes the remaining in the region more complicated. Collective strategies of sharing flats and houses.	Very relevant, one of the factors attracting them to the region. Education institutions are a gate for socialisation in the city.
Knowledge migrants	Not very relevant because most of them come to the region with a job.	Not a negative factor because as expats, the company provides housing.	Relevant because it provides opportunities for training for them and their relatives

Source: Own calculations

The technical infrastructures are among the hard factors that cause dissatisfaction among all the target groups. For creative and knowledge managers this dissatisfaction can be found in two main areas: the internet connection, which, although regarded as good in the city of Barcelona, is still deficient in other areas in the BMR and the transport system. The public transport system between Barcelona and the rest of the region and between the various subcentres in the region is seen as inadequate and the cause of inefficiency. For these reasons some activities which depend on frequent contact between the supplier and customer or which use internet connections have not expanded sufficiently towards the rest of the metropolitan region, and are highly concentrated in the city of Barcelona⁶. Both these aspects may lessen the spread of economic activity towards the rest of the region and may affect the retention of economic activities. These deficiencies have negative effects also on the housing conditions in BCN, since they limit the expansion of the population towards the rest of the region and put further pressure on the limited land available for construction in Barcelona.

For workers and graduates the public transport system is also a concern. 50 per cent of the survey was dissatisfied or very dissatisfied with the connectivity between the city and the periphery and 33 per cent showed the same dissatisfaction with the transport within the city. Workers and graduates showed similar dissatisfaction with the number of bicycle lanes. Nevertheless, it is important to stress that the opinions of workers and graduates were collected in a moment (June-July 2007) in which several problems with the regional railway system generated great controversy in the public opinion, with a salient negative opinion of the situation. Nevertheless, the assessments of workers are relevant taking into consideration

⁶ See Pareja et al. (2008b), p. 30.

that they are the main users of the public transport system. Moreover, the survey reflected more general satisfaction with the region when the time of commuting from work to home was shorter. For foreign citizens, the technical and social infrastructure cannot be considered as a factor of attraction per se, as the newcomers are unaware of them until the people have taken up residence in the BMR. However, it can have an influence on their retention or on their decision to live in one part or another of the metropolitan region. In the case of qualified migrants from the knowledge sectors, most of them choose to live in municipalities outside the city of Barcelona. Apart from cultural reasons explaining this option, they assess the technical infrastructures of communication with the city as good. Nevertheless, they tend to use private transport more than the public transport system and their assessments in this regard are closely linked with their perception of the size of the region, as we shall see in the next section.

International accessibility is irrelevant for workers and creative managers, but important for knowledge managers. The feeling is that a greater number of direct intercontinental flights to and from Barcelona would attract more multinational firms and would promote knowledge-intensive activities. The improvement of the rail connection with France, with the introduction of high speed trains, will also help to expand the influence of the BMR. The point of view of the international migrants on international connectivity coincides with that of the locally born employers and managers. However, this opinion is held only by managers in the knowledge sector, whose activities might be stimulated by the greater implantation of multinational firms in the region. For qualified migrants the international accessibility is relevant not only in economic terms but also to maintain personal ties. In this sense they assess positively the possibility to have direct flights to their country of origin to visit family and relatives. Moreover, the international accessibility of the city is relevant because Barcelona is seen as a gate to other European cities, especially for those migrants coming from Latin America.

The quality of Social Infrastructures does not seem to be a factor of attraction to the metropolitan region but plays a role in the retention of workers and migrants. In fact, healthcare and education systems are strongly assessed as elements providing quality of life in the region. 52 per cent of the survey of workers and graduates are satisfied with the general quality of health services and 77 per cent are very satisfied or quite satisfied with the provision of healthcare facilities in their neighbourhood or area of residence. In a similar vein qualified migrants assessed social infrastructures as elements that reinforce their willingness to remain in the region. This is especially true in the case of qualified migrants coming to the region with their children, which seek quality primary and secondary schools and childcare facilities.

Table 3.2 - Influence of hard factors in the different groups (II)

	Technical infrastructures	International accessibility	Social infrastructures
Workers and graduates	Negative assessment of the public transport connections	Not relevant.	Relevant in terms of retention.
Creative managers Knowledge managers	Good internet connections in the city but worse in the rest of the region. Public transport connections need to be improved	Not relevant Relevant because international connectivity attracts more firms and promotes knowledge sectors	Not directly relevant for companies but it can retain skilled workforce
Creative migrants	Not a factor of attraction but a factor for retention positively assessed. Influence on the selection of neighbourhood.	Relevant because it provides possibilities to go the origin country and to travel to other European cities	Relevant in terms of retention as a factor providing quality of life
Knowledge migrants	Not very relevant but positively assessed and related with the size of the region.	Relevant because it allows to maintain family ties	Relevant in terms of retention as a factor providing quality of life, especially for children

Source: Own calculations

Summarising, some hard factors such as the labour market play a role in the attraction of companies and workers to the metropolitan region and others, those related with daily life, have an impact on the decision of remaining. On the other hand, some hard factors such as the housing conditions have a negative effect on the retention. The role of hard factors is closely linked with the increasing role of soft factors in the decision to move to or remain in the Barcelona metropolitan region.

3.2.3 The relevance of soft factors (I): Location and environment

The target group responses suggest that soft factors play a key role in attracting and retaining creative and knowledge workers and companies in Barcelona. Soft factors linked to the environment and the region's location are considered relevant by all groups, even though for workers they are less influential than for the rest. The soft factors we refer to are not only the weather but also the geographical position of the city, its size, and the proximity of attractive environmental areas. This group of soft factors also includes the general image of the city linked to these elements, a phenomenon that may well attract people from abroad.

The analysis of our target groups shows that the Mediterranean weather of the Barcelona Metropolitan Region is of foremost importance in terms of attraction and retention. Creative and knowledge migrants associated the climate with quality of life, and this was important both for people from the north and the south. For migrants from the south the weather is similar to that of their homeland, while for northern migrants the climate is particularly attractive. Moreover, for creative and knowledge managers and employers, the weather is important precisely for its potential to attract talent from abroad. Besides, both groups

consider the weather to be relevant because it encourages leisure activities and street life, thus strengthening the social networks which, as we stated above, have an indirect effect on the development of companies and careers.

The size of the city and the morphology of the region are assessed in a similar way. Most skilled creative migrants interviewed consider that the city is a manageable size, in comparison to large cities like London or New York, but large enough to develop a vibrant atmosphere that promotes creativity. Creative managers have a similar perspective, stating that the size of the city helps the development of the informal professional networks that are vital to their professional development. Furthermore, both creative and knowledge managers consider that the size of the city encourages clustering without obliging firms to move. They have a positive view of the knowledge district 22@ in Barcelona – which contains five strategic clusters of creative knowledge companies in the eastern part of the city – but consider that being located in the district is not essential to be able to take part in the economic clusters. Finally, the region's geographical position and its urban morphology are also considered relevant. All the groups interviewed rate the proximity to the sea and the mountains highly, as well as the existence of small towns and villages in the metropolitan region.

Summarising, this group of factors seem to be important for all the groups. Nevertheless, for creative and knowledge workers some of these factors play a secondary role. As we noted, in the case of the workers the employment opportunities and the personal networks are the most important factors in the decision to move or to remain in the region. However, location factors have an impact on quality of life. The survey reveals that those living in small villages and towns express a greater satisfaction with their environment than those living in medium-sized towns or in Barcelona. The region's polycentrism appears to be a relevant factor. Table 3.3 displays the assessments of different groups of the factors related to environment and location. In spite of the differences in the reasons expressed, almost all the groups regard these factors as relevant.

Table 3.3 - Influence of location factors in different target groups

Target group	Weather	Size	Geographic position /urban morphology of BMR
Workers	Not relevant, although it is assessed by 16 per cent of the survey as one of the reasons for living in Barcelona	Not relevant, although it is assessed by 17 per cent of the survey as one of the reasons for living in Barcelona	Relevant. Living in a small village raises quality of life
Creative managers	Relevant because it promotes informal professional networks	Relevant because it promotes informal professional networks and allows clustering through all the city	Relevant in terms of geographic position
Knowledge managers	Relevant because it promotes the image of the city and the attraction of other companies	Relevant because it promotes the image of the city and the attraction of other companies	Relevant because it promotes the image of the city and the attraction of other companies
Creative migrants	Relevant because it provides quality of life and social networks	Relevant because it provides quality of life and social networks	Relevant because of leisure activities although they are settled basically in the city of Barcelona
Knowledge migrants	Relevant because it provides quality of life	Relevant because it provides quality of life	Relevant because it has implications for quality of life and living in small villages and towns.

Source: Own calculations

The image of the city – the last aspect related with location and environmental factors – deserves special analysis. In general, Barcelona’s image is seen as relevant by managers and migrants, though each group places emphasis on different aspects. The image of the city is strongly linked with the elements analysed above. For all the groups the image of Barcelona as an attractive place to live and work is based on its good weather, its size and its geographical position, elements that reinforce quality of life and cultural development. For managers and for some of the migrants interviewed the image of the city is associated to what has come to be known as the “Barcelona brand”. For them, Barcelona and its values confer prestige on local products and services. Thus, the image of Barcelona has an impact on the region’s products and services and also promotes the city as a whole, attracting talent and business. In fact the City Council is playing a major role in the creation of this ‘brand’, which is related to the leisure and cultural sectors, the living standards, the Mediterranean climate and the atmosphere of tolerance and diversity in the city. In spite of this, some managers consider that the content of the ‘Barcelona brand’ should be redefined in order to better attract talent. They state that although soft location factors are key to the city’s positive image, they are not enough to attract the best creative and knowledge companies and workers. In their view, the city’s image mainly attracts tourism, which is transforming the region as a whole. Thus, for managers the image that the city is projecting corresponds to an earlier model of growth based mainly on leisure industries. They consider it important that the image of Barcelona should reflect the city’s emerging economic activities and its values.

In a similar vein, although qualified migrants feel attracted by Barcelona's modern image, they think that the Barcelona brand should be improved in order to link the image of the city to the quality of design and production practices. Skilled migrants working in architecture and design noted that they were attracted to the city by its image as a centre of architecture and design. For some of them, their development as professionals in Barcelona confers prestige and aids their entry into European markets. Managers of creative industries also stressed this aspect of the importance of Barcelona, suggesting that the 'name' Barcelona instantly attracts attention to creative activities.

Summarising, the image of the region is difficult to separate from the idea of its quality of life. The image gives added value to the city's products and services and is used by the City Council for promotional purposes and to attract people to the city.

3.2.4 The relevance of soft factors (II): quality of life and diversity

Barcelona is well known for its quality of life. Since 2006 Barcelona has been considered the European city with the best quality of life by workers and managers (European cities monitor, 2007; Pareja-Eastaway et. al., 2007). The research conducted in the ACRE project for Barcelona corroborates these results, showing that quality of life is one of the most important elements in attracting and retaining professionals from the creative and knowledge industries to the BMR. We find evidence of its importance in all three target groups analysed. For the interviewees, quality of life includes a wide array of aspects concerning the region, and is strongly linked to the location factors analysed previously, such as the weather and the size of the city. Here, though, we analyse quality of life separately from these elements and focus on aspects related to everyday life, such as leisure and cultural opportunities, local gastronomy and culture, lifestyle and the quality of public services. In this way, quality of life should be understood as the set of elements which provide opportunities for leisure and well-being and which have a social or cultural basis. From this point of view, we find differences between the three target groups. Whereas the creative and knowledge workers express positive opinions of quality of life in the region in terms of quality of services and leisure opportunities, managers assess it in terms of the opportunities it provides for the economic performance of their companies. Qualified migrants from the creative and knowledge industries understand quality of life as a whole, but emphasise social life and lifestyle, which in most cases is different from that of their country of origin.

Creative and knowledge workers show high levels of satisfaction with the elements linked with quality of life. They are quite satisfied with the leisure opportunities and the cultural activities that the region offer. Although in some cases the hospitality of the city, its leisure and entertainment and its cultural diversity were elements that to some extent influence their decision to move to or remain in the region, they did not play a major role in their decisions (Pareja et. al., 2008). Bearing in mind that most of the interviewees were born in the BMR, the fact that they mention these elements as a reason for living in the region means that they consider the social atmosphere to be positive. Furthermore, only a minority of the workers who want to leave the city in the near future will do so in search of a place with greater quality of life. These indicators show that quality of life is assessed positively and plays a key role in the decision of workers to remain in the region.

Qualitative data from managers and migrants shows that quality of life, understood as the intangible aspects of everyday life, is highly relevant and acts as a stimulus for creativity. For managers linked to the creative industries, quality of life is related to the existence of a strong cultural atmosphere with a wide range of leisure and cultural opportunities. This environment attracts talent to the city and allows for the creation of new projects for companies. Besides, for small and medium-sized companies the creative atmosphere encouraged by this quality of life also provides the trust and diversity needed to pursue their activities. So quality of life is related to the attraction of new talent that reinforces informal professional networks. In contrast, managers in the knowledge sectors reported that quality of life does not have a direct impact on attracting business.

Transnational migrants in the creative industries stress the importance of the quality of life in Barcelona in their decision to move to or remain in the city. Apart from the weather and other location factors, this group values the possibilities for leisure and culture in Barcelona as well as the relaxed rhythm of daily life. As stressed in WP7, we find differences depending on the origin of migrants. For people from the north, daily life in Barcelona is relaxing but allows them to pursue a career. For people from the south things work more efficiently but the culture retains certain elements of their country of origin that they value highly. Thus, according to the migrants working in the creative sector, Barcelona presents a mix between the cultures of the north and the south, and this combination has an effect on social life and working conditions. Moreover, they consider quality of life as a necessary element for a creative environment and they rate the existence of a vibrant cultural life as a highly positive asset. Once again, we find differences between migrants working in the creative industries and those working in the knowledge industries. For migrants in the knowledge industries, mainly expats, as an element linked to social life and leisure opportunities, quality of life is important, but plays a secondary role. This group emphasises the quality of public services and factors such as the Mediterranean culture as elements of attraction.

