## Barcelona as a competitive metropolitan region

Pathways to creative and knowledge-based cities

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### Barcelona as a competitive metropolitan region

### Pathways to creative and knowledge-based cities

ACRE report [2b]

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Accommodating Creative Knowledge – Competitiveness of European Metropolitan Regions within the Enlarged Union

Amsterdam 2006 AMIDSt, Faculty of Social and Behavioural Sciences, University of Amsterdam

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### 0 EXECUTIVE SUMMARY

The ACRE project –Accommodating Creative Knowledge: Competitiveness of European Metropolitan Regions within the Enlarged Union— looks at the determinants of economic activity location in different European urban agglomerations. It pays particular attention to the emergence and location of the so-called creative industries. The central research question to be addressed is: What are the conditions for creating or stimulating creative knowledge regions?

As Musterd et al. (2007) point out, limitations of the classical so-called "hard factors" as determinants of entrepreneurial location have influenced the analysis of the role played by new "soft" location factors such as quality of life or adequate environment. Therefore, competitiveness of regions and cities in Europe might be dependant on certain issues which will be explored throughout this project.

There is an evident academic controversy in defining "creative knowledge", as the ACRE report 1 has revealed. Furthermore, such a debate has currently reached political and stakeholders' arenas. At the end, conceptualisation of creativity becomes certainly arbitrary as it is evident in the selection of the ACRE "creative sectors".

This report focuses on the Barcelona Metropolitan Region (BMR) case as an example of a Southern European non-capital city, with a diverse industrial past and a shift towards the service sector in progress since the eighties. Certainly, the improved and improving position of Barcelona in international networks as a place for business and living in the recent past confirms the interest of such a case study.

This report exploits statistical data provided by different public and private entities. However, the following remarks have to be taken into account to properly understand the information provided: firstly data for the Metropolitan Region of Barcelona is not always available. Therefore, we must resort to data for other territorial levels of analysis such as the province or the Metropolitan Area instead. Besides, sectorial data are given only at national level. Consequently, disagregated data concerning other territorial levels such as the province is not exact. Secondly and broadly speaking, data on immigration is biased given the fact that it is based on the residential permit. Thus, it does not reveal the actual situation for it accounts for just legal immigration. Finally, the main source for national data, the Census, changed its format in 2001. Currently the census is updated continuously whereas formerly revisions were made every ten years only. Working with different data sources can generate misleading results.

Chapter one provides the contextual framework, which is the Spanish socio-economic context during the last decades whereas Chapter two outlines the main features of the BMR. For many years Barcelona was the most relevant industrial region of Spain. The economic recession in the 1970s led to a main economic change in the city, which shifted its economic activity towards services although industrial activity still represented a great proportion. Nevertheless, the region as a whole continued to base its economic profile on the manufacturing sector. The

region faced significant challenges to keep social cohesion while evolving towards a knowledge and innovative society.

Chapter three presents the historical development path of the BMR, which provides key elements to understand the current situation. Social composition in the BMR underwent substantial changes throughout the twentieth century. After a first industrial development in the nineteenth century, the Spanish Civil War and the post-war period delayed economic and social improvement. The late 1950s saw the industrial take-off of the country and the 1960s were marked by the migration flows from other parts of Spain. Transition to democracy and economic growth were accompanied by a transformed demographic composition, typical of Western societies, characterised not only by an ageing process but also by the relatively new phenomenon of the arrival of international immigrants. Chapter four gives an overview of the recent (2000-2006) socio-economic events in the BMR, and pays special attention to the observed changes in economic activity and social transformations. Besides, the Chapter addresses the main risks and challenges ahead.

Chapter five explains the main developments in creative and knowledge-based industries in the region. As we shall see, relevant differences between the city of Barcelona and the region, as regards their economic profile, emerge. While Barcelona has made some progress in attracting creative capital and innovation, the rest of the region remains basically industrial. There, small and medium enterprises that show a pattern of diversified activities and specialized nodes prevail.

Main policy strategies and challenges of BMR are reviewed in the last Chapter of the report. These reveal the efforts made by public and private bodies in attracting new activities. The analysis puts emphasis on the political willingness to transform the region and the city, specially outlining the key role played by strategic planning.



Plaça Real in Ciutat Vella district

"Library of courtesy, hostel for foreigners, hospital of the poor, home of the brave, vengeance of the offended and pleasant correspondence of the friendships, and in place and in beauty, unique; even though the events that have occurred to me there have not been to my liking, in fact of great sorrow, I am not sorrowful, just for having seen it."

Don Quixote on Barcelona **El Quijote, Miguel de Cervantes** 

### 1 THE SPANISH CONTEXT

During the last decades, Spain saw a wide range of transformations. From the political perspective, a pacific transition from dictatorship to democracy made of Spain an example to follow. Besides, the Spanish economic performance was forced to improve and to adapt from a relatively protected situation to open competition, given the European membership since 1986. The Spanish society follows the European path of transformation but, in addition, the country has shifted towards a more multicultural scenario. This chapter offers a brief introduction to the main features of Spanish political context, its society and economy.

### 1.1 Political overview

Spain had a population of 44,108,530 inhabitants in 2005 in an area of 504,000 square kilometres. Population density is 87.5 per square kilometre. The largest cities in Spain are Madrid with more than 3,000,000 inhabitants and Barcelona with more than 1,500,000. Four cities exceed the half million mark, 52 cities exceed the number of 100,000 inhabitants, and 67.7 per cent of the population lives in cities which have over 20,000 inhabitants. The Mediterranean Coast, Madrid and the southern region are the most densely populated areas in the country. The population increase in the above mentioned areas has been higher than in the rest of the country for the last twenty years.

The Spanish Constitution of 1978 decentralised government in 17 Autonomous Communities (*Comunidades Autónomas*) which have an autonomous parliament and government each. These have different jurisdiction in many political decisions: education, health, industrial promotion, and land planning. Catalonia, the Basque Country and Galicia enjoy wider legislative autonomy, in particular in the cultural field. The decentralisation process is an ongoing process, nowadays characterised by the approval of many new Constitutional Charts for each Autonomous Community (for instance, Catalonia passed its *Estatut d'Autonomia* in 2006).

Spain's accession to the EU in 1986 was one of the most relevant economic and political events in recent Spanish history. It strengthened the openness process of the Spanish economy and started the openness process of the Spanish society. Besides, Spain participated in the EMU since its very beginning.

### 1.2 Economic development

Spain's economy was, until the mid-eighties, conditioned by the political transition which delayed the economic adjustment to the seventies recession until the advent of democracy. Thus, the democratization process and industrial adjustment, which affected traditional sectors such as iron and steel, naval, textile and mining industries, coexisted in the first half of

the 1980s decade. Industrial adjustment generated a high rate of unemployment and social unrest.

The European membership gave momentum to the liberalization and internationalization process of the Spanish economy, which had been quite isolated until that time<sup>1</sup>. However, liberalization brought about changes in the competitive advantages of Spain's economy that increased the unemployment levels that the above mentioned microeconomic industrial adjustment had caused.

In the 1990s the adaptation process to EU directives continued. The main objective was to integrate Spain's economy into the European Economic and Monetary Union. From 1986 to 2005 Spanish economic growth was higher than the European average (see table 1.1). Furthermore, thanks to joining the EMS and the EMU Spanish inflation decreased and macroeconomic stability improved. During the expansion periods of the economic cycle (1986-1991) and (1994-2005), the GDP growth rate was considerably higher than in the rest of the European Union except for Ireland.

**Table 1.1 - GDP growth rates (in average)** 

	1986-1991	1994-2005	Total (1986-2005)
Spain	4.2	3.1	3.1
EU-15	3.0	2.2	2.3

Source: Eurostat

Nevertheless, the increase in productivity was very modest for the period 1986 - 2003. Just 1 per cent annually compared to 1.6 per cent in the EU. The causes that lay behind this are, on the one hand the prominence of labour intensive sectors such as certain services and, on the other, the low level of R&D expenditure in Spain (see table 1.4).

The significant economic growth together with the scarce increase in productivity prompted a rise in employment, particularly in the second half of the 1990s. From 1996 to the present, salaries slightly increase in real terms. Almost 30 per cent of employment in the EU-15 from 1998 to 2005 was created in Spain. However, this growth model, which is based on the use of intensive labour and which requires little innovation is one of the weak points of Spain's competitiveness. As Pérez (2004) points out, Spanish competitiveness has been based for many years on low costs. However, labour cost per unit has recently increased more than in the rest of the EU due to the absence of productivity rise.

Parallel to the above developments, income levels in Spain have converged with those in the rest of the EU. This was due to the higher growth of the Spanish economy compared to the growth in the rest of the EU (as seen in table 1.2). From 1986 onwards Spain's income levels were only outperformed by Ireland's.

<sup>-</sup>

<sup>&</sup>lt;sup>1</sup> Indeed, both the trade openness index (X+M)/GDP) and the stock of FDI (Foreign Direct Investment) related to GDP rose significantly from 1986 onwards. The former reached 60 per cent of GDP in 2005, thus doubling the figures for 1986. FDI in Spain was 33.6 per cent of GDP in 2003 compared to 15.3 per cent in the EU-25 while Spanish investment abroad accounted for 30 per cent of GDP compared to 19.8 per cent in the Euro zone.

Table 1.2 - Per capita GDP Spain/EU

	1986	1995	2005
PPP (*) Spain/EU-15	71.6	78.9	90.1
PPP Spain/EU25	-	87.5	97.4

(\*) PPP Purchasing Power Parity

Source: Eurostat

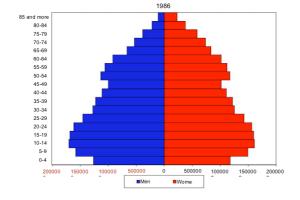
The increase in the employment rate has resulted in the fact that economic growth has gone hand in hand with a better income distribution. The rate between the income received by the 20 per cent of population with higher income and the 20 per cent of the population with lower income went from 5.9 in 1995 to 5.1 in 2004. In the EU-15 the difference between these two income groups changed from 5.1 to 4.8 in the same period of time.

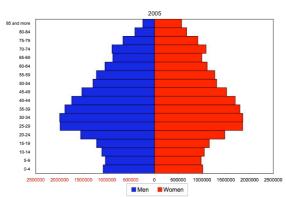
Spain has benefited from European Regional Policy since its inception. Under the scheme Spain has received, from 1986, 78.131 million euro net in current terms<sup>2</sup>. The funds have been used to improve communication infrastructure, equipment, and to re-orientate industrial and agricultural activities, in particular in regions located in the South and North-west of the country<sup>3</sup>. Besides, a substantial part of the funds has been allocated to improve urban areas. The accession of new countries will, in the near future, determine the reduction in the amounts perceived by Spain, and whether the country will become a net contributor to the EU.

### 1.3 Socio-demographic and cultural development

Spain's population, which was 38.5 million inhabitants in 1986, increased at a low pace until 1996. The reason was the country's lower, compared to the European average, birth rate. Since 1996, though, the pace in population increase has, thanks to immigration, accelerated and nowadays Spain's has 44 million inhabitants. The pyramid population in figure 1.1 shows the marked ageing process of Spanish population.