Another indicator of the relevance of quality of life is the concern expressed by all the target groups with the effects of economic growth on quality of life in this general sense. For all the groups analysed, the development of Barcelona in recent years, with a huge increase of the tourism and building sectors, has had a strong effect on the city, some of it negative. For instance, 43 per cent of creative and knowledge workers interviewed consider that quality of life has fallen in recent years because of the increase in the cost of living and the cost of housing. Similarly, qualified migrants working in the city consider that in recent years the city is losing its authenticity and becoming a city for tourists, a trend that has a direct effect on its creative environment. Amongst the creative qualified migrants there is the concern that Barcelona is becoming a 'theme park'. Equally, managers of the creative and knowledge sectors consider that, in spite of its positive effects for the region, the growth of tourism and the leisure industries has restricted the possibilities for growth of economic sectors. This is especially true for managers from the knowledge industries, who consider that the region has lost several opportunities to become a European leader in the knowledge economy because of the overriding focus on tourism, and that mass tourism has a negative influence on the region's quality of life. (Pareja Eastaway et. al., 2008: 47). For their part, small and medium-sized companies working in the creative sectors see tourism as a threat to the creative environments needed for their optimal economic performance.

The views of the different groups on the threats to the region's quality of life show that the creative environment linked to culture and social relations is vital, at least for those pursuing careers in the creative sectors. According to Florida (2004), a key element in the development of these creative milieus is diversity: tolerance and diversity are the main elements that attract creative people to certain cities because they allow artists to develop their projects and meet like-minded people. From this perspective, the existence of a creative environment is linked to quality of life and diversity. In this research project we stress the importance of diversity in attracting and retaining people working in the creative industries, and the necessity of this diversity for the development of these people's professional careers. The tolerance shown by the host society to newcomers is assessed positively, although there are strong differences between workers and managers, mainly born in the region, and qualified migrants. Workers and managers consider the region as a hospitable place for people from other countries as well as for minorities, and they consider the city to be tolerant towards sexual minorities. In contrast, some of the qualified migrants stress that it is difficult to become integrated, mainly because Catalan society is rather closed. For these migrants, the diversity in Barcelona may encourage the creation of networks of foreigners in isolation from the local society. In spite of this, the strong role of local government helps to forge ties between migrants and locals, for instance, through the creation of institutions and the hiring of creative migrants for government-funded events.

Furthermore, the comparison reveals that diversity reinforces informal professional networks and allows the diversification of profiles. In this regard we should understand diversity not only in ethnic terms but also in terms of professional and artistic profiles. In fact, transnational migrants in the creative industries stressed the importance of multidisciplinary and the lack of specialisation in the BMR, which allows the development of innovative projects. As in the case of many other soft factors in the region, managers assess the existence of diversity in terms of its impact on the labour market and economic activity: they see diversity as an opportunity to hire talent from abroad. Diversity is also seen as an opportunity for internationalisation because it allows firms to find foreign partners inside the region itself.

As stated above, qualified migrants and managers in the creative industries link quality of life with daily lifestyle, which has an impact on their working environment. In fact, the working environment emerges as an important soft factor linked to quality of life. For creative and knowledge workers, working conditions linked to soft factors, such as friendly working environment, prospects for career advancement and the ability to meet and network with professionals in the same field are important elements in their job satisfaction (Pareja et. al. 2008). Hence, regardless of their material conditions, they tend to show high levels of satisfaction with their job. The opinion of skilled creative migrants is similar – they stress the importance of the atmosphere of the region in providing a good working environment. Table 3.4 summarises the influence of quality of life and diversity in the different target groups.

Table 3.4 - Influence of soft factors linked to quality of life in different target groups

Target group	Quality of life	Diversity
Workers	Positive assessment of the elements that provide quality of life: public services, leisure opportunities,	Self-perception of high acceptance of diversity and high levels of tolerance.
Creative managers	Understood as an element attracting talent and generating social informal networks that reinforce the creative milieu	Understood as an element attracting talent and generating social informal networks that reinforce the creative milieu
Knowledge managers	Relevant for the image of the city but not capable by itself to attract companies in the sector, and without any direct impact on their activity	Not relevant as an element for the attraction of talent.
Creative migrants	Importance of relaxed lifestyle and strong range of cultural and leisure opportunities. Allows the creation of informal networks and reinforces the creative milieu	Strong diversity but lack of profound relations with the host country. Diversity understood not only from a cultural point of view but also from a professional point of view, as a factor promoting interdisciplinarity and innovation.
Knowledge migrants	Understood as an element attracting talent and generating social informal networks that reinforce the creative milieu	Not relevant as an element for attraction or retention but the existence of diversity and tolerance of minorities is positively assessed.

Source: Our own calculations

To obtain a full picture of the factors influencing the decisions of different target groups, three last factors must be analysed: the quality of the residential environment, the influence of Barcelona's urban architecture and the residential opportunities that the region offers. The quality of residential environment is directly related to the quality of environment but it has a more local focus. The aspects it includes are less abstract and more closely linked to the immediate surroundings. Quality of residential environment centres on the evaluation of the area of residence, of the diversity of the neighbourhoods, green zones and public spaces. People tend to rate their immediate surroundings more highly than a broader concept such as their city or region, because proximity intensifies their attachment with the place. This is reflected in the opinion of workers in the creative and knowledge sectors in the BMR. The levels of satisfaction with the neighbourhood where they live are particularly noticeable: 90.7 per cent of the ACRE respondents claimed to be satisfied or very satisfied with their area of residence. The assessment of the city or town in which they live in the BMR is also positive, though less so: on a scale of 1 to 10, 67.2 per cent gave the city a mark of over 5.

The quality of public spaces in the city also receives a positive rating from workers in the BMR, though lower than those for some leisure areas such as shopping centres or restaurants. The public spaces are also positively valued by both local and foreign creative sectors, not so much from a residential perspective (as is the case of other target groups) but as a scenario for cultural and artistic performances. In spite of the positive assessment of the residential aspect, environmental considerations bring down the overall score. The levels of pollution and noise due to the traffic receive fairly negative ratings in the neighbourhoods. In the city as a whole,

traffic and air pollution are among the aspects that most concern the respondents; more than 75 per cent are worried or very worried about these two environmental threats. On the other hand, for foreign citizens in the knowledge-intensive sector, residential quality of life is one of the main factors of attraction in the BMR. To start with, this target group is better placed to select their area of residence; they usually arrive as expats, already with a job, and their firm often helps them to find accommodation that meets their expectations. They usually choose to live in small and medium-sized towns on the outskirts, avoiding the environmental problems characteristic of a big city. As expats, their priorities are different from those of the other target groups; they value quality of life above all, which is one of their main reasons for coming to the BMR.

Barcelona's architecture is considered one of the most important features of the city. The urban expansion project launched in 1864 allowed the creation of new architectural style, known as *modernisme*, led by Antoni Gaudí. Today, Gaudí's work is the cornerstone of the promotion policies of Barcelona City Council. Moreover, the expansion of the city did not mean the disappearance of the old town, and so Barcelona presents an interesting combination of the medieval era and the nineteenth century (Pareja et. al. 2007). All the groups analysed rate the urban architecture positively and in some cases they mention it as an influence in their decisions to move or remain in the city. Creative and knowledge workers rate the city's architecture and monuments as a positive element for leisure activities: 80 per cent of the sample is satisfied or very satisfied with this aspect of the city. Moreover, for qualified migrants working in fields such as architecture and design, the city's urban development is an important influence on their professional careers. For them, the emergence of *modernisme* and later architectural movements bear witness to the dynamism of a city and present a powerful precedent for the development of new ideas. So they see the city's architecture not only as an element of leisure but also as an inspiration for their careers.

Polycentrism is one of the main features of the BMR. The region is formed by 164 municipalities with a wide variety of residential environments, from small coastal villages to the large city of Barcelona. This polycentrism plays a role in attracting qualified migrants, especially those in the knowledge sectors. The geographical position of the region, its proximity both to the sea and to the mountains, and its size, which allows workers to live relatively near their workplace without sacrificing access to services or proximity to commercial areas, are all positively rated. Indeed, the morphology of cities in the BMR, based on the compact city model, reinforces this trend.

3.3 Conclusion: A summary of relevant factors influencing decisions

In this chapter we compare the role of soft and hard factors in the decisions of different target groups regarding living and working in the BMR. To conclude, we will summarise the results of our comparison in a matrix showing the most important factors for each of our groups (workers, managers and migrants). The matrix also highlights the differences between knowledge and creative sectors. Table 3.5 summarises the main factors analysed and their definitions.

Table 3.6 summarises the main factors influencing the decisions of the three target groups analysed. The results are split into factors of three kinds: hard (classic) location factors; soft (new) location factors, and personal attachment, that the fieldwork identified as the key influences. Following the methodology used during the detailed analysis, we split the target groups into those involved in the creative industries and those in the knowledge industries, except for the case of workers and graduates in which no significant differences could be appreciated. The summary of soft, hard and personal factors allows us to combine the main factors of the Barcelona Metropolitan Region. We have selected two factors of each kind to summarise the most influential elements in the region.

Table 3.4 - Definition of factors influencing decisions

	Factor	Definition
Hard factors	International accessibility	International transport connections (airports, high speed trains, harbour...)
	Employment	Job offers and career opportunities
	Working conditions	Type of contracts, salaries
	Education	Universities and other institutions for higher education
	Technical infrastructure	Public transport facilities
	Social infrastructure	Kindergartens, schools, health and medical facilities...
	Housing conditions	Dwelling stock (composition, ownership structure), price of housing, affordability and availability, Social housing and rental sector
Soft Factors	Living conditions	Cost of living, overheads, other expenses Taxation system Subsidies, allowances
	Quality of the environment	Geographical dimensions, landscape, location Image of the city
	Quality of urban architecture	Landmarks, heritage preservation, building stock
	Quality of residential environment	Diversity of neighbourhoods, greenery, public spaces
	Working conditions (environment)	Flexibility of timetables Nice colleagues Attractiveness of work-place and its environment
	Quality of life	Well-being, rhythm of everyday life Cultural, leisure, sport and entertainment possibilities
	Tolerance	Services, retailing and shopping networks, gastronomy Acceptance of diversity, openness, social cohesion, equality
Personal trajectories	Cultural Milieu	Language, local culture
	Born here	
	Family reasons	Parental family lives in the region Family status, current family background (marriage, wife and / or children)
	Followed partner	
	Social networks	Private sphere: Friends, acquaintances Professional sphere: Contacts, working staff, associations, non-formal events
	Studied here	

Source: Our own calculations

The most important classic location factors are the city’s international accessibility and its connection with Europe through direct flights, and the existence of solid employment opportunities and a dynamic labour market in the knowledge and creative industries. These elements are reinforced by the city’s quality of life, its Mediterranean culture and lifestyle, its good weather and its geographic position, with the sea and the mountains nearby. All these elements encourage the creation of informal professional networks that are not only local but extend to other locations. These professional networks attract talent and promote innovative initiatives based on multidisciplinary and cultural diversity. Nevertheless, perhaps the most salient element is the fact that personal networks and attachment to the territory serve to retain local talent in these sectors. The study of the three target groups highlights the important role of personal connections not only for locals but also for people from elsewhere who follow their relatives and friends to the BMR.

Table 3.5 - Matrix of soft, hard and personal factors influencing decisions of target groups

		Hard factors	Soft factors	Personal attachment
Workers and graduates (no significant differences apart from willingness to move)		Employment Opportunities Social infrastructure	Quality of the environment Working conditions (environment) Quality of life	Born here Family reasons Social networks (personal sphere)
	Creative	Education and study Employment opportunities	Quality of the environment Quality of urban architecture Quality of life	Born here Family reasons Social networks: professional sphere
Employers and managers	Knowledge intensive	International accessibility Technical infrastructure	Quality of environment	Born here Family reasons Social networks: professional sphere
	Creative	Education and study	Architecture Quality of life Tolerance and openness Quality of environment	Social networks: private sphere Social networks: professional sphere
International migrants	Knowledge intensive	Employment Living conditions International accessibility	Quality of life Quality of environment Quality of residential environment Quality of urban architecture	Social networks: professional sphere
	Summary of relevant factors	International accessibility Employment opportunities	Quality of life Quality of environment	Social networks: private sphere Social networks: professional sphere

Source: Our own calculations

4 EVALUATION OF THE CITY REGION FROM THE PERSPECTIVE OF LOCAL CONDITIONS AND POLICIES

4.1 Introduction

This chapter analyses the local conditions and policies fostering the growth of the creative knowledge economy in the Barcelona Metropolitan Region. Departing from the results of the previous chapter, we assess the weight of different soft and hard factors in the development of a creative knowledge economy. Moreover, we analyse the role of path dependency and existing policies in the weight of these factors. Following the same method of chapter three, we have created a matrix containing different soft and hard factors and their relevance for the region. Whereas the previous matrix (in table 3.4) reflected the importance of location factors in the BMR according to the different target groups, the outcome of this chapter is a new matrix (matrix 2 from now on) reflects the strength or weakness of these factors and their contribution to the attractiveness of the metropolitan region as a place to develop creative and knowledge industries. To do this matrix we depart on the assessments of the different target groups analysed (employees, managers, skilled immigrants) with respect to each location factor. Drawing on previous analyses of the context of the BMR and the assessments of the different target groups, we evaluate the same location factors as in the previous chapter (see figure 3.4). In addition to the location factors, we also examine the importance of Personal Trajectories (Born here, Social networks, Family reasons, Followed partner) in the decision-making process of the different target groups.

In this chapter, we present an overview of the strengths and weaknesses of the BMR and then analyse each one of the location factors in detail. Thus, departing from the information available in previous ACRE research we analyse a) the attraction and retention of companies to the BMR and b) the attraction and retention of the skilled workforce. Although the different factors play a similar role for both companies and workers, in some cases we can appreciate significant differences. With this detailed analysis we reformulate and qualify the generalisations that the matrix may present. The present analysis of the location factors in the BMR is compared with the theories resulting from previous stages of the ACRE project. First, we analyse the role of Personal Trajectories which prove to be as important as location factors in each of the target groups studied. Secondly we analyse hard factors and explain why each factor is considered as a strong or weak point following the evaluations of each target group. Finally, in section 4.2.3 we analyse the result of the evaluations of the soft factors. After that, the chapter analyses the role of path dependency and current policies in fostering the role of certain factors in the metropolitan region.

4.2 Strong and weak points of the city-region regarding its capacity to accommodate creative knowledge

4.2.1 *The weight of personal trajectories*

In Spain, as well as in other Southern European countries, mobility is reduced and people tend to organise their life in the same place they were born or where they grew up. The strong family ties contribute to maintain this trend. Thus, the attachment to the place plays a key role on the decisions of local people to work or to develop their business in the metropolitan region. The ACRE research reflects this fact. For instance, all the target groups in the creative and knowledge sectors analysed report at least one important reason related to their personal life for living and working in the BMR. This also stresses the importance of personal aspects in the strategies adopted, in addition to the area's characteristics and institutions. Attachment with the place also plays an important role in the assessments of the local conditions. In this regard, personal trajectories are particularly relevant. In most of the cases family and social ties have a role in retaining people in the region.

Personal trajectories play also a role in the attraction of foreigners. In most of the cases, foreigners arrive to the BMR to finish or to complete their studies following friends or relatives who are already developing their careers there. This attraction process has created a network of foreigners that mixes with local people and that is based on friendship but also in shared professional interests. Hence existing social networks of professionals attract people from abroad, who enlarge the network. In most of the cases, these social networks are linked to some specific sectors such as architecture or design, and appeared through education institutions like design schools. These informal networks can be understood also as attraction and retention factors for creative and knowledge companies. Companies consider relevant the existence of an informal network of professionals that can organise horizontal productive processes. As was described in Pareja-Eastaway et al. 2008b, in sectors like cinema and media industries or web design development, the existence of these kinds of networks can be extremely useful for the development of a project.

Table 4.1 reflects the weight of different aspects of personal trajectories in the attraction and retention capacity of the BMR. As can be seen, the family reasons and to be born of the region are strong elements for retention. Following the collected data, to follow a partner is not a main element of attraction to the region given the limited relevance of expatriates. For creative migrants most of the time it is a shared decision.

Table 4.1 - Role of the Personal trajectories

	Attraction	Retention
Born here	--	Strong
Family reasons	Medium	Strong
Followed partner	Medium	Medium
Social networks	Strong	Strong

Source: own calculations

4.2.2 *The weight of hard factors*

In general, hard factors are the classical factors of the localisation of economic activity in a country or region. They include both the factors that stimulate economic activity and those that derive from it. In the BMR, some traditional location factors have a strong role in the attraction and retention of skilled workforces and companies, whereas other factors have a role only in terms of retention and some of them represent weak elements for attraction and retention. The size of a region's economy and the diversity of its economic activities constitute basic factors in the demand for diversified, quality employment. Similarly, the internationalisation of the economy is another important element in a region's economic potential, since it introduces a new dimension into a region's commerce and productive activity. In effect, the existence of multinationals in the region, either local or foreign, gives the region a broader strategic perspective, and brings with it a demand for employment in highly-skilled, high value-added activities such as management, research and development and some creative activities. This sets in motion the virtuous effects of the agglomeration economies: agglomeration economies are attractive for the establishment of companies in the region, and the establishment of companies in the region generates agglomeration economies. This dynamic of strengthening the local economic environment helps to increase the region's economy and its diversification.

The economic development of the BMR has been characterised by industrial diversification since the early days of the development of traditional industries such as textile production and metallurgy and large-scale commercial activity which grew up around the port (Pareja-Eastaway et al 2007). This diversification led to the emergence of economic activities around a series of clusters and the appearance of educational institutions providing training and carrying out research in related areas. The productive activity of the BMR covers a wide variety of manufacturing industries and services located either in the city itself or in the metropolitan region. The clusters inside the city (for example in the 22@ district) and others elsewhere in the region include activities such as ICT, design, media, biomedical technologies, energy, chemicals and pharmaceuticals, R+D, publishing, foodstuffs, vehicles, machinery, transport and logistics, in addition to other types of manufacturing, financial and service activities that make up the region's economy. In all, the region provides employment for 2.5 million people. Both the economic development and the commercial orientation have made the BMR a reference point at home and abroad and, as a result, a region with the potential to attract talent.

The analysis of the hard factors identifies both positive and negative economic externalities related to the generic phenomenon of agglomeration economies. The characteristics of the labour market in a region and its entrepreneurial fabric, in particular multinationals, are key elements in the generation and attraction of economic activity. Both factors are important to a region's productivity and competitiveness and, as a result, to its capacity to attract more work and capital. But related to these factors are others such as material infrastructures, educational and research institutions and social protection and health care services, which all contribute to a region's capacity to attract and retain economic activity and talent.

The labour market and career opportunities offered by the Barcelona metropolitan region are among the region's strong points. As mentioned above, the labour market in a metropolitan region depends on the region's economic activity, its economic size and diversification, and the quality of the jobs it can offer. These aspects depend in turn on the agglomeration economies generated in the metropolitan region. In general, workers move to these regions in spite of the high levels of unemployment. To some extent the explanation resembles the old argument proposed by Harris and Todaro (1970), who held that workers move towards urban regions, in spite of the high unemployment levels, because of the higher mathematical possibility of finding well-paid work in these regions than in the rest of the country. In the BMR, the strong development of certain sectors guarantees a large volume of firms generating job opportunities and synergies with other areas of professional activity. These sectors are termed node sectors. Barcelona is especially well endowed with node sectors linked to creativity, such as architecture, design and textile production. As we shall see, these sectors have had a long development since the nineteenth century and have been key for Barcelona's industrialisation. The existence of these sectors means job opportunities for workers and people working in the creative industries. Furthermore, for entrepreneurs in the creative economy it is easier to develop a start-up or a project or to find other companies and people engaged in similar initiatives. On the other hand, for companies the existing labour market allows them to find skilled people but there is an increasing demand, especially in some sectors such as ICT in which this demand is not properly covered.

When analysing the role of the labour market we must consider not only job offers and career opportunities, that is, the chances of obtaining work or of rising professionally in the region, but also the working conditions, characterised by the type of contract and the salary received¹. As has been stated, in the opinion of all the groups interviewed, the job offers and career opportunities represent the most important factor of attraction in the BMR, due to the diversity of the demand for workers and the quality of the jobs. In this sense, **working conditions** can be considered a weak point in the BMR. In this factor we include the material aspects of work, above all salaries and types of contract. The economy of Barcelona, like that of the rest of Spain, is based on low productivity patterns and does not generate high salaries. In comparison with other European cities, Barcelona has low salaries and a strong flexibility of contracts that does not allow for employment stability. This is a factor that could play a negative role in the attraction of foreigners working in the creative industries but that is balanced by the strong role of soft factors such as the weather or the quality of life. Thus, transnational workers in the BMR in the creative sectors consider that in Barcelona they are poorly paid for their projects and they state that if they had decided to work elsewhere they would have been paid more. Nevertheless, for them the soft factors, above all the ones linked to quality of life and the cultural atmosphere, balance the situation and make them able to remain in the region.

Besides, we must also take into consideration that general access to tertiary education was only granted after the democratic transition (1975-1981). A significant part of the regional workforce has only secondary education. This fact reinforces the pattern of low productivity

¹ A third element, the working environment, is analysed in the next section given that is considered a soft location factor.

of the economic model, although active employment policies based on training and education are being held since the nineties to change labour market dynamics.

Knowledge-intensive industries have a different pattern in terms of salaries and contracts. Although the working conditions are worse than in other European contexts, the strong demand for a workforce and the existence of large companies in the knowledge sectors generates greater salaries and stability. For that reason, transnational workers in the knowledge sectors are usually in a different situation. A large part of these immigrants arrive in the BMR as “expatriates”; working in a multinational minimises the effects of the local market as regards salaries. Nevertheless, small and medium companies cannot afford to pay high salaries. Thus, the structure of the sector in the BMR based on small and medium-sized companies reduces the possibility of offering high salaries that would be able to attract a higher qualified workforce.

Summarising, there is an extensive labour market attracting people and companies to the region but also a flexible labour market based on low productivity and low salaries, especially in the creative industries in which there is a lack of large companies. These poor working conditions, due above all to the low salaries, are compounded by the perception of living in an expensive city, with high prices that also affect basic services such as housing. The factor **Living Conditions**, which covers quantifiable economic aspects of the region (the cost of living, tax system, allowances, etc.) is not a factor of attraction for many qualified workers, but it plays a role for certain entrepreneurs from other countries. The increase in the influx of tourists and Barcelona’s international image have generated an increase in the cost of living that has an effect on the creative and knowledge workforce. Following data of the Observatori Barcelona (2007), the city is increasing positions in the ranking of cost of living of cities, being the 31st most expensive city for foreign professionals in the world and the 21st most expensive in the European context².

One of the elements contributing most to this increase in the cost of living is the situation of the housing market. In fact, the high housing prices and the weakness of the rental market are amongst the weakest factors for attraction to Barcelona. The difficulty of obtaining a house, because of the inflated prices and the shortages of rental accommodation of all kinds, is one of the most criticised aspects in the capacity to attract and retain talent in the BMR and in particular in the city, both for the Spanish and for international migrants. Transnational entrepreneurs and qualified professionals agree on this point. What is more, the cost of housing is one of the most important factors in the decision of where to live in the BMR – far above other factors like the proximity of services, the dimensions of the flat, or the proximity of personal and social networks. The price of housing in Barcelona city reached its peak of 5.918€/m² and 4.246€/m² in the Barcelona Conurbation. The rental market had fallen, according to the 2001 census, a 17.8 per cent. Nevertheless, the situation might be changing due to the economic crisis (see box).

² The ranking is developed by Mercer Human Resource Consulting comparing prices of more than 200 basic products and services in 143 different cities in the world.

Box 1: Crisis in Spain and housing affordability

In Spain, the global financial crisis has meant the burst of the bubble of the construction sector, which was the motor of the national economy since the mid-nineties. This abrupt end has had effects on the whole economy but perhaps the most outstanding consequence is the curbing of the rise of prices of housing due to the fall of sales. As a consequence, real estate sector companies have oriented themselves towards the rental sector waiting for better conditions for sales. Thus, since 2008 in Barcelona there has been a growing rental sector and a demise in housing prices. Since the first quarter of this year sales have fallen in Catalonia by 45.2 per cent, inevitably bringing prices down, while rental contracts have gone up by 10.8 per cent in Catalonia.

The results of the fieldwork do not reflect this shift, showing that housing is a major concern for all the groups interviewed. Nevertheless the double effect of decreasing prices and increase of the rental market can bring more opportunities for local workers in the creative and knowledge industries as well as to qualified migrants. The decrease of prices of offices can potentially facilitate also the clustering of knowledge and creative companies.

Although cost of living can have an impact on the attraction of people from southern countries, it has a positive dimension in the attraction of people and companies in which cost of living is even higher. As was stated in Pareja-Eastaway et al. (2009), a certain number of international migrants live in Barcelona and work for clients abroad from Barcelona. That allows them to reduce the costs of living of being in a city like London or Paris and at the same time to have good working conditions. Thus, we should note here that in the case of foreigners the assessment of certain possibilities offered by the city is determined by the conditions in their country of origin. This happens also with the requirements for working freelance in the BMR. For workers from countries with a strong business tradition such as the US, some Latin American countries or the UK, the tax contributions of self-employed workers are high and the bureaucratic processes excessively complex. For people who come from countries with a solid welfare state the tax contributions are considered reasonable and the bureaucratic processes straightforward.

On the other hand, the increasing restriction of migrants' entrance in the last years plays a determinant role in the attraction and retention of migrants. As stated in Pareja-Eastaway et al. 2009, until 20 years ago Spain was a country of emigration. The first migration inflows to Spain started in the last 1990s and there was no consistent legislation on migration flows until recent times. The new legislation does not take into consideration the attraction of high-skilled workforce as a priority. Moreover, the only existing policies to attract a qualified workforce to the country are directed towards allowing for the return of local qualified workers developing their careers abroad.

In spite of these weak factors for attraction (working and living conditions), the BMR is a region that is gaining workers rather than losing them and creates career opportunities for workers in the creative and knowledge-intensive sectors. Around the existing node sectors a

wide range of public and private institutions are generated which guarantee sound mechanisms for the consolidation and expansion of these activities. One of these mechanisms is the higher education system, which is another of the region's strong points.