Figure 1.1 - Population structure in 1986 and 2005





Source: INE

<sup>2</sup> This quantity corresponds to  $\in$  93, 350 in 2004 prices.

<sup>&</sup>lt;sup>3</sup> The funds contributed, for instance, to quintupling the motorway network between 1986 and 2004.

As we have seen, there was an increase in the number of people employed in the same period. At the same time the rate of unemployment decreased steadily and stood at 8.4 per cent in October 2006, 0.5 per cent above the figure for the EU-25. The highest employment growth has taken place in the service and construction industries, which are often protected from competition from outside. The activity rate stood at 72.5 per cent for people who are between 16 and 65 years old.

In an attempt to strengthen social policies, the Spanish government has recently passed the Dependency Act (*Ley de dependencia*). Its aim is to cater for people who need daily care. Moreover, the minimum wage has been increased in real terms and equal opportunities legislation has been put in place. Thus, the government will fund programmes to prevent gender discrimination and to favour the integration of immigrants and ethnic minorities.

Immigration has been the most remarkable demographic event in the last decade in Spain. From 1996 to 2005 over three million foreign nationals arrived in the country (See table 1.3). Seventy per cent of immigrants settled in the region of Madrid, the Mediterranean coast and Andalusia in the South of Spain.

Table 1.3 – Immigration in Spain 1996-2005

Origin	Number of people	Percentages
Total	3,134,712	100.0
Europe	1,087,556	34.7
UK	187,144	6.0
Romania	290,001	9.3
Africa	461,714	14.7
Morocco	322,291	10.3
Asia	113,346	3.6
China	55,807	1.8
America	1,240,584	39.6
Ecuador	370,259	11.8
Others	231,512	7.4

Source: INE

Immigration has affected the birth rate, the labour market and housing. 73 per cent of foreign nationals who are above 16 years of age have completed secondary education, and 19.2 per cent are university graduates. These percentages increase for those who are EU nationals.

However and broadly speaking, foreign nationals have come to fill unskilled jobs. Their impact on the labour market has slowed down the rise in salaries, and has increased the number of workers employed in precarious conditions. Housing demand has been fuelled by immigration. Immigrants have accessed the most degraded cities areas. Consequently, they find themselves in situations of marginality and social exclusion. The contribution of immigration to Spanish society has not yet been properly assessed since it is a relatively recent phenomenon. Up to now, it has contributed positively to the country's economy for half of the total economic growth of the last years is attributed to immigration (Oliver, 2006a). However, both productivity and the average real salary have decreased. Although until the present time there have not been any episodes of social confrontation that can be

attributed to immigration, we need to take into account its recent occurrence. The experience is at the moment of first generation immigrants and therefore the potential social tension of the phenomenon might still be ahead. One of the upcoming challenges for Spanish society will undoubtedly be to remain tolerant of immigration and to accept the cultural diversity that goes with it.

### 1.4 Urban policies and housing

As far as urban policy is concerned, the responsibility for elaborating general rules about land qualification and land use falls on the state, the Autonomous Communities pass urban laws and the municipalities implement them through their urban plans. Although, this means that there is a hierarchical structure in these three institutional levels, from the state to the municipalities, at the end of the day, the municipalities have the greater degree of influence in shaping towns and cities. For our purposes, it is worth to mention that, local government responsibilities are not included in the Constitutional Chart of 1978. They are defined in the Local Government Act of 1985 (Ley 7/1985, reguladora de bases del Régimen Local). Municipalities, according to the above law, showed a growing shift of responsibilities from the national government without simultaneously providing income sources. Urban planning has become in many cases, the main income source for local governments. Taking into account that local governments increase their income through a range of taxes when land is in advanced steps of construction, their interest lays in the more the number of developments, the best. Unfortunately, this fact has favoured many fraud situations, which have emerged lately in Spain (i.e. the Marbella case in Málaga in 2006 and the Andratx case in Mallorca in 2007).

The Land Use Act of 1956, which was modified in 1976, 1990 and 1992; the laws that regulated the housing market made in 1986 and the Land Act of 1998 shape the general legal frame of urban policy in Spain (Sánchez de Madariaga, 2004). The first of the above legislation was quite restrictive while the later acts were liberalizing, particularly that of 1998. The central government 1998 Land Act has been interpreted and implemented differently by different Autonomous Communities. Thus, while Catalonia elaborated a law (*Llei del Sòl, 2002*) which kept the trends of the existing law, that is, the one prior to 1998, the Autonomous Communities of Valencia and Madrid passed legislation which was clearly liberalizing.

Until the seventies, the need to cater for the housing demand of domestic migration resulted in the creation of compact industrial cities such as Barcelona and Bilbao, which were classical industrial nineteenth-century cities, and Madrid, of a more recent origin. However, popular criticism to this type of urban development and, above all, economic recession and subsequent deindustrialization caused the loss of population in big cities to their conurbations. The eighties and nineties saw different experiences of urban renewal. Old industrial sites were recuperated for community use and city quarters. The most remarkable cases are Ciutat Vella in Barcelona, la Ría in Bilbao, and Palomeras in Madrid, which underwent complete processes of regeneration and rehabilitation. Moreover, initiatives, mainly the construction of science and technology parks, aimed at creating a favourable environment for activities related to new technologies have been fostered, specially, in big cities (Madrid, Barcelona, Valencia). The latter interventions seek to transform cities into competitive platforms with the potential to attract investment and human capital.

The construction of housing has experienced two periods of remarkable expansion (Rodríguez, 2006): from 1986 to 1991, and from 1997 to 2006. The first of these two periods was fuelled by measures that fostered demand, such as the liberalization of rent, the deregularization of loans, and fiscal advantages introduced in 1986. Immigration, foreign investment, and adhesion to EMU, a fact that gave confidence to investors and helped to reduce interest rates, sustained the second. Significantly, the liberalizing policies whose purpose was to stabilize the housing market have caused a housing boom with a considerable increase in prices. The Spanish housing market is characterised by an unbalanced situation in terms of tenure (Pareja & San Martin, 2002); indeed, owner-occupation represents 82 per cent of the total housing market, while rent only accounts for 11 per cent. In addition, an enormous increase in housing prices has taken place during the last decade. The high cost of housing is one of the main explanations for social inequality which affects in particularly young adults and mono-parental families, a form of household which, in accordance with the times, is on the rise in Spain (Pareja Eastaway, 2006). Moreover, high housing prices hinder labour mobility.

The attempts to stimulate rent within the housing market have not succeeded up to now. Therefore ownership is the most usual form of tenure in the country and certain collectives have difficulty in accessing adequate housing (Pareja Eastaway, 2005).

# 1.5 Economic development with mention of creative industries and knowledge economy policy

Knowledge economy, which is based on the production, distribution, and use of knowledge and information, rests on the human capital of a country (Trullén et al., 2002). The human capital of Spain is similar to that in the rest of EU. 24.4 per cent of the population aged between 25 and 64 years has completed university education. The percentage in the rest of EU-15 countries is 22.7. The number of technical graduates is close to that in the EU (see table 1.4). However, when we look at the use of this human capital some differences between the EU and Spain become evident. The budget for R&D, which barely exceeds half of the European average, is one of the most significant delays in Spain's economy. Besides, it accounts for the slow rate of increase in productivity<sup>4</sup>. This fact is related to productive specialization where there is a deficit in medium and high technology sectors and in those which require intensive knowledge.

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<sup>&</sup>lt;sup>4</sup> However, in Madrid, Catalonia and the Basque Country R&D expenditure exceeds 1.5 per cent of their GDP.

Table 1.4 - Technology and knowledge activities Spain and EU. Percentages.

	2000		20	04
	Spain	EU-25	Spain	EU-25
Science and technology graduates over 20-29 years/	9.5	10.2	12.5	12.7
population				
Expenditure in R & D/GDP	0.91	1.86	1.07	1.86
Business enterprise sector	0.49	1.21	0.58	1.18
Government sector	0.14	0.26	0.17	0.25
Higher education sector	0.27	0.39	0.31	0.41
Researchers/total employed	1.11	1.31	1.33	1.36
Employment in high and medium technology sectors	24.5	37.7	27.0	34.7
Employment in knowledge intensive sectors/total	4.8	6.2	4.23	5.6
employment				
Exports of high technology products/ total exports	6.0	21.0	6.0	18.0

Source: Eurostat

As evidenced in table 1.4 there are fewer people employed in technical and knowledge intensive sectors in Spain than in the rest of EU countries. Consequently the capacity to export products of these sectors is scarce. Indeed, the insufficient financial resources allocated to research make it quite difficult to improve productivity through R&D. The government plan for 2004-07, which establishes a 10 per cent increase in the research budget, aims at redressing the deficit in research activity, promoting the cooperation of companies and government, and at establishing priority objectives.

As far as information society is concerned (Table 1.5), Spain lies behind the EU not because of the lack of communication infrastructure, which is similar to the European average, but because individual use of new technologies is insufficiently promoted. Besides, internet is more expensive in Spain than in the rest of European countries.

Table 1.5 -Internet users and broad band in Spain and EU-25. Percentages over total population (2005)

	Spain	EU-25
Broad band (nº lines over population)	10	10.6
Households with internet	36	48
Internet Users	35	43

Source: Eurostat

### Creative Industries

Creative industries such as advertising, TV and radio, cinema and video, architecture, hardware and software consultancy, design and more recently the production of videogames account for 2.4 per cent of Spain's GDP and for 3 per cent of people in employment. Creative industries are located mainly in Madrid and Barcelona. The support given to these activities by the Autonomous governments, mainly through fairs and exhibitions, might improve the competitiveness of the above creative industries.

### Cultural Industry

Both globalization and the emergence of autonomous, local and private television stations have reshaped some of the existing cultural and creative industries in the last two decades (Gámir, 2005). As a result, multimedia corporations dedicated to press; radio, television and publishing have been created. These groups generate economies and externalities within the corporations. The average size of companies and groups of this sector is smaller compared to European, and above all, American standards. This is the reason why there have been several alliances with international holdings.

The majority of Spain's cultural industry is located in the North-East of the country that is, in Madrid, Barcelona, Valencia, and to a lesser extent in Zaragoza. From a strategic point of view, the Spanish speaking community in the American continent offers excellent perspectives for Spain's cultural industries.

### 1.6 Conclusions

After a long period of isolated development, in recent decades Spain has experienced an internationalization process in economic, political and social terms. International migration flows to Spain have contribution to these major changes. This internationalization process has gone hand in hand with rapid economic growth and industrial transformation characterised by a loss in relevance of heavy traditional industry. As far as creative and knowledge intensive industries are concerned, Spain suffers from a delay in R&D activity, when compared to other European Union countries. This fact translates into a low growth in productivity. However, the country retains its favourable strategic position in the field of creative and cultural industries towards Latin America.

Chief among future challenges is the fostering of R&D activity through public-private collaboration in order to improve productivity and competitivity, the acceptance of migration inflows as an intrinsic element in Spanish society, and the resolution of problems in the housing market.