In fact, **education and training** activities are closely linked to the labour market. Their role should be viewed from a dual perspective. On the one hand, the education system, comprising the universities and other technical and artistic centres, is the main supplier of a country or region's human capital. On the other, this education and training system represents in itself an element that attracts talent (either already trained or seeking training) to the region. There is an ever closer link between a region's economic activity and educational institutions, which constitute one of the vertices of the regional clusters. As has been stated, in the case of the BMR the institutions with the longest tradition are those in design, engineering, architecture and chemicals and pharmaceuticals, related to sectors such as textiles, advertising, publishing, machinery, the chemical and pharmaceutical sector and construction. The impact of the new technologies on sectors like design, publishing and advertising has encouraged training in these areas; in fact the BMR is a reference point both in Spain and abroad in activities such as design or in areas of biomedical research.

The education and training offer of the BMR is made up of five public universities and two private ones³, in addition to business schools that rank among the best worldwide. Although some of them are concentrated in the city of Barcelona, in general these universities and business schools are not concentrated in a single place but distributed among the territory. According to the estimations of Biocat no fewer than a thousand students are carrying out postgraduate studies in BCN. Though less frequently quoted than career opportunities in the employees' responses in the interviews, education is a factor of attraction in the BMR, particularly among graduates from other areas who came to the region to complete their studies and who later find jobs in the region. Furthermore, education possibilities are a factor of retention of the local workforce. The possibility to develop all kind of studies and degrees in the same region allows local citizens to avoid moving to another city-region. In the same way, it allows creative and knowledge foreigners to remain in the region and complete their training.

The wide offer of educational and training possibilities must also be understood as an element that contributes strongly to the creation of networks and professional ties between creative workers and employers, one of the BMR's most positively assessed assets. In fact, the educational institutions, especially those based on postgraduate studies generate a series of weak ties that have a translation in the professional world. Different organisms in the BMR and particularly from the Barcelona city council are trying to foster these ties through different policy actions (see section 4.4).

Despite that positive role of education and training institutions, in some cases companies find a lack of connection between what is taught in universities and the skills and knowledge needed. In this sense, from the point of view of companies the connection between the

³ The public ones are University of Barcelona (UB), Autonomous University of Barcelona (UAB), Politechnic University of Catalonia (UPC), University Pompeu Fabra (PF), and the Open University of Catalonia (UOC). The private universities are Ramon Llull (URL) and International University of Catalonia (UIC).

university and the labour market must be improved. Besides, in some specific sectors there is a good education offer but a lack of medium and large companies capable of absorbing the entire qualified workforce. Finally, another weak factor related to education and training and the existence of a dynamic labour market is the low skills of the local workforce in foreign languages, especially in English. Although there is a skilled labour force, their poor skills in English can strongly affect the decision of transnational companies to settle in the region. In fact, as we shall see in section 4.3 the historical development of Spain during the twentieth century did not allow for the knowledge of foreign languages.

The connectivity and the public transport system within the region is a weak factor in the attraction and retention of people to the region. Nevertheless, this element, combined with the regional polycentric structure makes possible one of the main features of the metropolitan region: the existence of multiple neighbourhoods and environments, including, among others, the city of Barcelona and its different districts, small coastal villages and medium-sized cities with a long industrial trajectory in the interior region. Hence, even though connectivity and transport is not a factor with great influence on attracting workers and talent to the BMR –it is not part of the image of the city–, it is relevant for the regional daily life, in which there is strong mobility from the residence to work. Therefore this factor can be considered a hard factor of retention. For foreigners (especially in the knowledge sector), the possibility of living in quiet neighbourhoods and to be able to reach the city centre in half an hour for leisure purposes can be certainly a positive factor. Nevertheless the assessments about the quality of the services of public transport facilities reveal dissatisfaction with the service and the view that it needs investments to be improved.

Inside the city of Barcelona public transport infrastructures are well assessed and considered relevant. In fact, these infrastructures reinforce the connectivity between districts and economic activities, which has an impact on the perception of the size of the city. For companies in the creative and knowledge industries it is possible to be anywhere in the city regardless of the physical location of clients and other companies in the same sector. Furthermore, in the region there is a good connectivity with the main city and increasing connectivity between economic subcentres, what has a strong effect also for companies. As we shall see, some cities in the first ring of the metropolitan region are developing knowledge districts that will be connected with the 22@ district in Barcelona. Moreover, some companies can place part of their productive process in municipalities of the metropolitan region and part of the process and services in the city of Barcelona (for example Hewlett-Packard in Sant Cugat del Vallès and in Barcelona). Nonetheless, as the ACRE survey stressed, the connection between the centre and the outskirts of the city and the region as a whole, and the number of bicycle lanes, are among the aspects that receive the lowest satisfaction ratings, which means that these infrastructures need major investments.

Finally, technical Infrastructures also cover systems of connectivity. For the vast majority of the creative and knowledge-intensive sectors, optimal connections to internet and virtual services are vital. In this regard, the city of Barcelona is not a problem but some municipalities of the metropolitan region show deficits. Firms in the BMR state that the quality of the internet connection must be improved, and that the operators are excessively expensive and do not always provide quality service. As has been said in chapter three, that has had an effect on the geographical distribution of activities in the region, with a

concentration of knowledge activities in Barcelona. Summarising, technical infrastructures are a weak attraction factor to the BMR but play a greater role as a retaining factor. In spite of that, new and major investments are needed to improve internal communications and internet connectivity, especially in the municipalities of the region.

In contrast with the technical infrastructures, **social infrastructures** –that is the existence of health, education and cultural facilities– play a key role in the attraction and especially in retention of workers and companies. The quality of public health and education systems in the BMR plays a role in the retention of qualified workers. Especially important is the significant presence in the region of schools that teach in foreign languages, an important factor for knowledge-intensive and creative foreign workers. Although factors of this kind do not have a great influence on attracting talent, they may well have an influence on retaining it; by integrating the workers' children into the school system, they are likely to encourage workers to stay in the city. Children's education is considered important, especially by highly-skilled immigrants. This target group usually moves to the BMR with their family and with a place of work already secured, and the quality of the social infrastructures (schools, kindergarten, health care, etc.) they find in the BMR is a key point in their decision-making process. Nevertheless, following the results of the research, some companies find it difficult to provide a comfortable life for managers in issues related with social infrastructures, for instance, education for their children. (Pareja-Eastaway et. al., 2008: 46) In this regard, a lack of private education institutions to facilitate the arrival of managers and officers of large companies is perceived.

Finally it is important to underline the relevant role of social infrastructures in the general perception of the BMR as a place with a high quality of life. The existence of public healthcare centres and public primary schools in all the neighbourhoods contributes to the general satisfaction with the place of residence detected in all the ACRE research. For that reason social infrastructures, as well as the whole element of quality of life, can be considered as a relevant factor of retention of talent.

The **international accessibility** to and from Barcelona is one of the key elements to understand the success in the recent decades and an important factor for the attraction of talent and creativity to the BMR. Since the 1992 Olympic Games, Barcelona airport has consolidated its position as a relevant European airport, being the ninth European airport in the reception of passengers in 2007 and the airport with the sixth largest increase in passengers in the world (Observatori Barcelona 2007). In general, Barcelona's international connections are considered sufficient, given the regular flow of connections with Europe and indirect connections with the rest of the world. Nonetheless, managers and workers from creative and knowledge-intensive industries consider that the existence of a greater number of direct intercontinental flights would raise the potential for the establishment of multinationals in Barcelona and would attract more value-added activities and work. In these views they coincide with most Catalans (both private citizens and in the business world). In fact, Barcelona Airport's volume of traffic outside the EU is far below the levels of the rest of Europe's large airports. In spite of the limited number of transcontinental flights (Bel and Fageda, 2006), the connections with the rest of Europe are currently sufficient because qualified workers needing permanent professional connection abroad (e. g. skilled immigrants in knowledge-intensive activities) can operate effectively in the BMR.

Box 2: New connectivity and transport communications

Historically, Barcelona has been one of the most relevant cities in Spanish industrialisation. Nowadays the Barcelona Metropolitan Region is the fifth biggest industrial agglomeration of Europe and the main exporter of Spain with 27 per cent of total Spanish exports (Pareja-Eastaway et. al., 2007). In spite of this relevance, the region has suffered a lack of transport infrastructures and international connections. Since the beginning of the XXI century, national, regional and local governments are investing in transport infrastructures. Apart from the investments in roads and highways, the attention of this policy action has been centred on the railway and the airport.

Railway

In 2008, and after four years of delay, the High Speed Train connecting Madrid and Barcelona was inaugurated. The second step of the project, which will connect Barcelona with the French high speed railway system, is planned for 2012.

On the other hand, the internal proximity railway system connecting the different cities of the region needs major investments. After years of negotiation between the regional and the national governments, the railway system is being improved slightly, but huge investments are planned for the next years. The results collected in the different ACRE fieldwork reflect, to some extent, the perception of the citizens about the situation of public transport facilities and Barcelona's international connections before these investments, which means that sometimes these issues appeared as overrepresented in the results.

Airport

On June 16th 2009 the new terminal of the Barcelona airport was inaugurated. This terminal has a capacity of 30 million passengers per year, and 90 operations per hour. That means more than doubling the previous capacity of the Barcelona airport (25 million passengers per year). With this infrastructure public administrations want to improve the number of intercontinental flights to and from Barcelona, trying to create a Mediterranean hub of intercontinental flights. At the same time that the inauguration took place the Catalan government proposed a new governance approach based on the collaboration between regional and national governments. Currently all the Spanish airports are managed by a national public body, AENA (Aeropuertos Españoles y Navegación Aérea –Spanish Airports and Aerial Navigation). The Catalan political class considers that central management tend to reinforce the position of Madrid as the main airport of Spain, hindering the possibilities of Barcelona to improve its connections. Hence, the regional government pushes for their collaboration in the management of the airport as a way to grant the deployment of its possibilities. Parallel to this strategy, and with the same objective, the regional government has encouraged the creation of a public-private partnership for the acquisition of the flying company Spanair.

All these new infrastructures and management approaches will transform the situation of Barcelona with a clear improvement in the hard factors related with international connectivity, which can potentially foster its magnetism and its retention capacity, especially for transnational companies and knowledge and creative migrants.

The assessments on the airport and the need of direct intercontinental connections are related to the situation of Madrid. As the capital of Spain, Madrid has always had better direct intercontinental connections than any other airport in the country, and the main intercontinental flights from Spain departure from Madrid. Thus, transnational companies have settled mainly there. The Catalan regional government and Barcelona City Council have been promoting self-management of the Barcelona Airport to counterbalance this trend (see box 1 for further information). In addition, the High Speed Train connecting Madrid and Barcelona, which started to circulate in 2008, can change the situation with better connection between the two cities and its businesses.

One of the most relevant assets of the BMR is its sea connections. In 2008 the Port of Barcelona had a maritime traffic volume of 51.8 million tonnes, the third largest in Spain, and it remained the Mediterranean's largest port in terms of cruise ships (with 2.07 million travellers)⁴. This high level of activity attracts a great many foreign firms, some in knowledge-intensive activities, related to logistics, for example, with the corresponding qualified workforce. This has an impact also in the creative industries. For those engaged in creative activities, the city's good accessibility is a fundamental factor, though less for their professional development than for their own personal trajectories. Good connections with their home country and the ease of mobility constitute another positive factor encouraging them to locate in Barcelona.

From the local perspective, firms in the BMR consider international accessibility to be important, though they raise a number of points. On the one hand they perceive an excessively local attitude on the part of firms which tend not to operate outside the local market. The business system based on small and medium-sized companies may represent an obstacle to the internationalisation of certain activities and may reduce the relevance of this hard factor. On the other hand, they believe that a series of improvements in international transport is needed. The Barcelona airport plan, with the recent inauguration of the new Terminal 1, which will allow an increase in annual passengers from 30 million to 55 million⁵, will play an important role. And although they do not mention this in such explicit terms, they also note the need for an international rail connection able to create synergies with regions in the south of France (see box 2).

Thus international accessibility is key because for creative knowledge sectors Barcelona is a node in a network of places in which to develop their projects and businesses. This is especially true for the mobile skilled migrants that move from one city to another, but is less relevant for local workers and companies. For them connectivity is a factor improving their possibilities for internationalisation. As a summary, table 4.2 shows the main findings regarding the weight of each hard factor in the attraction and retention capacity of the Barcelona Metropolitan Region

⁴ Source: Ministerio de Fomento: Puertos del Estado, 2008

⁵ Source: AENA, 2009

Table 4.2 - Role of hard factors in the attraction and retention

	Attraction	Retention
Labour market	Strong	Weak
Working conditions	Weak	Weak
Living conditions	Medium	Weak
Housing conditions	Weak	Weak
Education and training	Strong	Strong
Technical infrastructures	Weak	Medium
Social infrastructures	Medium	Strong
International accessibility	Strong	Strong

Source: Own calculations

4.2.3 *The weight of soft factors*

As has been stated in chapter three, soft factors are important elements in the attraction and retention of creative and knowledge workers and companies to the BMR. A large part of its magnetism is the result of non-quantifiable factors related to intangible aspects of the area. As we shall see, all the soft location factors included in the ACRE study can be considered strong points of attraction and retention to the BMR. In spite of this, certain aspects are more influential than others and some of them need improvement or policy action to remain influential. Besides, these factors are clearly influent on individual decisions of workers and foreigners but sometimes have only an indirect effect on the decisions of companies. Here we analyse the role of each factor for companies and individuals. First we analyse the role of factors linked to the environment, such as the geographic position of the region, its weather or its size. Closely linked to these factors there is the image of the region, which is linked to the policy action of the City Council. Secondly, we analyse the factors related to the quality of life and the working environment, two elements that are closely related and that have a strong role in the attraction capacity of the city-region. Thirdly we analyse the role of urban architecture, a relevant element given that architecture is one of the main sectors in the creative economy of the region. Finally, we analyse the role of the existing cultural milieu and its openness and diversity.

In the BMR the soft factors linked to the **quality of environment** are central to understand its attraction capacity. The BMR is strategically located in the Mediterranean coast, with a long tradition as a coastal region. Moreover, the region is near the Pyrenees, which allows for diversity of landscapes and leisure activities outside the city. This geographical position brings good weather with soft winters (9-11 degrees) and warm summers (23-24 degrees)⁶, which is an important factor for attraction and retention of foreigners to the metropolitan region. Another relevant element is the size of the city of Barcelona and the urban morphology of the BMR. Barcelona is seen as a city of human size, which is a factor that great metropolises lack. Besides, as has been stated, the metropolitan region includes 163 municipalities apart from Barcelona, including small coastal villages and small cities.

⁶ Temperatures for the city of Barcelona. In the rest of the region the weather can change slightly depending on the nearness to the sea

This diversity of environments also attracts people from abroad and has a role in retention. In this sense, following the data collected, foreigners tend to spend the first months or years in the city of Barcelona and afterwards they can look for quieter environments to live. As has been stated, this element is closely linked to the existence of public and private transport infrastructures that makes possible the configuration of the region and the social and economic interdependence between municipalities. The urban morphology of the region enables the existence of different residential environments, which means the possibility to choose between different kinds of neighbourhoods, including those of the compact city model (in Barcelona but also in other municipalities) and those of the disperse city model (based on family houses). This diversity is an asset that allows for the attraction of different kinds of people with different interests and different neighbourhood preferences. These elements, summarised as factors related to the **quality of residential environment**, are factors for retention in the Barcelona Metropolitan Region. The aspects we refer to are less abstract and more closely linked to the immediate surroundings, including the area of residence, the diversity of the districts and neighbourhoods, green zones and public spaces.

Nevertheless, these factors would not play that relevant role without the existing image of the city, which is strongly based on its environmental quality. Since the nineties Barcelona has been receiving an increasing flow of tourists and there is a relevant policy action to promote the city in many different ways. In this regard, the image of Barcelona is linked to the Mediterranean culture, including the assets described above. This image is also linked to the idea of Barcelona as a cultural capital in which events and cultural exhibitions take place. In addition, in recent years public authorities are putting a growing emphasis on creativity as an asset of the city, not only for the external image of the city but also to promote the entrepreneurship of local inhabitants. In spite of that, the image of the city is still strongly linked to the attraction of tourism, which is one of the most relevant industries in the city. The growth of tourism has created a gate for the attraction of creative and knowledge workers. Many creative foreigners or foreigners in qualified jobs had already visited the city before coming to live here.

On the other hand, there is an image of the city of Barcelona but not an image of the whole metropolitan region. In fact, some municipalities in the region, especially in the county of Vallès Occidental and Baix Llobregat, remain mainly industrial and tourism plays a weak role. Furthermore, in the majority of municipalities there exists a local sense of belonging without a sense of belonging in the Metropolitan region as a whole, which contributes to the weak coordination between municipalities in terms of governance. Thus, the evidence collected in the different stages of the ACRE research shows that the image of Barcelona attracts foreigners that later discover the diversity of places and neighbourhoods existing in the metropolitan region and takes advantage of them.

As far as companies are concerned, they benefit either directly or indirectly from the city's image. As has been stated, from the point of view of companies the image of Barcelona is associated with the Barcelona brand. To develop a product in Barcelona gives that product an added value, a link to the values of the city and the Mediterranean culture. In the creative sectors especially (local or international), the brand gives an added value to the product or service created or offered in the city and region and also attracts talent. Nonetheless, as has been stressed in chapter three, some criticism is being voiced concerning the Barcelona brand:

it needs to be redefined in order to monitor the quality of the products and it needs to be dissociated from the tourism sector and linked to new emerging economic activities such as knowledge-intensive activities and creative sectors, mainly design. We will analyse the role of the Barcelona brand in section 4.4 (policies).

The collateral effects of the existing image of Barcelona and the promotion of the city abroad are, on the one hand, the increase in the cost of living and, on the other, the continuous growth of the tourism sector. The first one has been analysed as a weak hard factor in the previous section. The increase in the growth of tourism is one of the major concerns of the citizens and has undesired effects, for instance in the perception of the quality of life. As stressed in chapter three, **quality of life** is one of the main assets of Barcelona, and the city is recognised as the number one city in quality of life for workers (European cities monitor, 2007). But quality of life has special relevance for those developing their careers in the creative and knowledge sectors, because it enables the creative atmosphere of the region.

The city's cultural life facilitates the creation of formal and informal social and professional networks in the creative sectors. In this way, culture becomes part of the working environment: creative networks and the city's cultural life coexist in a feedback process. The professionals in these sectors stress the city's ideal atmosphere (social, cultural, climate, professional, etc.) for the emergence of networks of this type. Thus, the city's cultural scene and the creative atmosphere are a key factors for both local and international creative sectors. The concept of cultural life in the city includes not only the cultural activities organised by public or private spheres but also civil initiatives. The region's tradition in creativity and the image of the city are factors that consolidate the position of the cultural industries.

Nevertheless, as has been mentioned, the knowledge business sectors in the BMR are concerned about the risk of a model of a region with an excessive proportion of leisure activities and cultural industries. For them, this image of Barcelona directly benefits a model based on tourism but does not attract added-value industries or help them to proliferate. The principal concern for these business sectors is that the region may lose its position in the global economy of knowledge. These concerns make evident the changing pattern of the metropolitan economy, with an increasing role for the knowledge-intensive economy in a context in which leisure and tourism industries are main contributors to the economic growth.

Whereas creative sectors can be complementary to the tourism industries, knowledge-intensive companies claim more and better attention from the public authorities in order to become key agents for growth. From another point of view, for people engaged in the creative sectors a continued increase of tourism can hinder the creative atmosphere of the region and the city can lose its 'authenticity'. Finally, for local inhabitants the model of cultural industries and events focused on tourism have a negative effect on the general quality of life. Summarising, quality of life is one of the outstanding features of the BMR that attract and retain people to the region. Nevertheless, the continuous increase of tourism and the policy actions focused on this objective have negative effects on this quality of life as well as in the development of other sectors, especially the knowledge-intensive sectors.

The rhythm of everyday life and the overall quality of life is closely related to the working environment in the creative and knowledge-intensive activities. By **Working Environment** we mean all non-material, non-quantifiable work-related aspects that influence professional activity. Working atmosphere is one aspect, but so is a pleasant place of work and the opportunities for flexibility. In the BMR the Working Environment is directly related to the characteristics of the region. The city has conditions that are highly favourable for the creation of networks of professionals in the creative sectors. For these sectors, the constitution of these formal and informal networks is vital to their productivity. The networks of professionals that are generated inside the city are, in part, the cause and the effect of favourable working conditions for the creative sectors in the BMR. The weight of these networks means that many creative firms base their external and internal organisation more on cooperation than on competitiveness. All these aspects are fundamental for the creative sector's high opinion of the working conditions in the BMR.

This assessment is shared by both local and foreign creative professionals. But the views of the foreign nationals can also provide new perspectives. Firstly, it should be borne in mind that assessment of the working environment is strongly dependent on the cultural context of respondents' countries of origin. The quality of firms and professionals is considered acceptable but the atmosphere is relaxed rather than highly competitive, a fact that has a positive impact on quality of life. As we have seen, the negative side is the low salaries, the low fees paid for projects and the low productivity, but these are aspects that belong to the hard factors. From the point of view of companies, however, the negative factor of low productivity may be partially compensated for by greater flexibility at work. The strong point of environmental conditions in the BMR according to the foreign workers is that it is an ideal position to balance the north and the south, combining the more serious approach of the countries of the north with the more relaxed and flexible approach of the countries of the south.

In the BMR intangible work-related aspects are more highly regarded than material aspects. The vast majority of workers in creative and knowledge firms in general are satisfied with their work, but this good result is due, mainly, to a high assessment of the soft factors in the working environment. The aspects that are rated highest are friendliness in the working environment and the ability to meet and network with professional from your own field, which can be attributed to the weight of the networks in the region in particular sectors. Nonetheless, one aspect remains unresolved: the possibility of combining professional and personal life, which receives the lowest ratings.

The relevance of the soft factor **Quality of urban architecture** in the BMR is closely related to the history of the city (path dependency) and to specific hard factors, such as the weight of certain economic sectors in the region. In fact, the urban architecture of Barcelona plays a role in attraction in two different ways. Firstly, it is a touristic reclaim that is strongly assessed as an element providing inspiration for all kind of creative people. In this sense, the existing urban architecture is valued particularly highly by the creative sectors, which praise the role it plays in the generation of a vital creative atmosphere and heritage in Barcelona. Furthermore, for creative foreigners, it is one of the area's most important factors of attraction. Secondly, is a symbol of the relevance of architecture in the BMR, a node sector which draws not only visitors but also talent as well; it generates work, professional networks, synergies with other

economic activities and public and private institutions for its preservation, consolidation, and promotion.

The quality of urban architecture is not only appreciable for relevant buildings but also for the morphology of the city itself. The expansion of the city planned by Ildefons Cerdà in 1864 is one of its main assets and defines the city. Furthermore, the expansion was done preserving the medieval town. Consequently, Barcelona's urban architecture is not only based on modernism but also includes medieval building and contemporary new buildings such as the Agbar Tower from Jean Nouvel. Nevertheless, urban architecture is an asset of the city of Barcelona but does not play a role in the rest of the region. Although local bourgeoisies in industrial cities like Sabadell, Terrassa or Mataró invested in singular modernist buildings during the nineteenth century, there is no clear evidence that this architecture plays a role in the attraction of talent from abroad. Thus, the role played by the urban architecture must be understood as an existing factor that has been promoted both by public authorities and by private institutions. In this regard, the urban architecture of the city has been an element for the attraction of tourism and at the same time an element for the attraction of skilled professionals linked to architecture. Moreover, the urban architecture of the city is one of the elements that constitutes the image of the city abroad.

In the analysis of the soft factor **Cultural Milieu**, we should stress that it does not refer to the cultural atmosphere and range of events on offer in the region (these are included in the factor Quality of life) but considers culture in an anthropological sense, that is, language, religions and social customs, and so on. This location factor is particularly significant for foreign residents. The cultural proximity with countries in Latin America and the Mediterranean is an important factor in the decision of many people (linked to the creative and knowledge sectors or not) to decide to settle in the BMR.

On the other hand the fact that Catalonia has a language of its own, in addition to Spanish, in some cases causes certain fears and prejudices prior to arrival in the BMR. In spite of this, after a period of time in the region skilled foreigners agree that the language does not represent an obstacle for their career development or for their social life. There are two points to be made here: first, foreign immigrants in skilled jobs in the creative and knowledge sectors do not normally need Catalan as an essential tool in their work, nor is it indispensable in postgraduate studies. It may be useful and beneficial, but not fundamental. Second, many of them accept that it is possible to live in Catalonia without learning Catalan, but to obtain a higher attachment with the place and a better understanding of the society around them it is better to learn it. Indeed, foreign citizens have a very positive vision of the language and see Catalan as a means by which to become integrated rather than as an obstacle.

There is still one more view from outside: the Cultural Milieu of the BMR. In comparison with other leading international cities, Barcelona has a certain "provincialism". This provincialism is often viewed negatively, because it prevents the city from taking its place alongside great cultural capitals such as London, Paris and New York. But on the other hand this also makes the city attractive: in comparison with more globalised cities, it retains a strong local culture. This aspect is highly regarded by foreign residents, who see it as a characteristic of the city's "authenticity".

Cultural Milieu does not always constitute a factor of attraction. For some firms in BMR who want to reach out beyond the local market level, the cultural milieu may present obstacles, especially in cultural sectors that depend on public funding. The public sector in Catalonia promotes the Catalan identity often via cultural projects related to this subject that stimulate the use of the Catalan language. This is a positive factor because it generates opportunities for new cultural projects, but it may be that in the presentation of proposals the objective of preserving Catalan identity is prioritised over other aspects of the work. This may produce tensions between the promotion of the identity and the quality of the event.

As has been stated, **Tolerance and Cohesion** constitutes an important aspect in the theories of Florida (2003). Following this author, a city will be a pole of attraction if it has an open character and a tolerant atmosphere. Barcelona is considered a tolerant and welcoming city, both by the local interviewees and by the skilled immigrant workers. At the same time, there are aspects in need of improvement. According to the ACRE survey, most of the workers in the creative and knowledge sectors believe that their city is hospitable to people from other cultures and nationalities, but above all they believe that it is a tolerant region in relation to homosexuality, almost 70 per cent state that the city is gay and lesbian friendly. Slightly under a quarter (23.1 per cent) believe that there are visible tensions between different economic groups, and 21.6 per cent believe that the city is not welcoming to visible minorities.

We should also note the distance between local and international social networks. The mix between local and international networks faces certain obstacles. Transnationals attribute this to a difference in priorities due to their status as immigrants and the closed Catalan character, though this assessment depends on the cultural background of the interviewee. The fact that Catalans may be perceived as “cold” does not stop Catalan society from being considered tolerant and welcoming. The hospitality of the city is attributed not so much to the local character as to the presence of a multitude of nationalities and cultures and, therefore, of people in similar situations who are keen to build up social relationships. Finally we should also note that transnational workers in the knowledge-intensive sector have a more negative view of the local society: for them, the social networks are not as important or as extensive as in the case of the creative transnational; their relations are based more on their working lives and their interaction with local society is more limited.