View of Barcelona from the seaside

"Although by the end of the nineteenth century, it was common to say that Barcelona lived 'back to the sea', the daily life did not corroborate such a statement. Barcelona was and always had been a harbour city: it has lived of the sea and for the sea; it was fed by the sea and gave to the sea the results of its efforts."

The City of Marvels, Eduardo Mendoza

### 2 Introduction to the Barcelona Metropolitan Region (BMR)

### 2.1 Geographical / Demographical context

The city of Barcelona is the capital of the Autonomous Community of Catalonia, the North-Eastern region of Spain, which represents 6 per cent of the national territory. The Autonomous Community accounts for 19 per cent of the Spanish national income and Barcelona represents the highest percentage. The city of Barcelona is also capital of the province of the same name<sup>5</sup>, which is the most important of Catalonia not only in economic but also in demographic terms. It includes the whole metropolitan region of Barcelona, which is the second most important urban agglomeration of Spain after Madrid and the fifth industrial agglomeration of Europe. The region remains also between the most important urban agglomerations of the EU (Rojo, 2001).

Barcelona is a seaside town on the Mediterranean coast. The boundaries of the city are determined by the river Besòs in the North, the river LLobregat in the South and the Collserola coastal range in the West of the city. Its strategic position contributed to its success during the industrialization process. The geographical boundaries of the city have determined its territorial spread and the relation with neighbour cities. Instead of growing and absorbing surrounding cities, Barcelona has created strong networks with them. Hence, these cities have maintained their historical identities and local authorities, despite their economic and historical linkage to the capital. The result of these interactions is a multi-nuclear city region with Barcelona as its core centre but with other important cities linked to it (Trullén and Boix, 2003).

The so-called Barcelona Metropolitan Region (BMR) does not have a common administrative authority<sup>6</sup> but is defined by its urban and economic dynamics. The common definition of the metropolitan region —which is used also by most local and regional authorities— describes it as formed by the six counties surrounding Barcelona: L'Alt Penedès, Baix Llobregat, Barcelonès, Garraf, Maresme, Vallès Occidental and Vallès Oriental and the county of Barcelona itself:. This extensive region has 4,320 square kilometres and contains 162 municipalities, that is, it represents 80 per cent of the province of Barcelona. Figure 2.1 shows the metropolitan region divided by the seven counties and the capital cities of each county.

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<sup>&</sup>lt;sup>5</sup> Provinces are the territorial administrative units of Spain. Catalonia has four provinces: Tarragona, Lleida, Girona and Barcelona.

<sup>&</sup>lt;sup>6</sup> Between 1974 and 1987 there was a regional authority called Metropolitan Corporation of Barcelona but it disappeared for political reasons. Jordi Pujol, then president of Generalitat de Catalunya, the autonomous community government, saw in this regional metropolitan authority a counter-power. Thus, he eliminated the metropolitan authority (García, 2002).

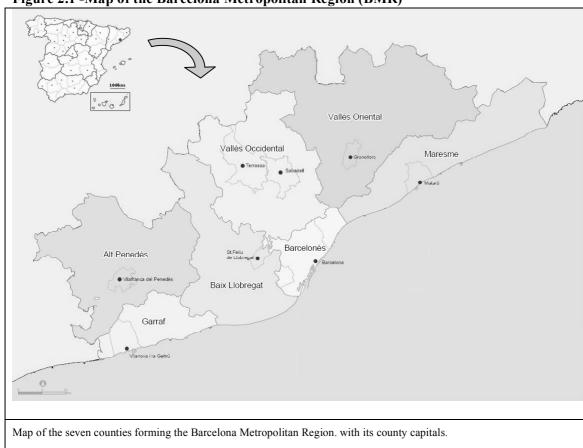


Figure 2.1 -Map of the Barcelona Metropolitan Region (BMR)

Source: Autoritat metropolitana del Transport website

As far as demographic issues are concerned, the metropolitan region is home to 4.4 million persons that represent roughly 70 per cent of the total population of the Autonomous Community. Approximately 2.4 million persons —over 50 per cent of the total—live in the county of Barcelonès, which includes the cities of Barcelona, Badalona, L'Hospitalet de Llobregat, Sant Adrià del Besòs and Santa Coloma de Gramanet.

Table 2.1 shows the main figures in demographic terms in Barcelona, the metropolitan region and the Autonomous Community of Catalonia. The population grows in the three areas, but the lowest increase is in the city of Barcelona (6 per cent compared to 10 per cent in Catalonia). Until 2001 the city experienced a gradual population loss and the recent growth can be attributed to migration flows, as we shall see later.

Table 2.1 - Main demographic figures of the region (2005)

	Total population	Population growth	Population Density	Population structure		
		(2001-2005)		0-14	15-64	65 +
Barcelona (city)	1,593,075	5.9	15,868.9	11.7	67.6	20.7
Metropolitan	4,770,180	8.6	1,471.6	14.1	69.7	16.2
Region	4,770,100	0.0	1,471.0			
Catalonia	6,995,206	10.0	217.9	14.3	69.2	16.6

Source: Anuari Estadístic de Catalunya (2005)

Barcelona follows the general demographic trends of European developed regions, with an ageing process of the population, especially in the city of Barcelona. As evidenced in Table 1.1: 20.7 per cent of the total population of Barcelona is 65 years old or older whereas the percentage for the region is 16.2. The city itself has 100.4 square kilometres and, when compared to the whole city, a high population density (15,869 inhabitants per square kilometre). Population structure has started to change due to growing migration flows especially from North Africa and South America. Barcelona city-region is strongly affected by global migration flows to Spain since the city is one of the favourite destinations for migrants. Consequently the region has one of the highest rates of migrants in Spain. In the whole province of Barcelona foreigners are 7.8 per cent of the total population. The age structure of migrants reveals a young profile which causes an increase in birth rates. Table 2.2 shows the distribution of foreigners by origin. As it is easily noticed, most of the migrants come from Central and South America, especially from Ecuador. Another important group comes from Africa, mainly from Morocco.

Table 2.2 - Origin from foreigners of Barcelona province (2005)

Origin	Foreign population	Percentage over total
		population
Europe	72,548	1.4
Africa	120,282	2.3
Asia	56,031	1.1
America	161,490	3.1
Oceania	233	0.0
Not given	155	0.0
Total	410,739	7.9

Source: Anuari Estadístic de Catalunya (2005)

### 2.2 Main economic specializations

In the last two centuries Barcelona became a classic dense industrial city and the most industrialized city-region of Spain. This condition remained the same until recent decades, when Madrid took the lead in the industrial field (García, 2002). In many ways Barcelona is still considered the industrial capital of the country and an essential agent for the insertion of Spanish economy in the European context. In this sense Catalonia and the metropolitan region are the main exporters of Spain with 27 per cent of total Spanish exports (Trullén, 2001a). Barcelona's regional industrial structure is based on its polycentric nature, with a diversified economy on the whole but with specialized centres in the medium and small cities surrounding Barcelona.

Nevertheless, the city-region economic basis is changing into a service-based economy, where knowledge is called to have a central role. This structural change is clearly visible in the city of Barcelona, where knowledge-based industries are replacing the old industrial sites, which, in turn, are moving to the metropolitan region. In the whole region, however, while the industrial growth rate is negative, services and construction sectors show a positive rate. Although the primary sector has been a marginal economic activity for quite some time now, its decline continues in the present time. Emergent primary activities such as decorative flower crops or wine production do not compensate for the diminution of more

traditional primary activities. Table 2.3 shows the GDP growth of each sector in 2005. It evidences the general trend of the region: services and construction grow while the primary sector and industry decline.

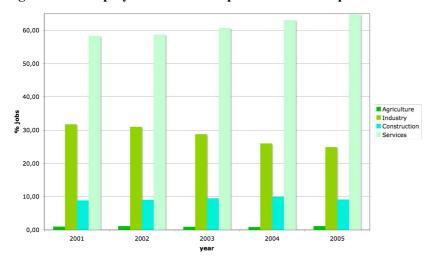
Table 2.2 - GDP Growth per sectors in the province of Barcelona

Sector	GDP growth (2005)
Primary sector	-4.4
Industry	-0.5
Construction	5.3
Services	4.1
Total	2.9

Source: Anuari Econòmic Comarcal 2005

The above changes allow for an analysis in terms of job distribution. Figure 2.2 shows the evolution of employment distribution per sectors. There is a steady decrease in industrial jobs and an increase in tertiary sector jobs.

Figure 2.2 - Employment evolution per sectors in the province of Barcelona



Source: IDESCAT

The city of Barcelona has its own economic dynamic, relatively autonomous from the rest of the region. In that sense, the figures that follow show the importance of the service sector for the city, and the impact of the knowledge economy. Roughly 60 per cent of knowledge-based jobs and companies of the region are concentrated in the city of Barcelona (Trullén, 2001a) whereas the region has still an industrial profile. The service-based economy is much more present in Barcelona than the region, which remains mainly manufacture-oriented. In the city of Barcelona, 82 per cent of jobs are in the service sector but in the whole region these jobs represent only 45 per cent of total (IDESCAT, 2006). Thus, the city is becoming the services provider for the rest of the region.

The industrial sector in the BMR is undergoing major changes: former important sectors such as textile industries and machinery and mechanic equipment are now in crisis, whereas other sectors such as chemistry are on the rise. The industrialization process in Barcelona was linked to the rising of a powerful textile sector that started to decline in the 1970s. As many other industrial sub-sectors, textile industries must face the growing competition of less developed countries such as China or North Africa. Although the textile

sector is still significant, its contribution to industrial GDP has dramatically decreased. Machinery and electronic sub-sectors follow a similar trend. This negative evolution explains, to a considerable extent, the decline of the whole industrial sector in the region, since the growing sectors cannot counterbalance the decline (see chapter four for further information).

This is the reason why governance is focused on generating the necessary conditions for the knowledge economy. Nevertheless, the challenge for the region as a whole is to carry out this transformation paying particular attention to two factors. On the one hand, the slump of former powerful industrial sectors such as the textile sector for these sectors employed an unskilled workforce that cannot be easily integrated into the knowledge economy. Recession on these sectors means destruction of unskilled work places and creation of new knowledge-based jobs that unskilled workers cannot fill. On the other hand, the region has an historical lack of infrastructures, mainly internal railway connections, that hinders the mobility between small and medium cities.

Barcelona itself must tackle its own challenges. Firstly, the city must find a balance between competitiveness interests and citizenship policies. Tourism, for example, is a growing sub-sector that can collide with the interests of citizens. The city must attract new kinds of tourism. Indeed, Barcelona must offer its cultural assets rather than the beach and the sun as its main attractions. Secondly, the city must face a new urban model which has to be developed without the help of outstanding events such as the Olympic Games.

## 2.3 Conclusions: main challenges and position in European networks and hierarchies

Spain's accession to the European Union in 1986 enormously affected the path of economic development of the country. This phenomenon was especially evident in large cities. At that time, Barcelona changed its strategy and, in particular, its economic specialisation: from an industrial city, oriented to the Spanish internal market, it became an international metropolis oriented to external markets (Trullén, 2001a). Since then, the region has improved its international and European relevance in economic networks. The Olympic Games of 1992, which put Barcelona on the map, allowed for urban regeneration and a new global public image of the city emerged. Thus, Barcelona became an attractive city not only to set up a business but to visit or to live as well. Its appeal as a tourist destination ceased to be seasonal. It started to attract tourist and visitors that came for reasons other than the sun and the beach. Besides, the city started to attract capital and improved its relevance among European cities. According to the European cities monitor, Barcelona is the fourth favourite city to locate a business. In the last two years, 2005 and 2006, Barcelona has surpassed Amsterdam and Brussels in this ranking and now only London, Paris and Frankfurt are considered better cities for business location (European cities monitor, 2006). The city is also among the ten most visited cities of Europe. Taken together, the above indicators confirm Barcelona's tourist attractiveness and its business power. A further asset of the city is its quality of life for employees. According to the European cities monitor again, Barcelona has been the first city in quality of life since 2000. Obviously, the rankings given above are valid only for the city of Barcelona and not for the whole city region, which is made up of towns and cities whose profile is still industrial. In those places the quality of life is substantially lower than in the capital.

In spite of its positive position in a global comparison, Barcelona city region suffers from a lack of adequate physical connections with the European networks. El Prat airport, the international airport of Barcelona, even though it is one of the ten most important European airports, it is relatively small for such a relevant city as Barcelona (see Chapter four). Moreover, the airport has a deficit of international connections when compared to that in Madrid and plays a *feeder* role of the European companies (Bel and Fageda, 2006). In addition, the Port of Barcelona will be enlarged in order to expand its influence to the North-East of Spain and South of France (See Chapter four).

Barcelona does not yet have a High Speed Train to connect the region with Madrid and Paris, and has old road infrastructures. Hence, *Generalitat de Catalunya*, the autonomous authority, promoted, with other regional authorities, the Mediterranean-Pyrenees Euro-region, which includes the autonomous regions of Aragon, Catalonia, and Balearic islands, as well as the French departments of Languedoc-Rousillion and Midi-Pyrenees. The creation of this massive region aims at improving trans-European connectedness by creating economic and social links between regions of different states. In this way, the Euro-region wants to transcend the traditional state-based borders to improve transport infrastructures and be closer to the most dynamic core of European economy. As the most significant urban area of the Euro-region, Barcelona can improve its position in Europe and be the core of a southern European network.



Les Rambles de Barcelona

"He walked along the alleys abandoned to their useless history, seeking the city full of workmen making it into an Olympic shop window. The cathedral, although distant, loomed over the building works of an underground car park that would allow an increase in the number of Japanese visitors before the year two thousand. We apologise for the inconvenience. We are working for you. Barcelona, get dressed up! Barcelona more than ever. Everyone seemed to be passing through; even the city was passing between a known past and a future without precise limits."

El laberinto griego, Manuel Vázquez Montalbán

# 3.1 Barcelona before 1950: industrial development, social struggles and civil war.

Since its foundation<sup>7</sup>, Barcelona was a centre for commerce and trading. During the Roman Empire the city became-relevant in economic terms due to its strategic situation in the Roman trading routes. Thus, in the middle ages Barcelona became a key player in the Mediterranean commerce During this period the city was the capital of Catalonia and one of the most important cities of the Kingdom of Aragon. The union of Aragon and Castile to form the new Kingdom of Spain, and the rise of transcontinental commerce after 1492 resulted in the loss of political power for Barcelona. Hence, in the sixteenth and seventeenth centuries, the city was forced to find its place in a new context. The "discovery" of America had made the world wider, and created a new geopolitical order in which Barcelona played a minor role. The city was excluded for political reasons from transcontinental trading and tried to maintain its economic influence in the Mediterranean commerce, but failed. Until the beginning of the eighteenth century the city was immersed in permanent recession. At the beginning of the nineteenth century, with the development of capitalism in Spain, Barcelona became the main industrial region in the country. Industrial development took place in the city of Barcelona, the main centre of activity, and in cities such as Sabadell, Terrassa and Mataró, where small and medium companies related to the textile sector were located.

The emergence of capitalism is linked to multiple cultural factors. In the eighteenth century, the Catalan institutions for self-governance had been abolished and the region remained under the Kingdom of Spain, which ruled under the principles of the Castilian-Borbón Monarchy. From the nineteenth century onwards, the emergent Catalan bourgeoisie began to pose a series of demands to the central government in Madrid that this institution, which was still deeply connected to nobility and which retained many feudal features, had difficulty in comprehending. The main cultural movement in Catalonia was "the renaissance" ("la renaixença"). It rested mainly on the principles of Catalan nationalism and one of its main objectives was the recovery of Catalan culture. For the advocates of the movement the knocking down of the walls of Barcelona and the enlargement of the city were of the essence.

Despite political reservations on the part of the central government, the demands found favour and in 1854 the demolition of the city walls started. The construction of an enlargement to the city (*Eixample*) began ten years later. The expansion envisaged the use of vast territories between the rivers Besòs and Llobregat, as well as the addition of the towns located in the nearby flatland which were already economically dependant on Barcelona. The expansion was designed by Ildefons Cerdà whose plans took very much into account the needs of an industrialized society (Solà-Morales, 1995). Thus, the plan included the construction of housing for the working class, industrial districts, equipments and transport infrastructure such as railway and underground. The fact that the first railway line of Spain

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<sup>&</sup>lt;sup>7</sup> The origin of Barcelona is not clear. Although there was population living on the area from the Neolithic age, the Romans refounded the city in 218 BC with the name of Barcino.

was constructed to connect the cities of Barcelona and Mataró in 1848 is an example of the dynamism and industrious mood of the city at the time.

Although the city, as planned by Cerdà, was to be compact from its inception, land speculation and the pressure of promoters led to even more building and the final result was an area that was much denser than expected. Besides, the emergent textile industry had located in towns on the borders of Barcelona because of the lack of space that prevented expansion in the city. With the construction of the *Eixample* these towns became part of Barcelona serving as its industrial districts. Those areas corresponded mainly to the current districts of Sants and Sant Martí (Grau, 2004). Many other cities that are part of the metropolitan region today experienced sustained industrial development thanks to the textile industry and energy. This would be the case for Sabadell and Terrassa, cities that attracted a considerable number of workers.

The position of Barcelona as regards Spain's economy has accorded the city a paramount role in generating economic, social and cultural phenomena associated to the process of industrialization that surpasses that of any other region in Spain. In addition, Spanish trade policy was oriented to preserve the inner market for the national industry, a fact that benefited directly Catalan businesses. Industrial development first and industrial diversification later on made of Barcelona a referent. This was so not only in the economic field but as far as culture was concerned too. Industrial development implied the existence of a bourgeois class that during the romantic period, that is, in the last quarter of the eighteenth century, managed to consolidate the cultural recovery of Catalonia. The restoration affected literature, plastic arts and architecture mainly<sup>8</sup>, and was at its most visible in the city of Barcelona were culture in general and architecture in particular flourished.

The drives of the city and of the Catalan bourgeoisie were made known with the organization of two universal exhibitions (1888 and 1929). Both events involved urban development projects. Indeed, the 1888 exhibition aimed at recuperating an area next to the harbour and the old military citadel, while that of 1929 was destined to recovering the southeast part of the city, mainly the *Montjuïc* Mountain. Sustained industrial activity generated marked social segregation. In contrast to what happened in other European countries, the industrial working class in Barcelona organized around the principles of anarchism, regarded as a political and cultural movement. The existence of a vibrant anarchist current allowed for the coexistence in the cultural field of a strong Catalan nationalism of bourgeois origins and of internationalizing anarchism which promoted social auto-organization of the population. Nationwide, there was a general feeling of cultural renaissance and new ideas and currents of thought from the rest of Europe were avidly received. At the same time social inequality became an issue. It was within the above context that in 1931, the second Spanish Republic was proclaimed. Catalan nationalism saw in the new democratic political system the possibility of recovering the institutions of self-rule that had been abolished in the eighteenth century. Indeed, the new Spanish Republic contemplated, at its inception, the autonomy of Catalonia that would become a reality with the Generalitat (the Autonomous Community government).

<sup>&</sup>lt;sup>8</sup> During this period, Catalan architects — Gaudí, Domènech i Montaner and Puig i Cadafalch— developed their own style, the so-called Modernism.

The industrialization and development of Barcelona as an industrial region brought about, as mentioned above, the emergence of a nationalist movement which was associated to the bourgeoisie, as well as a powerful cultural movement that was grounded on the principles of anarchism and promoted social self-organization. Both movements were absolutely relevant in the first third of the nineteenth century and influenced local politics until the Spanish Civil War. In fact, 1936 saw the advent of a fascist military regime who rose to overthrow the democratic government of the Republic, but the *coup d'état* did not succeed. The events evolved, instead, towards civil war. Between 1936 and 1939 Barcelona came to be, firstly, a revolutionary city where the principles of anarchism were implemented, and, secondly a stronghold of republican resistance. These were the reasons why the city suffered severe bombings during the war and fierce repression after the fascist victory.

Before the Civil War, anarchism promoted the creation of workers' associations, and actively campaigned and provided the means for achieving literacy among popular classes. It was also responsible for the advancement of publishing, imported movements such as naturism and vegetarianism, and advocated for the rights of the workforce. The movement succeeded in creating a social network for the support of poor people and that, in addition, lent a helping hand to immigrants (Abelló and Gabriel, 1995). For the major part of the nineteenth century Barcelona had received rural population from other parts of Catalonia. These immigrants were the first workforce for the cotton industry. Towards the last third of the century there was a significant inflow from the rest of Spain. It was this latter group that gave momentum to the anarchist movement. Figure 3.1 shows demographic evolution between 1717 and 1986. There are two periods of accelerated growth. The first corresponds to the 1920s, a time when major infrastructures such as the construction of the underground and the buildings for the 1929 universal exhibition attracted population from the rest of Spain. During the civil war and the post-war years the growth in population stagnated. This situation persisted until the 1950s, when a second period of accelerated growth occurred. This would continue until the 1980s. As we shall see presently, this period coincided with the expansion of manufacturing industry in the BMR, which acted as a pioneer for Spain's economic development, and that attracted population from the rest of Spain.

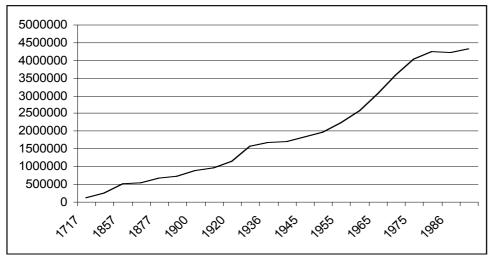


Figure 3.1 Evolution of BMR population (1717-1986)

Source: Own calculations from IDESCAT data.