On the other hand, it is relevant to show that in BMR migrants and ethnic groups are not segregated from the rest of the population. The distribution in the different municipalities and districts is similar. The city centre operates as a gate to the rest of the metropolitan region and it is usual for foreigners to settle in the centre of Barcelona, in the old town and later move to other districts or municipalities. As the ACRE research shows, this pattern is also valid for qualified migrants. Qualified foreigners look for the diversity and cultural movement in the city centre in the first years of their stay and later look for quieter places with good connections to the city centre.

Table 4.3 summarises the main findings on the role of the different soft location factors in the BMR. As has been explained, all the factors play a medium or strong role in attraction and retention, without any weak factor.

Table 4.3 - Role of soft factors in the attraction and retention

	Attraction	Retention
Quality of the environment	Strong	Strong
Quality of urban architecture	Strong	Strong
Quality of residential environment	Medium	Strong
Working environment	Medium	Strong
Quality of life	Strong	Strong
Tolerance and diversity	Strong	Strong
Cultural milieu	Strong	Medium

Source: Own Calculations

4.2.4 Summary: Matrix of main factors of attraction and retention

Departing from the analysis presented above we can summarise the weight of the different factors in the matrix 2 (see table 4.5). Table 4.4 shows the codes used for the elaboration of this matrix. The numbers represent the different target groups whereas the combination of numbers and letters reflects a subgroup inside the target groups. As will be seen, factors for knowledge and factors for creativity are sometimes different.

Table 4.4 - Interpretation of matrix 2

Target Group	Code
Employees	1
Managers	2
<i>Creative Managers</i>	2A
<i>Knowledge Managers</i>	2B
High Skilled Immigrants	3
<i>Creative Highly Skilled Immigrants</i>	3A
<i>Knowledge Highly Skilled Immigrants</i>	3B
Assessment	Sign
Very positive	++
Positive	+
Neither positive or negative	=
Negative	-
Very negative	--

Source: Own Calculations

The matrix reflects the weight of each factor following the assessments of the different target groups, and the direction of this assessment. Thus, there are factors that play a strong role in a positive way and others that do it in a negative way.

Table 4.4 - Matrix 2: Strong, medium and weak factors in BMR

Hard factors	Strong	Medium	Weak
Employment demand (Availability of highly qualified labour)	2A (++) 2B(-)		
Employment offer (Availability of Jobs)	1(++)	2(+), 3A(+)	3B(=)
Costs of labour		2(+)	
Taxation			2(=), 3(-)
Housing conditions (office availability and rents)	2A (--), 3A (--)		
Housing conditions (Availability of housing and prices)	1(--), 3A(-)		2A(-)
Cost of living	1(-)	2(=)	3(+)
International accessibility	2B(++), 3(++)		
Technical infrastructure		1B(-), 3B (-)	3A(+)
Social infrastructure	3B(+)		
Education and study	3A(++), 1(+), 2(+), 3B(+)		
Proximity to customers, strong economic setting		2(+)	
Working conditions	1(-), 3A(-)	3B, 2B (=)	
Soft factors	Strong	Medium	Weak
Quality of environment	1(++), 2(++), 3(++)		
Cultural milieu			
Quality of urban architecture	2A(++), 3A(++)		
Quality of residential environment			
Working environment			
Quality of life	1(++), 2A (++) , 3(++)	2B(+)	
Tolerance, diversity, openness	3A(+), 1(+)	3B(+)	
Professional networks	2A(++), 3A(++)	2B(+), 3B(+)	
Personal trajectories	Strong	Medium	Weak
Born here	1(++), 2(++)		
Family reasons	1(+), 2(+), 3B(+)		
Followed partner			3A(+)
Social Networks	3A(++)		

Source: Our own calculations

In general, the BMR scores highly in the assessments of local conditions for accommodating the creative and knowledge sectors. Most location factors are considered to be strong points. Table 4.5 shows the strong and weak points in order of importance, leaving out intermediate positions and the target groups.

Table 4.5 - Strong and weak points in the BMR

	Strong points	Weak points
Hard factors	Employment Education and study International accessibility Social infrastructures	Housing Conditions Working Conditions (hard factor) Technical Infrastructures Living Conditions
Soft factors	Quality of environment Quality of life Working environment Quality of urban architecture Quality of residential environment Tolerance, cohesion Cultural milieu	

Source: Our own calculations

Though the first assessment appears positive, we should stress two aspects: the number of strong points and medium points are the same (see table 4.1), that is, they are location factors that do not obtain a high rating. Second, there are also a considerable number of location factors that are weak points, principally related to the hard factors.

Most of the strong points in the BMR are attributed to soft location factors. The strength of the soft factors (non-quantifiable indicators) is key to the understanding of the capacity of the BMR to accommodate the creative and knowledge sectors. According to the conclusions of earlier stages of the research project, the improvement of Barcelona's international position as a pole of attraction and retention of talent is not only related to its economic development and the recent improvements in infrastructures, but also, and crucially, to the contribution of soft factors (Pareja-Eastaway et al., 2007). The image of the city and the "Barcelona model", the success of certain cultural sectors in building a dynamic creative atmosphere, and above all quality of life, combine to play an important role in the strong local conditions of the BMR.

The range of field work carried out by the ACRE project confirms the importance of the Quality of Life factor. This is also borne out in other quantitative studies: according to the *European Cities Monitor* study, in 2008 Barcelona ranked fifth among European cities for business and, for the eleventh year running, came first in terms of quality of life for its workers.

The assessments of the hard location factors are not as positive as those of the soft factors. Nonetheless, the overall situation of the hard factors in the BMR is not entirely negative. It would be an oversimplification to consider soft factors as strong points and hard factors only as obstacles. In this case especially the views of the different types of respondent should be taken into account. A significant number of hard factors receive medium ratings, and areas as important for the region's development as Employment, Education, International Accessibility and Social Infrastructures are rated positively.

Creative professionals in all target groups rate the local conditions more positively than those in the knowledge-intensive sector. This is probably due to the importance of the city's institutional and civil cultural life, but above all to the region's tradition in economic activities related to the creative industry. The region has strong node sectors and an economic importance that generates job opportunities, synergies between professional disciplines, and institutions that provide quality training (Pareja-Eastaway et al., 2009). Most of these node sectors, like architecture and design, are related to creative areas.

Throughout the ACRE project the BMR's position as a competitive region inside the enlarged EU has been clear. Nonetheless the project has also highlighted certain mechanisms that need effective intervention both from the public and the private sectors. Some of these mechanisms are linked to traditional location factors: the improvement of technical infrastructures, the need for capital risk investment, the housing market, low salaries, the interrelation between the business and the academic worlds, among others. The relative strength of the hard factors in the BMR is due to a series of projects in the city's agenda; the plans to improve international transport systems – the expansion of the port and airport, the arrival of the high-speed train, plans for improving the housing market, the relations between business and the university, increasing investment in innovation, improving connectivity inside the region, and

so on (Pareja-Eastaway et al., 2007). Establishing a creative and knowledge-intensive region in which the hard location factors are as powerful as the soft factors will require the definition of a clear strategy for the city with the cross-sectional involvement of all levels of government.

Therefore, the obstacles Barcelona faces in its development, as a creative and knowledge-based region are not, strictly speaking, hard factors. The need to transmit a clear development strategy, the improvement of coordination between the different levels of government, the current lack of internationalisation of companies and the need for environmental improvements are some examples. What is more, the importance of soft factors in the region, as we have seen, represents a challenge. These soft factors (geography and size, international image, culture, quality public spaces, architecture, etc.) are also poles of attraction for visitors and draw increasing numbers of tourists. Efforts must be made to control the weight of the tourism sector and to make sure that its presence does not negatively affect the lives of the city's residents (Pareja-Eastaway et al., 2007).

4.3 Path dependency in relation to the weight of hard and soft factors

In this section our aim is to stress the influence of previous historical development on the current soft and hard factors of location, and to analyse the overall influence of path dependence in the development of the creative knowledge economy in the BMR. As we shall see, the policy action to attract tourism has been based on the promotion of soft factors, mainly the promotion of cultural assets of the city, the urban renewal of the coastline and the promotion of cultural and leisure events. This has paved the way for the emergence of some creative sectors and has reinforced the role of other sectors already settled in the region. Nevertheless, the growing importance of some economic activities linked to these policies, namely tourism and the building sector, has determined the opportunities for the emergence and attraction of creative and knowledge industries.

The impact of these transformations has been deeper in the city of Barcelona than in the rest of the region, which means different possibilities for the emergence of creative and knowledge industries in the city and in the rest of the region. In the rest of the municipalities of the metropolitan region there is still a tradition of industrial activities based on the historical development of a network of small firms specialised in different activities, but focused mainly on textile industries. In these places these networks continue existing with strong institutional agents from the fordist era (business associations, entrepreneurs, local trade unions) playing a strong role in the local policy-making⁷. In this framework, the attraction of creative and knowledge industries must be integrated in the existing industrial network. Conversely the city of Barcelona, from where the existing industry was expelled in the eighties, is trying to create a completely new network of companies. The strategy of the city is mainly based on the attraction of large companies of the knowledge economy. The best example of these kinds of efforts is the 22@ district in Poblenou. These efforts, lead by the

⁷ The best examples of this strong industrial institutional contexts are the cities of Sabadell and Terrassa in which there exist powerful associations participating in the economic development model.

public administration, show a will to innovate in the productive activities of the city without taking into consideration the previous relevant industrial sectors.

Nevertheless there is one feature of the region that remains unchanged and that affects all the economic sectors: the existence of a network of small companies rather than large companies providing the economic growth. This model has been dominant since industrialisation and it is also valid for the emerging creative and knowledge sectors. Although the attraction strategy of Barcelona and the late privatisation of large national companies can counteract this trend, there is a historical lack of financial sector in the region which means the absence of venture capital and more difficulties for growth and internationalisation.

Thus, while in some of the economic subcentres of the region the historical development path of industrialisation plays a strong role in the current economic development, Barcelona has tried to reinvent itself on two different grounds: the creation of a knowledge-based industry and the growing relevance of tourism based on the cultural features of the city. Nonetheless, that does not mean that there is a lack of historical effects on the development of the city; this reinvention receives the existing hard and soft factors of the city, for instance its infrastructures and its tradition of small companies. As we shall see, the weight of soft and hard factors must be understood in the context of the historical development of the city. In this regard, the uncontrolled industrialisation of the whole region under Francoism is a pivotal element in understanding the role of different factors of attraction.

4.3.1 Path dependency and soft and hard factors

The regional industrial development that took place under the Franco regime between 1960 and 1975 brought strong negative effects on the region in social and environmental terms. Most of the weakest factors of attraction of the Barcelona Metropolitan Region can be understood as an inheritance of this period. In the first place, the rapid industrial development took place without a coherent political response in providing transport and social infrastructures or generating good housing conditions. During this period there was a huge increase of the population and entire new neighbourhoods appeared. In some cases migrants built these neighbourhoods creating substandard housing. On the other hand, Francoism created the conditions for the private transport communications but did not invest in public transport systems. In all the municipalities there was a general lack of social infrastructures such as healthcare or educational facilities. Although democratic public administrations, especially city councils, improved the situation a lot, the analysis of the target groups reveals that these elements are still perceived as a negative factor in the attraction and retention capacity of the region, especially in the periphery, where transport connections and equipments are weaker than in the city of Barcelona.

The hard factors linked to salaries can also be related with the productivity model imposed by Francoism, based on low salaries, low productivity and short-term earnings. Between the 1950s and the 1970s, traditional industrial sectors, namely the textile industries, started to decline in the Barcelona Metropolitan Region and new industries, such as the automobile industry, started to grow. Other sectors such as the building sector started to consolidate as main contributors to economic growth. All this changes took place with a working class

without union rights and without a democratic government controlling the urban development. This model put the basis for the current low productivity model and the relevance of the real estate sector as a cornerstone of the economy. Besides, Franco's coup d'état can be understood as a movement against the modernisation of the country. Teachers and professors were one of the collectives that suffered strongest repression during and after the war. The low education levels of the workforce during Francoism still remain in the older working population, reinforcing the model of low productivity of the economy. In the same vein, the origin of the general lack of English language skills in Spain can be found in the long-term closure of the dictatorship to external influences.

But the existence of the Franco regime brought also unexpected positive consequences. The rapid changes in the local society, hosting southern Spain's rural population, fostered tolerance and the acceptance of diversity. The perception of local inhabitants that they were in the same situation of oppression as migrants helped to generate this environment. Moreover there was an increasing perception of Barcelona as a cultural melting pot mixing different people of Spain. This atmosphere paved the way for the acceptance of the increasing immigration in the late nineties and reinforced the region as a place where diversity played a role.

As has been stated in previous ACRE research, Barcelona has historically played the role of cultural capital of Spain. Cultural industries started to develop in the twentieth century in the city and to a lesser extent in the region. Until the civil war (1936-1939), the local bourgeoisie invested in these industries, and the first radio and cinema companies of Spain were created in Barcelona. By this time Barcelona attracted artists from Spain and was seen as a gate to Paris and other cultural capitals of Europe. Nevertheless, the dictatorship imposed a fierce censorship on cultural industries that were strongly controlled by the government. With that objective, existing cultural industries concentrated in Madrid. For that reason, except in the case of publishing, with a large tradition since the middle ages, there is no sustained tradition in creative sectors like radio, cinema and television. It was only after the transition that new policies enabled the resurgence of these sectors in the BMR.

With the Spanish transition there was an explosion of new industries and new policy approaches. During the seventies and the eighties a cluster of record companies emerged, but it moved rapidly to Madrid where there were investors and possibilities for growth. This fact shows the weight of small and medium companies in the creative sectors and their historical weakness and inability to grow and consolidate in Barcelona. As we shall see in section 4.4 public and private authorities have enforced initiatives to counteract this trend. The empirical data collected shows problems of internationalisation and growth of the companies in the creative and knowledge sectors, a fact that partially explains the negative assessment of some aspects of the region.