Franco's regime abolished one more time, all the Catalan institutions for self-governance. Likewise, all forms of democratic freedom, manifestations of Catalan culture, and working class organizations were wiped out. The 1940s decade was a period of extreme poverty and unabated repression. The 1940s decade was a period of marked economic recession and of severe repression, especially in the city of Barcelona. The economic policy of the dictatorial regime caused, amidst general scarcity, higher relative prices and salaries in activities of the primary sector rather than in the industrial sectors. This implied maintaining economic activity in primary sectors to the detriment of manufacturing. Moreover, the economic policy, which was protectionist and based on autarchy, forced the incipient post-war industry to turn to the domestic market. As far as culture and society were concerned, the victory of fascism meant the disappearance or marginalization of the associative tissue of the region. Censorship was fierce and any form of Catalan culture was forbidden. The only discourse that was not censored was that that exalted the dictator and the regime, which on its part, was set on returning to Christian traditional values. The defeat of the Axis Powers in 1945 begot certain abatement in the ways and iconography of the Spanish regime for it began to consider a rapprochement with the allied forces and the possibility of opening the economy. These political changes would become more evident from the 1950s onwards.

### 3.2 From 1950 to 1990s: Economic development and the arrival of democracy

From an historical perspective this long period can be divided in two sub-periods. The first goes from the 1950s to the second half of the 1970s and the second period comprises the 1980s decade. The first period is dominated by accelerated industrial development within the framework of the Franco regime and ends with the arrival of the effects of the economic recession and the advent of democracy. The second period sees the transformation of the city and the region under a new political system and amidst profound economic recession. It culminates in the Olympic Games of 1992. It is to an outline of these periods that we turn in the next sections.

### 3.2.1 From 1950 to 1975: Industrial development and urban growth

Franco's victory in 1939 implied the loss of self-governance for Catalonia. From that moment on, the only local and regional agents were the town councils and the regional delegations of the central government based on the province and known as *Diputacions*. Administrations were organized according to fascist models. Thus, trade unions were turned into organisms which established compulsory membership for employers and workers alike. Institutions, such as the National Institute for Industry, whose task was to create large national industries within the framework of the existing autarchic economy, were founded. Until the 1950s the economy was extremely directed by the state, but the mitigation of the regime on account of the allied victory in 1945 and a certain recovery of the economic situation would gradually allow for more autonomy. As outlined above, the 1950s saw the return to economic and social development in the country after the civil war. The economic growth of the 1950s, related to the consolidation of the Fordist model of production, was a determining factor in the configuration of the BMR as we know it today. In those years, demand for spaces to locate larger factories increased. The price of land rose and caused factories to move out of the inner

city. Moreover, the increase in economic activity attracted population, mainly from rural areas from the rest of Spain. Consequently new population centres within the BMR appeared. In addition, the region became denser both as far as population and economic activity were concerned. The expansion of economic activity beyond the boundaries of each town, and the occurrence of certain economic specialization in some of the cities within the BMR were instrumental in increasing inter-municipal relations and in blurring the boundaries between cities and towns. This increase of relations forced local governments to establish stronger systems of collaboration. Thus, supra-municipal institutions were established. The changes that derived are analysed below.

From the 1950s onwards the city of Barcelona began to attract significant migratory inflows from the rest of Spain. The need to provide housing for the new population caused the accelerated urban development of Barcelona. Another side effect was the emergence of substandard housing. Until the 1970s, Barcelona and neighbouring cities suffered accelerated growth and persistent lack of infrastructures for the newcomers. The massive arrival of immigrants meant an integral transformation in the urban model of the metropolitan region. The most conspicuous change was a dramatic growth in the cities of the first metropolitan ring. This second immigration wave, the 1920s had seen the first, is accountable for the current high density in the cities of the first ring. Immigrants were attracted by the possibility to find employment in the industries that were being established in Barcelona. As it had been the case at the beginning of the twentieth century, the places of origin of the immigrants were the rural areas of Spain, especially Extremadura and Andalusia.

The housing deficit that accompanied the steady arrival of immigrants evolved towards the emergence of infra-housing and the construction of illegal houses —by the immigrants— in unpopulated areas of different cities (Pareja et al., 2003). Thus, marginal districts and poor cities, which suffered from deficient infrastructure, became the order of the day. The above context saw, from the 1960s onwards, the emergence of active neighbours' associations that would press the administration demanding basic services and infrastructure for housing estates. The housing deficit was compensated for, from the 1970s onwards, with massive building. Housing demand was addressed to a major extent through the construction of housing estates and social housing by organisms such as *Obra Sindical del Hogar* and the *Patronat Municipal de l'Habitatge* de Barcelona.

The distribution of the immigrant population and of economic activity in the territory in the decades under consideration in this section contributed to shaping the BMR. The improvement of communications, although it took a long time and they are still insufficient, has facilitated the organization of big companies and the distribution of their activities in the BMR. Thus, as we shall see in Chapter four, there is specialization within the BMR. Service activities such as retail, finance, management, services to enterprises and knowledge-intensive activities are conducted in Barcelona and the larger cities of the BMR, while manufacturing activity occurs in other areas —very often in industrial parks located between cities—. Small and medium companies are dispersed along the territory, given the fact that they have less constrains when choosing a location. They tend to locate according to specificity.

In economic terms, the development of the industrial sector between 1950 and 1975 was characterized by two main trends. Firstly, by the increase in industrial diversification; this meant going from an industrial sector that had its sustain on the textile industry to a diversified industrial sector. Secondly, by the loss of significance of the industrial sector for

the whole economy of the area. Thus, new economic growth was linked to both the emergence of new industries and to the development of new activity related to services. On this line, tourism would cause the service sector in Spain to grow considerably.

Table 3.1 shows the above mentioned evolution in the province of Barcelona. In 1955, 24.6 per cent of GDP corresponded to the textile industry, while in 1975 the sector represented only 10.1 per cent. The fall was due to the recession in the textile sector and to the diversification of the industrial sector towards new activities. Among these, sectors such as chemical, machinery, transport material, graphic arts, publishing and food industries were the most relevant. The significance of the service sector is evident for it increased from 44.7 per cent in 1955 to 49 per cent in 1975.

Table 3.1 - Sector structure of BCN province Economy (in percentage of GDP contribution)

	1955	1975	1985	1995
Agriculture and fishery	3.4	1.3	0.8	0.7
Total manufactures	45.8	43.0	34.7	29.7
Energy and water	1.2	2.3	1.7	2.0
Metallic mining and metals	0.6	0.3	0.3	0.3
Non metallic mining	1.8	1.7	1.9	1.2
Chemic products	6.0	6.6	4.1	3.9
Plastics and rubber	]0.0	0.0	3.0	1.5
Machinery and metallic products	5.9	15.8	7.6	7.8
Transport material	3.9	13.8	2.2	2.6
Food products	1.7	2.3	3.4	2.9
Textile, leather and shoes	24.6	10.1	7.0	4.2
Paper and graphic arts	1.9	3.8	2.6	2.6
Wood, cork and furniture	2.2	0.1	0.9	0.7
Building sector	6.1	6.1	3.8	6.2
Total services	44.7	49.6	60.7	63.3
Commercial services	17.7	12.6	13.1	10.8
Transport and communications	6.8	5.5	7.0	6.5
Credit and insurances	2.9	5.2	8.2	7.9
Rents of dwellings	5.1	5.3	5.1	5.4
Other services			6.9	12.5
Maintenance and repairs			4.2	2.9
Hotels and restaurants	10.4	18,3	3.8	5.3
Education and health (private)			2.9	3.0
Household services	]		1.0	1.5
Public services	1.7	2.7	8.6	7.7
Total sectors	100.0	100.0	100.0	100.0

Source: La Renta Nacional de España y su distribución provincial (Fundación BBVA)

Industrial diversification allowed the region to continue to be the first industrial area in Spain until the late 1970s when Madrid took the position. Moreover, increasing tertiarization reveals that Barcelona will gradually acquire a differentiated economic profile from the rest of the BMR for the core city will evolve towards marked specialization in services. This evolution was to be consolidated in the next period under study.

### 3.2.2 From 1975 to 1992: Crisis, democracy and new events

From 1975 a series of major structural changes influenced the development of the region. First of all there was an economic recession and a population decrease, which would not experience a slight recovery until 1986. Moreover, this was a time of certain political instability. This would continue until 1981 when the transition to democracy was completed. Therefore the advent of democracy and the first democratic town councils coincided in time with the intensification of economic recession. The implications that this fact had for the democratic local governments were considerable. They faced the challenge of providing solutions for the recession, and for the structural problems inherited as a consequence of the dramatic growth of the region under the dictatorship. In addition, the metropolitan region was an undeniable reality and the need for improved coordination between the different administrations and local institutions was pressing. In 1974, the *Consorci de la Regió Metropolitana de Barcelona*—Consortium of the Metropolitan Region of Barcelona— was set up. This was an administrative unit which was in place until 1987, when it was abolished by the *Generalitat* government because it perceived the institution as effecting counter power to the autonomous government (see Chapter four).

The economic recession demanded an industrial transformation that had been somehow initiated since the late 1960; however it was in this period that the region would approach it more distinctively. Thus, from 1970 to 1985 the city of Barcelona lost 25 per cent of jobs. The industrial sector, on its part, lost 42 per cent while construction experienced a loss of 69 per cent. The service sector, however, saw a 12 per cent increase in the number of jobs. The metropolitan region stayed mainly industry oriented and the main providers of employment were the machinery and electrical material sector, the textile industry and the production of transport material. These three sectors accounted for 52.5 per cent of total industrial employment in 1991(*Dinàmiques metropolitanes de l'àrea i de la regió de Barcelona*, 1996, p. 108).

Territorially, the above changes implied displacements for the industry and for the population. From the second half of the 1970s onwards, the first metropolitan ring started to expel population. Table 3.2 shows the evolution of growth in absolute and relative terms in the Metropolitan region between 1950 and 1991. The dramatic population growth in the city, which occurred particularly from 1950 to 1970, is evident. At that time growth stopped to become negative. In the rest of the region, though, the increase continues and the area receives the population that Barcelona and other big cities, located very near Barcelona, expel. Thus cities such as, Barcelona, Badalona, Cornellà de Llobregat, L'Hospitalet de Llobregat, Sant Adrià del Besòs and Santa Coloma de Gramanet lost population, while cities that are farther away from Barcelona saw increases.

Table 3.2 - Total and relative growth of the BMR population, 1950-1991.

	Barcelona		Total BMR	
	Absolute growth.	Relative growth*	Abs. Growth	Relative Growth*
1950-1960	2,77,684	1.98	600,442	2.70
1960-1970	184,116	1.12	999,229	3.34
1970-1975	9,157	0.10	453,751	2.42
1975-1981	1,491	0.02	219,163	1.07
1981-1986	-50,815	-0.59	-9,349	-0.04
1986-1991	-58,270	-0.69	34,895	0.16

(\*) Annual cumulative percentage

Source: Dinàmiques Metropolitanes a l'Àrea i la Regió Metropolitana de Barcelona, 1996.

Thus the relocation of industries from the city to the periphery forces the population to relocate as well. It moves to industrial cities such as Sabadell, Terrasa, Mataró, and Granollers. These cities, from 1981 onwards, led the population increase. The causes were twofold. On the one hand, the growth was due to their own economic and social dynamics and on the other hand to the role they played in receiving population from Barcelona and adjacent cities.

In the 1980s the poor chances to find employment and the end of the displacement of rural population to urban areas caused the migratory inflows from the rest of Spain to cease. It was in this period when the reduction in birth rates and the ageing process —with the effects of the 1936-1939 Civil War affecting the middle groups of the pyramid— caused population structure to become one that was typical of mature capitalist societies. Moreover, the population under 30 years of age was significant and this implied pressing demands in terms of education and employment. Family units changed as well; structures such as mono-parental households or cohabiting couples that were practically unknown up to that moment became common. Besides, from the 1980s onwards, migration begins to occur within the BMR mainly from the inner city to the periphery and from the core to farther areas. Households moved outside the city looking for better quality of life and lower housing prices (*Enquesta de la Regió Metropolitana*).

The development of a particular territorial model by the reinstituted *Generalitat de Catalonia* reinforced all the above trends during the 1980s decade. Thus, road and transport infrastructures favoured private means of communication. This caused changes in land prices first, and changes in the location of activities secondly. Between 1985 and 2000, 202 kilometres of motorways and roads and 126 kilometres of urban roads were built in Catalonia, while just 13.8 kilometres of rail were added to the transport system. This resulted in a situation where there was a substantial increase in the availability of land, but there was no demographic growth. (Herce, 2005). The territorial model in those years originated, thus, marked internal inequality. Although the global socioeconomic situation of the BMR was extremely determined by the weight of Barcelona, there were municipalities with very high income levels and others where the incomes counted among the lowest in Catalonia.

Social segregation occurred along the whole territory. The lowest incomes were concentrated on the districts that had accommodated the migratory inflows of the 1960s. These were areas with marked socioeconomic and cultural deficits and with scarce and insufficient infrastructure. High income level areas were located mainly in Gràcia-Diagonal (Barcelona), Esplugues-Sant Just Desvern and Sant Cugat-Bellaterra. These areas benefited from improved infrastructures and accessibility. According to the relative available information on net annual family income for 1990, over half of the families were low-middle income, 21.2 per cent had very low incomes, and around 21 enjoyed high or very high incomes (*Enquesta de la Regió Metropolitana de Barcelona*, 1990).

As outlined at the beginning of this section, the metropolitan region constituted an administrative entity between 1974 and 1987. The elimination of this form of governance impelled the emergence of a series of structures that were deemed necessary to deal with and coordinate essential or basic aspects that concerned the region. Thus, in 1987 the Catalan Parliament instituted two entities to manage certain environmental and transport issues. *Entitat Metropolitana dels Serveis Hidràulics i del Tractament de Residus* or *Entitat del Medi Ambient* (EMA), to which 33 cities belonged, would deal with issues regarding water supplies

and waste control and management. Entitat Metropolitana del Transport (EMT), with 18 municipalities would deal with transport and mobility issues. A third institution, Mancomunitat de Municipis de l'àrea Metropolitana de Barcelona (MMAB) was added in 1988. This was a voluntary association of 31 towns and cities that would be responsible for coordinated action in the fields of urbanism, mobility, housing, urban parks, natural spaces and economic promotion of the area. The three institutions constitute an administrative network that manages services of supra-municipal concern in the Barcelona Metropolitan Area. They coordinate public transport needs, urban issues, waste management and have incorporated basic functions that were carried out by the abolished AMB. The conflict that resulted in the abolition of the AMB originated in the fact that the metropolitan region was mainly governed by the Catalan Socialist Party, while power in the autonomous government was in the hands of Convergència i Unió, of nationalist centre-right nature. Beyond party politics, there was a divergence in questions regarding administrative structure.

In 1986 two events would acquire paramount relevance in changing the expectatives of Barcelona as metropolitan region. On the one hand, Spain's admission to the EU allowed for openness and improved competitiveness. On the other hand, Barcelona's nomination to organize the 1992 Olympic Games would open the way for major urban renewal. Barcelona experienced an unprecedented economic and territorial development. Between 1986 and 1999 per capita GDP rose 64.4 per cent, one of the highest rates in the EU (Trullén et al., 2002). Barcelona improved considerably in aspects such as external competitiveness, productivity and levels of employment. Its GDP per capita in terms of purchasing power parity with the European average went from 83 per cent in 1987 to 101 per cent in 1999. In fact, that was what the proposal to organize the Olympic Games had sought. The objective was to improve regional infrastructures and to internationalize the city. The development experienced by the Spanish and Catalan economies in the second half of the 1980s had especial repercussions for Barcelona and its region. Citizens became particularly active in and engaged with the preparations for the Olympics from 1986-1992, and took centre stage in the Games. The city and the region rediscovered the value of voluntary activity and the phenomenon reached unprecedented levels. This and the attitude of all citizens before and during the games were regarded as essential for the success of the event. Furthermore the city managed to give an excellent image. Chapter six will detail the role of the 1992 Olympics in the political strategy of the city.

### 3.3 From 1990 to 2000: great transformations

The 1990s were a period of profound changes in the economic pattern of the BMR. Likewise the social transformations that had been initiated in the previous decade continued and intensified. Following suit from the Olympic Games urban restructuring of the city proceeded, and references to the "Barcelona model" began to emerge (see Chapter six for an extended explanation). In October 1996, Barcelona Town Council announced that the city would host an unprecedented world event, namely, the *Fòrum de les Cultures* 2004. The project, as planned by local authorities, would allow for urban renewal of a significant area and would create the desired conditions to attract capital and tourism. From that moment on, the event was to dictate a significant part of the global political strategy for the city of Barcelona.

Undoubtedly, the initiative originated in the aftermath of the success of the 1992 Games, that had put Barcelona on the map of international cities that were considered desirable places to live, to visit or to locate a business. The city became an increasingly demanded tourist destination and its reputation as a place with high quality of life intensified.

Socially, the period saw the consolidation of a territorial model whose main characteristics were the displacement of the population to the second metropolitan ring and the intensified use of private transport. In addition, this was the time when foreign immigration began, a fact that was, until then, unknown in Spain and which was to affect the social configuration of the metropolitan region.

As far as the economy is concerned, the most relevant changes were, firstly, the intensification of the industrial crisis in the region, which manifested itself in the decline of traditionally strong sectors, and the relocation of industries to geographical areas where production costs are lower. Secondly, the relevance of the construction sector for the economy increased. Table 3.3 shows the establishment of companies in the BMR from 1994 to 2000. Industrial activities and retail lost weight, while construction, services, liberal professions and artists were on the increase. The BMR continued its way towards specialization, with Barcelona and the closest cities to it attracting creative and knowledge intensive activities.

Table 3.3 - Companies and professionals, per sector, BMR 1994-2000

					Professionals	
Year	Manufactures	Construction	Retail trade	Services	and artists	Total
1994	12.0	7.9	23.2	40.9	16.1	100.0
1995	11.7	8.3	22.6	41.0	16.4	100.0
1996	11.4	8.2	22.4	41.3	16.7	100.0
1997	11.3	9.2	21.5	41.8	16.1	100.0
1998	11.0	9.4	20.8	42.2	16.6	100.0
1999	10.9	9.9	20.3	42.5	16.4	100.0
2000	10.5	10.4	19.6	42.9	16.7	100.0

Source: IDESCAT

However, it is essential to remember that in the immediate aftermath of the Olympic Games the economy in Barcelona went into recession, which affected in particular manufacturing sectors such as the automobile, and mechanic sectors. Social Security figures attested to an employment decrease of 17.9 per cent in 1994 compared to 1991 rates in the city of Barcelona. Cities such as Sant Sadurní d'Anoia, Martorell, Santa Perpètua, Sant Celoni and Tordera, all of them located near or around Barcelona experienced an increase in employment, though. Thus, the process of decentralization of industries continued and the economic activity moved towards tertiarization and increasing diversification. In this situation, the role of Barcelona as services centre intensified. Other locations that stood out for their service activity were Sabadell, Granollers, Vilafranca del Penedès, Mataró, Terrassa and Sant Cugat: "segmentation of production processes, decentralization of factories, and places of residence, with the concomitant increase in transport and communication needs seem to be the new pillars that define the new model of economic development of Barcelona" (Trullén et al., 2002, p. 8). The increasing differentiation between the metropolitan region and the city of Barcelona began to become visible. The city concentrates service companies and

knowledge-economy activities, while the region is dedicated to traditional industrial activity, mainly thanks to small and medium companies. As we shall see in our next chapter, this trend will intensify considerably at the beginning of the twenty-first century. In addition, political strategies to partly counteract the above trend will be implemented.

The economic recession that followed the 1992 Olympic Games was reflected in the employment circumstances of individuals. Other changes in the production system-a more flexible labour market, increased job instability, precarious employment, especially for women and young adults, forced early retirements and redundancies- added their impact to the consequences of the recession. Figure 3.2 shows the reduction in employed population for the period 1991-1996 both in the city of Barcelona and in the BMR, the rise in unemployment is shown as well. The recovery in employment would not take place until 1996 when unemployment decreased by around 3 per cent. The figures for those years evidence the gradual decrease in the number of individuals who stay at home. A fact that concerns women in particular and attest to their steady incorporation to paid employment.

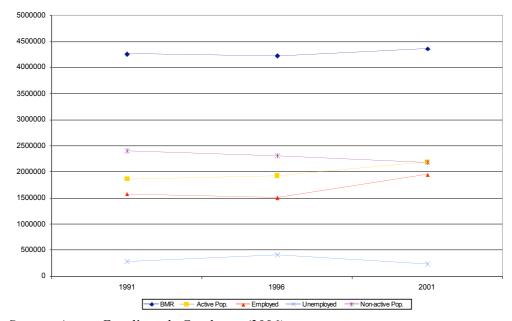


Figure 3.2 – Population regarding its labour activity in the Metropolitan Region of Barcelona

Source: Anuari Estadístic de Catalunya (2006)

A look at socio-professional categories shows the job specialization of the population in the BMR. While, there is little difference between 1995 and 2000, that is, from a temporal perspective, we do find significant differences when looking at the territorial distribution. Barcelona had a larger number of business people, liberal professionals, managers and technicians, whereas self-employed professionals and skilled and unskilled workers live mostly in the rest of the BMR. Barcelona remains a place of residence for highly qualified employees (*Enquesta de la Regió Metropolitana de Barcelona*, 2000).

During the 1990s improvements in telecommunication infrastructure began in order to attend to the demands of new economic activity. This gave momentum to service activities, productivity increased and some elements to promote the establishment of creative and knowledge activities were put in place. High-added value activities, such as services to companies, retail and health services developed rapidly together with already existing

activities such as chemicals, pharmaceutical, graphic arts, food industries and transport material. The labour market registered the increase in the number of jobs in knowledge-intensive sectors. Between 1991 and 2001 the number of workers in these sectors almost doubled.