The policy and economic developments of the eighties also allowed the emergence of new creative sectors and the adaptation of the old ones. The creation of the Catalan television in 1987 made possible the emergence of media industries. Nevertheless the sector appeared with

the regional public television as its only customer⁸. At the same time, old textile industries started to adapt their production, relocating productive processes first to Morocco and later to China, and concentrating their activities increasingly on fashion design. Nevertheless this contributed to an increase of unemployment in the region. Conversely, other sectors like architecture took advantage of the increasing relevance of the real estate sector in the whole region. The nomination of Barcelona as the host of the 1992 Olympic Games was determinant for this sector which started to be recognised internationally since then.

In fact, the Olympic Games meant an upturn for the whole region and put economic activities linked to tourism at the centre of economic life. The city transformed from industry to services and started to offer added value activities. Moreover, the development of the city of Barcelona as a touristic place in the last 18 years has contributed to the positive image of a city as a place with high quality of life linked to the rhythm of everyday life and the cultural activities and events. The City Council of Barcelona has played a key role in the development of strategies for attracting tourism. From the very beginning, culture was a central element in these strategies, with the creation of new equipments and facilities, and new efforts to take advantage of the existing cultural assets of the city. These policies have linked the image of Barcelona to its cultural assets, including its modernist architecture and its long tradition in creativity and culture. Thus, several elements that attract people to the city are in its international image.

The policy action of the City Council has been based on reinforcing the soft factors of the city as elements for attraction. In this regard, the current strong weight of soft factors in the attraction of foreigners and companies must be understood as the result of continued efforts from the public administration to attract people to the region. An example of these efforts can be seen in the urban renewal of the coastline of Barcelona. Following the ACRE research, one of the outstanding attraction elements of Barcelona is its nearness to the sea and the mountains at the same time. This element is linked to quality of life and the geographical position of the city. Nevertheless, since its industrialisation the coastline of the city of Barcelona was used to settle factories, and in some beaches substandard housing neighbourhoods appeared. In this regard the nearness to the sea was not taken advantage of as a place for leisure. Conversely, in the small municipalities of the coast tourism started to grow in the seventies and the beach was a relevant asset. In the case of Barcelona it is not until 1992 that part of the beaches became swimmable.

Summarising, the action of local authorities is key for understanding the strong role of soft location factors. In fact, the role of the local administration in the development of policies and strategies must also be understood as something historically embedded. As Albet (1997: 486) shows, in the last days of Francoism and the Spanish transition, the lack of consistent national or regional funding and initiative gave municipalities the scope for political responses. These responses were most of the time linked closely to citizens' participation. City councils became providers of social cohesion and promoters of economic development programs. In many cities of the region there appeared a hegemonic consensus around charismatic mayors, mostly

⁸ This landscape is under transformation due to the emergence of the digital television and the multiplication of platforms for media. As one of the interviewees stated, some media companies are nowadays closely linked to ICT and internet-based companies

from leftist parties. This tradition persists still nowadays, with city councils ruled mainly by left parties that develop strategic planning for economic development with other institutional actors, such as trade unions, neighbourhood associations, and entrepreneurs. Even so, the growth and internationalisation of Barcelona is hampering the consensus between the political elite and citizenship. Nevertheless, projects such as the 22@ district must be understood within this large tradition of consensus. We analyse the role of policies in section 4.4.

4.3.2 The role of path dependency for talent and companies

Foreigners' and companies' perceptions of the historical development path of the region also play a role in their decision to settle and/or to remain in the BMR. For companies there are several relevant elements regarding the traditional ways of organisation and collaboration between companies, and the historical development of sectors. These elements can be summarised as follows:

1. There is cross-sectional cooperation/collaboration between companies, especially between smaller companies that are not competing for customers
2. Many companies working in the creative sectors benefit from the key presence of design in the image of Barcelona. Moreover, the design tradition favours the attraction of talented professionals to the region and enhances social and professional networks between them.
3. The companies' flexibility and their capacity to adapt to a changing economic scenario is provided by both the composition of the business sector (i.e. the presence of small and medium-sized companies) and the existence of formal and informal networks of support between companies.
4. The historical importance of culture and creativity in Barcelona since the nineteenth century contributes to the emergence of new sectors transformed by the inclusion of creativity or knowledge, and is a source of inspiration for creative people
5. The region's lack of tradition in sectors such as finances or law creates certain instability and may have restricted the growth of companies.

Finally, the relevance of creative and knowledge sectors such as publishing, design or architecture in the BMR and their historical roles in the development of the city exerts a huge attraction for highly qualified immigrants. If a sector is established in the region and is a key node in the international arena, more employment opportunities, professional networks and contacts that can help people to start businesses and self-employment initiatives are expected. The recognition of the city of Barcelona as a "cultural milieu" in view of its artistic and architectural tradition and its rich cultural background is one of the key factors that attract foreign qualified immigrants.

Box 3: A summary of main elements of path dependency affecting hard and soft factors

Path dependency also plays a role in the current position of the BMR in international spheres of competitiveness. As stated in Pareja et al (2007), there are several aspects in this regard:

- 1) The industrial development of the region since the 1950s has provided experience and “know-how” for business implementation, especially in the service sector.
- 2) The region’s product diversification is a consequence of the adoption of a model that is not based on specialisation. There is no one sector that stands out in terms of employment creation, innovation development, or contribution to GDP.
- 3) An entrepreneurial bourgeoisie played a key role in stimulating culture and creativity in general from the beginning of the twentieth century onwards. The combination between private initiative and public entrepreneurship in cultural affairs created a stable framework for action and generated a strong reputation in terms of cultural innovation.
- 4) Cultural development and tradition is an asset for the city’s attractiveness and in particular for activities connected directly or indirectly with culture.
- 5) The widespread culture of association aids the existing networks, both professional and social, and becomes a key aspect in some of the groups analysed.
- 6) Event-related urban development and transformation and, in particular, the successful organisation of the Olympic Games, has boosted public participation in the design of long-term strategies for the BMR’s future.
- 7) Many years of political stability at municipal level since the return of the democracy has shaped a stable framework of negotiation between the actors involved in the public-private partnership and has enhanced competitiveness

Architecture is, therefore, one of the most consolidated sectors in the BMR, and has generated numerous related activities such as educational programs and interior and industrial design. In addition, Barcelona is as a meeting place for international architects (already famous, or starting their careers) and specific architectural research and studies. The importance of Barcelona as a harbour city has contributed to the huge development of logistics and transport management – another example of a consolidated knowledge sector with a great capacity to attract foreign qualified immigration.

4.4 Existing policies/projects enhancing different hard and soft location factors in the region

As mentioned in previous reports (see Pareja-Eastaway et al. 2007; Pareja-Eastaway et al. 2008a), since the deindustrialisation period starting in the 1980s, the search for mechanisms to counteract the negative effects of deindustrialisation and to improve regional competitiveness has been a significant policy concern. As a result, many plans have been implemented, with priorities and targets that have varied over the years. In addition, we should stress that a number of different levels of government coexist in the Barcelona region, sharing responsibilities and solving the problems that the search for increased competitiveness may create. Nevertheless, the existing governance framework in the metropolitan region has generated multiple policy actions without a clear leadership in its development. In fact, as stated in previous research (see Pareja-Eastaway et. al. 2007:33) the metropolitan region lacks a metropolitan government. For that reason municipalities have a strong role in decision-making and coordination between municipalities tends to be weak. On the other hand, the regional government (Generalitat de Catalunya) is the political agent with competences to develop a wide array of policies in Catalonia and is playing a key role in the development of large infrastructures in collaboration with the national government. The Generalitat is also playing a key role in funding most of the local economic development projects.

While analysing the empirical data –that is, the perception of creative workers, managers and qualified immigrants regarding official policies – certain things should be taken into account: first, the situation of the city during the period when the fieldwork took place may well have had a strong influence on the respondents' perceptions at that particular moment. Second, some of the people interviewed during the fieldwork were quite young when the Olympic Games were held in Barcelona in 1992; so their awareness of the city and its image is certainly different from those who directly benefited from or were responsible for this event. Finally, their impressions on policies in the Barcelona region may depend on their country and city of origin. For instance, for those born in the region (many of the workers and managers), the city has been their home for many years and they have detailed knowledge both of current policies and also their trajectory. For those from abroad, their impression of the city and the policies as enhancers of hard and soft factors is usually the result of the comparison with their own cities of origin.

The top-down approach towards enhancing competitiveness in the city of Barcelona is certainly strong; the city's position in the international arena responds to a well-established strategy implemented by the municipality since 1988 comprising a number of policies to increase competitiveness. Two periods stand out as regards priorities in the policy arena: the period from the beginning of the deindustrialisation till the end of the nineties (1980-1999), and the last decade (2000 onwards). During the first period, policies aiming to disseminate the city's cultural image, together with the success of the Olympics were successful in raising the city's profile. In the second phase, two elements must be considered: 1. The change of scale, from the city to the city-region; 2. The stimulus provided for the location of knowledge sectors as a complementary alternative to the existing "cultural milieu" in the city-region.

Box 4: The Barcelona Brand

The 'Barcelona Brand' is one of the most important attraction factors of Barcelona, and it is linked mainly to soft factors. The 'Barcelona Brand' is related to the particular model of urban and economic development of Barcelona and the image of the city. This image grew since the Olympic Games in 1992, due to the transformation of the city and the global impact of the event. Public administrations promoted the image of the city with marketing strategies focused not only on foreigners but also on local citizens.

The promotion of the city through the 'Barcelona Brand' is mainly linked to the attraction of capital through quality tourism and the promotion of the cultural sector. Thus, the brand is linked to the leisure and cultural sectors, and to the high quality of life and tolerance that without doubt contribute to the attraction of talent. The creative sectors, including the cultural industries, and the knowledge-intensive sectors, benefit from this image, and the 'brand' attracts companies and visitors to the city. Different data from the European Cities Monitor report show some insights into the vitality of the 'Barcelona Brand': In 2008, and for third year, Barcelona was considered the city that has best actions for improvement. In the same line, it has a considerably high score –between the first ten cities– in the government promotion of business environment and attraction of companies. In the last years the relevance of the Barcelona Brand linked to soft factors has positively affected not only the rest of the metropolitan region but the whole of Catalonia. For creative and knowledge industries the 'Barcelona Brand' gives added value to the product or service produced in the city.

Nevertheless, in recent years some sectors have criticised the 'Barcelona brand' for its excessive link to leisure and tourism. In the creative and knowledge sectors there is the opinion that a redefinition of the brand is needed, linking quality products with added value to the brand and avoiding the link with tourism. In this way, FAD (Foment de les Arts i el Disseny, promotion of Arts and Design) is creating a project trying to define Barcelona as a place for creativity and design through the label 'created in Barcelona'. As one member of FAD stated, *"The aim is to create an identifying trademark for creative work produced here which will be synonymous with quality. This will help our creative work flourish and will be used to launch it into the outside world"*.

In recent years policy developments and projects have allowed the creation of infrastructures and conditions for the attraction of companies and talent, and have influenced location factors. First, the region is now connected with Madrid by high-speed train, which will enhance the complementarity of the regional economies of both cities. Second, in 2009 the new terminal of El Prat airport began to operate, more than doubling the airport's flight capacity and laying the foundations for its transformation into an international hub. These developments are complemented by new governance approaches to the management of infrastructures encouraging cooperation between regional and national governments in the airport and in the regional railway systems (see the box on page 41 for further information).

On the other hand, since November 2008 Barcelona hosts the headquarters of the Union for the Mediterranean, an organisation formed by 43 countries, including the 27 members of the

EU and all the neighbouring countries with coasts in the Mediterranean. This nomination reinforces the role of the city in the international landscape as one of the most relevant southern European cities and a Mediterranean capital. It also links the image of Barcelona to the values of diplomacy and peace relations.

The efforts in branding Barcelona and all its assets in all sorts of forums have already succeeded in attracting creative people to the region – not only freelancers but also departments and even the headquarters of large companies. Differences can be noticed in the type of immigrant: while creative people are mainly attracted by the cultural milieu and the acclaimed tolerance and hospitality, knowledge workers might be more influenced by specific policies aiming to attract talented people to BMR and in particular to knowledge activities, both in the 22@ district and throughout the region. Currently, efforts at local government level are focused on supporting the engagement of qualified immigrants in long term economic activities contributing from “above” to encourage their integration in social networks and to provide support for their everyday lives. At the moment, this phenomenon is only visible in the 22@ district.

In fact, the new stage of the development of 22@ is focused on consolidating the knowledge cluster by attracting more companies from abroad and developing endogenous entrepreneurship. In the metropolitan region, several efforts are being made to attract knowledge companies to the region: for instance, the construction of a synchrotron in Cerdanyola del Vallès, the development of a biomedicine research park in L’Hospitalet and the creation of a business innovation park in Sant Cugat del Vallès. Furthermore, small municipalities of the region are trying to transform their traditional activities into the creative economy, mainly the former textile industries.

All the projects of these municipalities trying to attract people and investments are also promoting the relevance of their own soft factors, such as the surrounding green environment or the quality of their residential environment. Furthermore, medium-sized municipalities with long industrial heritage such as Sabadell, Terrassa and Mataró are developing their own strategies to transform their industries into the knowledge economy and to attract new activities. Terrassa, for instance, has created its own media park to attract audiovisual industries and has a local strategic plan with different clusters such as medicine or environmental industries. The local industries are trying to adapt to this strategy focusing increasingly on these activities.