Demographic patterns in this period evolved in the same direction as in the previous period. Although, for the first time, the population in the whole region decreased as it did in the city of Barcelona. The age composition of the population continued to reveal the ageing process underway, in particular for the period that went from 1991 to 1996. The process would not somehow arrest until 2001, when the percentage of people over 65 years of age ceased to increase. Ageing was particularly noticeable in the city of Barcelona. Such processes together with low birth rates were not to change until very recently, when the impact of immigration became noticeable. From 1990 to 2000 immigration was still insignificant. Thus, according to nationality data, in 1991 foreigners accounted for 1.1 per cent of total population in the BMR. The percentage rose to 4.9 per cent in 2001. The figures for the city of Barcelona were 1.4 per cent in 1991 and 6,3 per cent in 2001 (IDESCAT data)<sup>9</sup>.

The levels of education of the population improved in the period. The causes are to be found in improvement in the education system and in an increase in the numbers of those who attended universities. 7.6 per cent of individuals had a university degree in the BMR in 1991. The percentage rose to 14.6 per cent between 1996 and 2001. This figure was close to the average for Catalonia. In the city of Barcelona, though, the percentage of graduates was 21.1 per cent in 2001(*Departament d'Estadística*. *Ajuntament de Barcelona*).

Intensified intraregional mobility became the main characteristic of the territorial model in the 1990s decade. Commuting increased considerably from 1995 to 2000, when the population that leaves its area of residence to go to work is of significant proportions. (*Enquesta Metropolitana de Barcelona*). The reasons are to be found in the fact that the number of individuals who work and live in the same district or in other districts of the same city decreased. Distances to work increased. Parallel to the above dynamics, the number of people who work in Barcelona city raised, albeit slightly, 12.6; and the city lost residents. The investment in transport infrastructures, mainly in motorways and roads, together with the changes in residential patterns as a consequence of the housing market, account for the consolidation of this territorial model. Finally, as far as territory and mobility are concerned, we need to mention the increase in the number of longer journeys that start in the city of Barcelona. Obviously, the patterns above resulted in an increase in the use of private means of transport from 1995 to 2000; the figure is 53.5 per cent according to *Enquesta Metropolitana*, in detriment of public transport. Chapter four details how the model reached critical points at the beginning of the new century and took centre stage in the political debate.

In spite of the increasing use of private cars, public transport continued to be the most used means of transport. However, investments in the railway system were insufficient, in particular when compared to investments in roads and motorways. Railway passengers rose between 1986 and 1992 and the bus and underground system in Barcelona were improved in the 1990s. Likewise, the commuter railway system was slightly upgraded. Thus municipalities

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<sup>&</sup>lt;sup>9</sup> Foreigners are understood here as residents without Spanish nationality. From 2001 onwards there has been further developments in the statistical data on migration. The recent phenomena of foreign migration to Spain explain these changes.

in the first metropolitan ring and the rest of peripheral centres in the region such as Mataró, Granollers and Terrassa are easily accessible by collective public transport. However, new circumstances arose: the construction of new residential areas does not necessarily imply the construction of transport infrastructure and therefore choosing to live in those places means to become dependant on private transport.

The port of Barcelona consolidated its position and became even more relevant in the Mediterranean and internationally. It became a significant recipient of goods and tourists thanks to the launching of Barcelona as tourist destination. The airport Barcelona-El Prat, second in Spain after Barajas in Madrid evolved favourably. In addition, tourist demand facilitated the return to operations of airports that were in disuse, namely, Girona-Costa Brava and Reus in Tarragona, both locations outside the BMR. They became sites for the operation of low-cost companies.

The complexity in managing a segmented and diversified country, both in terms of production and socially, demanded increased effort on the part of institutions. In this period numerous entities emerged. Some examples are *Barcelona Regional* (BR), *l'Institut Metropolità de Promoció del Sòl i Gestió Patrimonial* (IMPSOL), different consortiums that manage natural parks in the BMR, or science institutions such as *l'Institut d'Estudis Regionals i Metropolitans de Barcelona* (IERMB). There was also an increase in the number of private foundations and institutions. Figure 3.3 evidences the number of public and private institutions in operation in the BMR. Cultural, educational and social institutions are a majority.

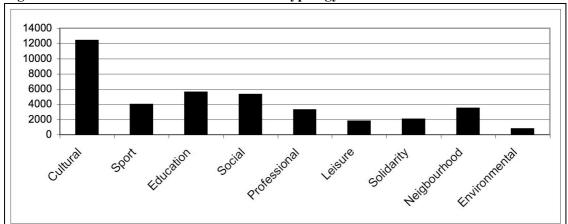


Figure 3.3- Associations and societies and its typology in the BMR

Source: Own calculations with data provided by www.entitatscatalanes.com visited on the 23<sup>rd</sup> December 2006

Cultural diversity confers a cosmopolitan image of Barcelona and the BMR. The cultural networks and their position within the global economy, together with the immigration from the rest of the Spain shaped the area as one of cultural and social diversity (see chapter four).

### 3.4 The historical tradition of tolerance in Barcelona

The city of Barcelona has been historically deemed as a tolerant city on account of its trading tradition, that made of the city a lace where cultures met in the middle age (Iradiel, 1996). The

city has a strong tradition of reception of migration flows, from the rural areas of Catalonia and from the rest of Spain and has proved its capacity to integrate newcomers. A look at the different migration flows in Barcelona's history does not offer any relevant social conflicts between natives and migrants. During the second half of the nineteenth century and the first half of the twentieth century Barcelona saw a cultural explosion with a new generation of artists. Some of them, like Picasso, moved to París, considered the world cultural capital, after a period of training in Barcelona. In that sense Barcelona was characterised by remarkable bohemian environment during this period, and a flourishing cultural market (Pérez et al., 1995).

The arrival of migrants from rural areas and the growth of Barcelona before the Civil War meant the cohabitation of people of different Spanish regions, and a new linguistic reality based on two official languages, Catalan and Spanish. The cohabitation of both has not created social problems, and is a sign of the tolerance of the city. With migration, Barcelona cultural environment was enriched with different popular cultures, that coexistent with strong cultural movements linked to the emergent bourgeoisie. The cultural flourishing of the city together with its economic dynamics created the image of Barcelona as a liberal city.

Franco's victory in 1939 put a stop to this cultural environment in many ways. The new regime based on traditional Catholic values, prosecuted all cultural forms that did not conform to its views. Despite of the intolerance of the political regime and the influence of its values on society, strong social networks based on tolerance appeared during the dictatorship. Population used legal institutions, such as neighbourhood or cultural associations to protect some collectives, protest and fight against the political regime, and to develop prohibited cultural, social and political activities<sup>10</sup>. These networks were based at great extent on migrant population activity. Thus, the context of dictatorship paved the way for the integration of migrants, who participated in social life. After the arrival of democracy Barcelona saw new cultural and liberal movements. In 1992 the opening ceremony of the Olympic Games made a point of emphasising and reflecting the tolerant spirit of the city.

The arrival of international foreign migrants since the 1990s poses new challenges for the region. For the first time, BMR is receiving population with diverse cultural and social backgrounds. The formation of a multicultural city is on the political and media agenda and Barcelona's citizens do not regard immigration as a major problem. Instead, they name housing, safety and employment as aspects that cause problems to the majority of citizens. Only 15.7 per cent of population mentions problems associated with immigration as a major concern. 63 per cent of population considers the mixture of peoples and cultures to be better than a culturally homogenous society. Only 33 per cent favours the latter.

Although immigration is not considered a problem, in many places civil society is developing strategies and initiatives to prevent social conflict and exclusion. NGOs that defend the rights of immigrants are active in the area. Likewise there are numerous associations of immigrants who encourage their members to participate in social initiatives and to integrate.

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<sup>&</sup>lt;sup>10</sup> It is important to note that under Franco dictatorship meeting rights were abolished. Three or more people together could be made to go apart or could be arrested.

#### 3.5 Conclusions

The development of Barcelona has been historically determined by the strategic geographical and political position of the city. Its location has been traditionally considered a valuable asset. The situation of the city on the coast and the existence of a significant harbour have allowed the extension of Barcelona's hinterland beyond its metropolitan region. Barcelona has, thus, become a city with a strong trading tradition that in medieval times rivalled with Italian cities. Its trading tradition favoured, in the nineteenth century, the emergence of a solid bourgeoisie (Sánchez, 1997). Moreover, Barcelona became, at the time, one of the most relevant economic centres in Spain, which was, then, on its way towards capitalism. The economic boom in Barcelona started when certain merchants and artisans directed their commercial activity towards a new, and therefore, outside guild regulations, sector: cotton industry, which was the axis of Barcelona's industrial development in the nineteenth century (Grau, 2004). During the nineteenth the country suffered strong social conflicts that led to a civil war at the beginning of the twentieth century. After the Spanish Civil War (1936-39) and Franco's victory, the city was under a huge economic and social crisis. Thus, it is not possible to talk of certain economic recovery until the 1950s. From then onwards, the country experienced unprecedented economic growth and profound changes in social structure were initiated. Barcelona played a vital role in the development, and at the same time its metropolitan region, as we understand it today, began to take shape.

With Franco's death in 1975 the transition towards democracy started. The process would transform the country into a parliamentary monarchy in the second half of the 1970s decade. The consolidation of the new political system coincided with the effects of the 1973 economic recession that would be particularly felt at the beginning of the 1980s. Thus, the new democratic institutions were confronted with a significant lack of infrastructures in the midst of economic recession. At a local level, the advent of democratic town councils brought about profound changes in the relationships between different municipalities. Besides, infrastructures to improve connections between different towns and cities were started. The 1970s and 1980s saw the consolidation of the BMA (*Àrea Metropolitana de Barcelona*); this was an entity that grouped 27 municipalities. This group of towns and cities was regarded, taking into account the capitalist development experienced until the 1980s, as the logical dimension of the BMA. It was considered logical both in terms of its area of influence and the expansion of economic activity (Nel·lo, 1998).

The changes in the 1980s effected a transition from a Fordist model to a flexible industrial model that resulted in economic transformations and new residential and working patterns (Catalan, 1998). The oil crisis, which reached Spain particularly in the 1980s, caused stagnation in production and demographic changes in the city of Barcelona: The city reached a peak in terms of population increase and Barcelona, together with other big cities around it, started to lose population. At the same time, the metropolitan area expanded and continued to grow. Economic expansion and the improvements in transport and communications during the 1980s and 1990s resulted in changes in the economic activity of the region. It was at the beginning of this expansion that the Barcelona Metropolitan Region was established. It included 163 municipalities from 8 different counties in an extension of 3200 square kilometres.

In addition, a chronic historical deficit concerning private financial entities became particularly evident at the time. The Catalan bourgeoisie, as opposed to the Basque one with Banco Bilbao or Banco Vizcaya or the central oligarchy with Banesto or Hispano-Americano, did not succeed in creating their own financial entity. Certain bankruptcies over the past prevented such a phenomenon. As a consequence, the main financial entities in Catalonia have been savings banks. These have a remarkable public character.