At the same time, the city of Barcelona and other municipalities are also emphasising the importance of social cohesion in their policies, not only to face the financial crisis but also to counterbalance the undesired effects of the increase of tourism. Hence, new policies improving the neighbourhoods and public services are on the agenda, and the Mayor of Barcelona has changed his discourse emphasising the need for major social cohesion in the city. As has been stated in the previous section, the municipalities of the metropolitan region have had a role in providing social cohesion and economic development programs, and they have transformed intangible soft factors into valuable assets. For instance, in 1992 the city was opened to the sea and the urban renewal allowed the use of the beaches. In some medium municipalities former factories are now design centres or museums. These changes have brought a flow of tourists to Barcelona that has been key for the transformation of its

economy towards the services. In spite of that, nowadays it is necessary to find a balance between the growing tourism and the quality of life, one of the outstanding soft factors of the city attracting visitors. Following the opinion of the different target groups, quality of life, understood as the rhythm of everyday life, and the multiple possibilities that the city offers is worsening, mainly because of increasing touristic flows. If we take into consideration that creative and knowledge talent is attracted to Barcelona because of its quality of life, diversity and cosmopolitanism, this perception reveals that the promotion of creative and knowledge economy can collide with other economic sectors such as tourism.

Box 5: The 22@ district in the city of Barcelona

Barcelona 22@ district Since 1996 the former industrial district of Barcelona is being transformed into a knowledge district. Five strategic clusters are promoted as the key activities for the district: Energy, Media, ICT, Design and biomedicine. The district mixes knowledge-intensive companies with residence and commerce. For that reason the creation of the district plays a role in hard and soft factors. The district has relevant educational institutions and technical infrastructure such as Internet connection and public transport facilities. But the 22@ district also means a high quality residential neighbourhood near the city centre of Barcelona. The public-private partnership 22@ promotes the settlement of companies helping them in aspects such as clustering, bureaucratic processes, hiring skilled a workforce and relations with public administration. The effects of 22@ district in attraction and retention have started to be assessed as the first stage of the project, finished in 2005, consisted mainly of urban renewal.

The main strategic clusters of 22@ district are:

- 1) Design: The last cluster to be added in the strategy, is based on the tradition of design of the city. The 'design hub centre' is under construction.
- 2) Energy: Based on large energy companies appeared as the result of liberalisation of energy markets in Spain.
- 3) Biotechnology: Based on the existing pharmaceutical and chemical sector.
- 4) Media: Tries to take advantage of the changing audiovisual industries and provides infrastructures for filming and production. The main company is Mediapro, partially owned by the city council.
- 5) Information and Communication Technologies: One of the most consolidated clusters of the 22@ districts tries to attract large companies. National headquarters of global companies like Microsoft, Google or Yahoo! are already settled in the district.

Finally, a notable increase in funding is foreseen for the coming years. Since the reintroduction of democracy in Spain, regional governments have acquired more and more powers, but without a corresponding increase in funding. Between 1980 and 2003 the nationalist conservative party CiU ruled the regional government generating a clear confrontation with the municipalities in the metropolitan region. Since 2003, a political

coalition lead by the social-democratic party PSC has been in the power. Given that PSC is governing most of the municipalities of the metropolitan region since the return of the democracy, multi-level governance has improved the situation slightly. The Neighbourhood Act passed by the new government is clear evidence of the new emphasis on neighbourhoods and municipalities since 2003. The new self-government statute of Catalonia, passed in 2007 but not enforced in practice until 2009, will provide more funding for the regional government, and will allow for the development of infrastructures in the metropolitan region.

In spite of these optimistic views, the economic crisis hinders possibilities for future development of the region. In the municipalities of the region that remain mainly industrial unemployment has been growing steadily since 2007, especially affecting non-qualified migrants and middle aged workers without training. The demise of the construction sector and the fall of internal demand explain this growing unemployment. In this situation different governments are developing policies to stimulate workers to receive further education and training. The national government, for instance is paying for Masters for unemployed graduates whereas municipalities are developing training at local scale in collaboration with local companies. Furthermore, the national government has a long term strategy to change the entire economic model from the construction sector to the 'green economy' based on knowledge intensive industries as the motor for growth in coming next years.

Summarising, we can find several policies and initiatives affecting the capacity of attraction of the different factors: in the following list the effect of the different policies in the different factors of location is summarised:

- **Promotion of the city as a place to visit and invest:** has an effect on the general image of the city and reinforces the role of soft factors as factors of attraction. Nevertheless it can have a negative effect on the promotion of knowledge as an asset of the city.
- **Public investments in internal transport connections:** ameliorate the connectivity between municipalities and the technical infrastructures. It can have an effect on retention, allowing for access to different neighbourhoods.
- **Public investments in international transport connections:** improves the international accessibility of the region and promotes it as a southern European international hub
- **Public and private efforts in internationalisation of companies:** Different institutions such as FAD are trying to link the 'Barcelona Brand' to added-value activities, mainly design. The label 'created in Barcelona' of Barcelona designs aims to make internationalisation easier by linking the product to the city. This has an effect on the image of Barcelona and can attract activities linked to design to the city
- **Strategic Metropolitan Plan:** The creation of a coordination governance mechanism between 26 municipalities of the region enables a coordinated strategy for growth and avoids competitiveness between municipalities in the different projects of economic development. Nevertheless greater integration of strategies is needed because most of the existing projects are on a local basis.
- **Better district act:** the program enforced in 2004 means an improvement in the quality of the most deprived neighbourhoods of Catalonia. The majority of them are in the Metropolitan Region of Barcelona. The program has invested roughly 1400 million Euros in more than 115 neighbourhoods.

- **Creation of factories for creativity and promotion of culture in the city of Barcelona:** Through these policies the public administrations try to foster the creative atmosphere of the city with the creation of public facilities for artists. Moreover, the city continues fostering culture and events as one of the main attractions to the city, which certainly has an effect on the creative atmosphere of the city
- **Promotion of different parks and projects linked to creative and knowledge industries:** The most relevant municipalities of the metropolitan region are developing new infrastructures and facilities to attract companies in the creative and knowledge industries. Most of these investments are based on public-public or public-private partnerships and have a direct effect as hard factors of location, with the creation of technical infrastructures for companies, specialised places covering all their needs for development. Some examples are:
 - **22@ district (Barcelona):** the most relevant project in the region, settled in Barcelona and with five different strategic clusters can be understood as an innovative scientific park inside the city
 - **Audiovisual park of Catalonia (Terrassa):** with 9000 squared meters, two sets and logistic facilities for the production of media, it aims a being one of the most relevant media production centres of Spain. It is based on public funds of the Regional government and the municipality of Terrassa.
 - **ESADE Creapolis (Sant Cugat):** A new Business park based on hosting the innovation departments of different companies. Companies are called to share their views to find new opportunities for business. The park is based on a public-private partnership and is lead by the business school ESADE, one of the most prestigious business schools in Europe
 - **Biopol (L'Hospitalet):** Scientific park based on health sciences to be inaugurated in 2015. The park is based on already existing models like the Park in Stockholm in Sweden
 - **Synchrotron Science Park (Cedanyola):** The park is based on attracting knowledge-intensive companies using the synchrotron and on creating new neighbourhoods and commercial activities in the place.

5 CONCLUSIONS

This report has evidenced the relevance of soft factors in the attraction and retention of workers and companies in the creative knowledge sectors in the Barcelona Metropolitan Region. Two points should be stressed in particular: first, the factors that can hardly be modified, improved or changed, such as the human dimension of the city of Barcelona, the proximity to the seaside and the mountains and the weather; second, aspects that are the result of historical stimuli to cultural activities in a broad sense, including, for example, the emphasis on architecture or leisure-time consumption activities. This research also highlights the close relationship and influences between hard and soft location factors in the BMR. As we have seen, a factor like quality of life is clearly influenced by other location factors such as the quality of public transportation systems or the cost of living. In addition, the effects of hard and soft factors may even work against each other: for instance, as mentioned elsewhere in this report, job opportunities, working environment and flexibility of labour time are certainly attractive in the BMR, but salaries and internet connectivity are not highly valued.

Personal careers and connections are relevant to all target groups. They are key to understanding the retention of local population in the region but also to recognising the attraction exerted over qualified migrants, especially from Latin America, most of whom follow their relatives or friends to the region. Having been born in the region is also a determinant for future residential and job location. In short, the BMR is hardly losing any creative and knowledge actors: these people feel quite settled in the area. Moreover, for those working in the creative sectors, the divide between personal and professional connections is particularly blurred, and the existence of informal professional networks can also be considered as a factor of attraction. So the relevance of different factors (hard, soft and personal networks) should be understood relationally. Nevertheless, each group of factors presents features of its own:

- Personal relations and networks are relevant not only in retaining people in the region but also in generating informal professional networks. These networks are especially relevant for creative workers. The strength of these social connections is closely related to elements of the city, such as its size and its climate.
- Most of the strong points in the BMR are attributable to soft location factors. The strength of the soft factors (non-quantifiable indicators) is key to understanding the region's capacity to accommodate the creative and knowledge sectors. According to the conclusions of earlier stages of this research project, Barcelona's improved position as an international pole of attraction and retention of talent is due not only to its economic development and the recent improvements in infrastructures, but also, and crucially, to the contribution of soft factors (Pareja-Eastaway et al., 2007). The image of the city and the "Barcelona model", the success of certain cultural sectors in building a dynamic creative atmosphere, and, above all, quality of life, combine to play an important role in the strong local conditions of the BMR.

- The assessments of the hard location factors are not as positive as those of the soft factors. Nonetheless, the overall situation of the hard factors in the BMR is not entirely negative: it would be an oversimplification to consider soft factors as strong points and hard factors only as obstacles. In this case especially the views of the different types of respondents should be taken into account. A significant number of hard factors receive medium ratings, and those linked to economically relevant sectors (node sectors) or areas important for the region's development such as Employment, Education, International Accessibility and Social Infrastructures are rated positively.
- Economic sectors (node sectors) which produce high added value and are internationally recognised as valuable and distinctive (for instance, architecture and higher education) constitute poles of attraction for the BMR in their own right.
- The obstacles Barcelona faces in its development as a creative and knowledge-based region are not, strictly speaking, hard factors. The need to transmit a clear development strategy, the improvement of coordination between the different levels of government, the current lack of internationalisation among companies, the cost and availability of housing and the need for environmental improvements are some examples. What is more, the importance of soft factors in the region, as we have seen, represents a challenge. These soft factors (geography and size, international image, culture, quality public spaces, architecture, etc.) also attract visitors and increasing numbers of tourists. Efforts must be made to control the quality of the tourism sector and to make sure that its presence does not negatively affect the lives of the city's residents (Pareja-Eastaway et al., 2007).

5.1 Policy recommendations

On the basis of the results presented in this report, we suggest the following policy recommendations:

- **Transversal policies:** As has been stated elsewhere in this report, underlying the strength of the soft factors is a strong policy commitment to their role in the region's capacity to attract workers. The clearest examples are the policies aimed at fostering the image of the city as a place with a high quality of life, based on Mediterranean values. In the near future, transversal policies to promote the city as a place for creativity and entrepreneurship must be developed. Along the same lines, transversal policies should be developed to encourage informal networks, including improvements in public spaces to foster social life and to promote new forms of association between individuals and companies in the creative and knowledge sectors. Initiatives of this kind are underway in the 22@project, but not in sectors that are not represented in that project, such as publishing.
- **The specific importance of education and training:** these areas come under "transversal policies" but, due to their contribution to a varied range of aspects, they are considered separately. As we have already mentioned, issues of attraction and retention should be transformed into a "mark of excellence" for those that have lived and worked in the BMR for some time. In this regard, policies reinforcing professional excellence are decisive for the competitiveness of the region not only because they may attract professionals who are

considering moving there but, especially, for those born in the region who are likely to continue living and working in the area, who will constitute the main source of available (qualified) labour-supply in the future.

- **Specific and sectoral policies:** Specific policies to promote the consolidation and internationalisation of the creative and knowledge sectors must be developed. These policies must include not only direct intervention in the sectors but also action designed to create ideal conditions for the emergence of new companies. The consolidated sectors need policies focusing on hard factors in order to encourage their internationalisation and raise their competitiveness in the global arena, whereas the emerging sectors need space and the conditions for self-development and growth, for instance through the creation of centres for media self-employees or small companies.
- **Developing strategies to complement tourism and creative industries:** The research carried out in ACRE shows that in the Barcelona Metropolitan Region the growth of tourism may hinder the emergence of creative and knowledge companies. In fact, mass tourism can have a negative impact on the creative atmosphere of the city and on the quality of life in the region in general. New policies based on the combination of tourism with the creative knowledge industries are needed.
- **Developing a more integrated approach to governance:** The Barcelona Metropolitan Region is formed by 164 municipalities with a number of economic subcentres such as Sabadell, Terrassa and Mataró. Greater coordination between municipalities in the development of the creative knowledge economy should be promoted in order to avoid competition at this level for local companies in the creative industries.
- **Long-term policies to prevent the risk of social exclusion:** Cohesive policies must accompany the strategy to stimulate and promote the creative and knowledge economy in order to increase the BMR's competitiveness in the European landscape. However, the risk of an increase in social exclusion and polarisation is high, and measures to prevent it should be included in the city's long-term strategy.

Summarising, policy recommendations should follow a sustainable scheme. That is, they should aim to achieve a regional equilibrium in environmental, social and economic terms. Care should be taken to avoid an unbalanced picture of the BMR as a competitive and attractive region but also as a region with an increasing risk of social polarisation.

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