View of the Olympic Village in Barcelona

"The jetty of the Olympic Port, higher, at the end, fills with dark figures silhouetted against the light, anglers and on-lookers, parts of an absurd theatre silently distant when they, statues on the stage of the same theatre, even more absurd, when they are still."

La platja del Bogatell, Miquel de Palol

## 4 New economic trends and recent social changes (2001-2005)

## 4.1 Introduction: recent changes in the BMR

Barcelona is nowadays considered a dynamic European economic area on account of its advanced industrial and tertiary activities (Trullén, 2001c). The region has a new productive basis grounded on Knowledge-intensive based activities, and has achieved notable integration into European and global markets. The geographical nature of the metropolitan region, with interconnected municipalities specialized in different activities and services, has contributed to its success and makes it competitive. Between 2001 and 2005 Barcelona's economy grew steadily as both its GDP and labour market reflect (Oliver, 2006b). Nevertheless, a closer look shows that the economic development of the region was based on low productivity and innovation patterns, with little investments in R&D and low number of intensive-knowledge employees (Vives and Torrens, 2004b). In the context of one of the main industrial regions of Europe that means loss of competitiveness in front of other emerging industrial regions all over the world. Nevertheless Barcelona has been, since its opening to external markets after 1986, the main contributor to Spain's export capacity (Trullén, 2001c), and one of the most important industrial regions of the country. The process of economic transformation is slow because of a hesitant industrial sector which must choose between the traditional model and the knowledge economy. It was not until the last two years of the period under study that there was a significant increase in research and development investments.

In this general context, main industrial activities are suffering structural changes and many flourishing new activities are growing rapidly. As we shall see, industrial contribution to the GDP is decreasing, despite the significant growth in services and construction.

The relevance of mature industrial sectors, namely the automobile, textile and electronic industries, for the national and regional economy has been substantially reduced due to the difficulties that these sectors experience to remain competitive in a global context. Thus, most electronic and textile industries of the region have moved to more competitive areas in foreign countries, or have disappeared. The automobile industry, led by Seat, underwent a restructuring process that resulted in the loss of 660 jobs in 2005. This is not only the case of Seat, who is able to innovate, but also of the network of small and middle enterprises of the automobile industries, which have more problems to make investments to be competitive. Although these traditional sectors are trying to innovate (Ruíz, 2004), Barcelona city region as a whole does not use its potential to transform its economic model. Nevertheless we must distinguish between the whole region and the city of Barcelona itself. While the region is currently undergoing a process to become a knowledge-based economy, in the city of Barcelona the transformation has been completed.

## 4.2 Population composition, recent dynamics and social polarisation

Roughly 5 million people live in the BMR, that is, 68.2 per cent of the total population in the Autonomous Community and 10.8 per cent of Spain's population. The territory of the region is approximately 3,000 square kilometres and comprises various compact cities where the major part of the regional population concentrates (Herce, 2005).

The city of Barcelona, with 100.4 square kilometres, has one million and a half inhabitants. In the last five years the city has seen a slight increase of population after decades of continuous population decrease. Between 2001 and 2005 population increased 6 per cent, whereas in the former period (1996-2001) it decreased 0.3 per cent. Nevertheless the population increase is lower than the increase experienced in the whole metropolitan region and in Catalonia (see table 4.1).

**Table 4.1 - Population figures** 

	Population (2005)	Population growth
Barcelona	1,593,075	5.9
Metropolitan region	4,770,180	8.6
Province	5,226,354	8.1
Catalonia	6,995,206	10.0
Spain	44,108,530	6.8

Source: Anuari Estadístic de Catalunya (2005), INE

The population of the region evidences the characteristics of advanced capitalist societies, that is, an ageing population with high life expectancy and low birth rates. Observing the population structure in five years' groups we can see this pattern clearly (see figure 4.1). Younger groups, under 24 years of age, are less numerous than adult groups, who belong to a previous stage of huge demographic increase. The base of the pyramid shows an increase in the 0-4 year old group which corresponds to a rise in birth rates. A fact that can be regarded as one of the most immediate consequences of international migration flows to the metropolitan region.

From 80 to 84 From 75 to 79 From 70 to 74 From 65 to 69 From 60 to 64 From 55 to 59 From 50 to 54 From 45 to 49 From 40 to 44 From 35 to 39 From 30 to 34 From 25 to 29 From 20 to 24 From 15 to 19 From 10 to 14 From 5 to 9

Figure 4.1 - Population structure of Barcelona Metropolitan Region (2004)

Source: Anuari Estadístic de Catalunya (2005)

The ageing process is clearly reflected in table 4.2: people over 65 years of age account for 20 per cent of the population, while the population under 15 is only 11.7 per cent. The population structure as regards foreigners is totally different. There are no old people and a there is a relevant 13.5 per cent of younger population.

Table 4.2 - Comparison of population structures between foreigners and total population in 2004 (BMR)

	Total	Foreigners
0-15	11.7	13.5
16-64	67.6	84.5
65 and +	20.7	2.0
Total	100.0	100.0
Average age	41	32

Source: Anuari Estadístic de Catalunya (2005)

Therefore the age of foreigners is contributing to arresting the ageing process that has been under way since the 1990s. Table 4.3 shows some indicators of these trends. Between 1991 and 1996 the average age of the population increased two years, whereas between 1996 and 2004 it increased only in one year. Likewise, the number of children per fertile woman increased in the last three years for the first time since 1981 (*Anuari Estadístic de Catalunya* 2005). In short, the region presents the profile of an ageing population where the first effects of the arrival of foreign younger migrants are being felt.

Table 4.3 - Main fertility indicators of BMR

	1996	2004
Population average age	39.6	40.7
Born alive per thousand inhabitants	9.0	11.4
Children per women	1.7	2.1

Source: Anuari Estadístic de Catalunya (2005)

Population structure is not homogeneous in the whole territory. Barcelona and its surrounding municipalities accumulate a major part of the ageing population, in contrast to other zones of the region where there is a more balanced population structure. There are multiple reasons that explain this pattern. The main reason can be found in the arrival of young population from other regions of Spain during the sixties. This population settled in the city of Barcelona and neighbouring cities, as L'Hospitalet and Badalona. In these cases age homogeneity is the cause of a higher ageing index. Other factors, like the housing market, expel young people from Barcelona and its surrounding cities. The destination of this young population is the second ring of the metropolitan region.

Similar reasons explain the fact that the cities of the first ring have higher population density per square kilometre than the rest of the region, as shown in table 4.4. The extreme cases are the city of L'Hospitalet, neighbouring Barcelona, with an average of 20,000 inhabitants per square kilometre, and Barcelona itself with roughly 16,000 inhabitants per square kilometre. The most remote cities from Barcelona, as Sabadell and Terrassa, have lower densities.

Table 4.4 - Population density in main cities of the Barcelona region

	Density (res. /Km2)
Metropolitan Region	1,471.6
Barcelona	15,868.9
L'Hospitalet	20,393.9
Badalona	10,323.7
Sabadell	5,197.1
Terrasssa	2,777.0

Source: Anuari estadístic de Catalunya 2005

During the last five years migration flows to the metropolitan region of Barcelona have intensified. The region houses approximately 70 per cent of the foreign population of Catalonia, which increased from 3.5 to 8.9 of total population in this period<sup>11</sup>. In the province of Barcelona foreign population is 7.8 of the total. 45 per cent of foreigners are women and, as mentioned above, this population is, in its majority, young. Table 4.5 shows the countries of origin of immigrants. There is a 39 per cent of foreigners from Latin America. Being Ecuador, Peru and Colombia the main countries of origin. The percentage of African immigrants is 29.3, with a significant proportion of individuals from Morocco. Finally Asian population accounts for 13.6 of total immigrants.

Table 4.5 - Origin of foreigners in Barcelona province (2004)

		Number of	Contribution
		foreigners	to the total
Europe	Total	72,548	17.6
	UE 15	51,616	
	Rest of Europe	20,932	
Africa		120,282	29.3
	Morocco	99,196	
	Other	21,086	
America	Total	161,490	39.3
	Ecuador	54,586	
	Colombia	20,502	
	Peru	22,417	
	Other	63,985	
Asia	Total	56,031	13.6
	China	21,514	
	Pakistan	15,768	
	Other	18,742	
Oceania		233	0.05
Total		410,739	100.0

Source: Anuari estadístic de Catalunya 2005

The inflow of non-nationals has not caused, up to now, conflicts in the BMR. Foreigners are not homogenously distributed in t9he whole metropolitan region. 60.5 per cent live in the city

40

<sup>&</sup>lt;sup>11</sup> We understand foreigners as foreigners with a valid residence permit on December 31 of each year. Thus, the tables show only legal migrants.

of Barcelona. A major number of immigrants choose the first metropolitan ring and other municipalities with adequate public transport connectivity. Consequently, the territorial model is essential to understand the incipient spatial segregation of wealthy population. We analyse this issue in the last part of this chapter.

## 4.3 Growing and declining economic activities and evolution of the labour force

As we have seen, the main characteristic of the region is its structural change to a service-based economy with low productivity and poor innovation levels. Construction and particular tertiary activities play a central role in the economic growth.

Analysis of GDP growth evolution illustrates these main economic trends. Table 4.6 shows the economic growth per sectors in Catalonia and the metropolitan region in the last three years of the period. There was sustained economic growth, between 2 and 3 per cent, although it was below the average growth of Spain. Construction and tertiary sectors were the main contributors to this growth. Construction activities have grown rapidly since the midnineties, and particularly between 2001 and 2005 their growth surpassed that of the tertiary activities. The relevance of construction can be felt not only in the BMR but also in the whole Autonomous Community. Industrial and primary sectors stagnated or declined. Industrial GDP has been declining since 2004 due to a structural crisis in strategic sectors, as we will see later. The relevance of the primary sector for the economic growth of the metropolitan area is slight, in spite of the existence of emergent primary activities related to consumption, such as flower and wine production.

Table 4.6 - GDP growth rate per sectors

	Catalonia			Metropolita	opolitan Region Barcelona		
	2003	2004	2005	2003	2004	2005	
Total GDP	2.9	3.2	3.3	2.5	2.2	3.0	
Agriculture	-1.4	0.3	-2.6	-1.4	0.8	-2.0	
Industry	0.6	0.4	-0.1	0.0	-0.8	-0.5	
Construction	5.2	5.0	5.4	4.5	4.4	5.2	
Services	3.2	3.7	4.3	3.3	3.2	4.1	

Source: Anuari Estadístic de Catalunya 2005, Anuari Economic Comarcal 2006

Table 4.7 shows the industrial GDP structure, and the growth of each industrial activity. One main feature of the industrial sector is its fragmentation in multiple activities with some that experienced a significant decline between 2001 and 2005. Textile industries, for instance, had a negative growth of 12.5 per cent in 2005 but they had been in decline since 2001 when their growth was of -0.2 per cent. Since then the growth has been increasingly negative. Machinery and technical equipment followed a similar trend, although their decrease was less remarkable than that of the textile industries. Electronic industries suffered a similar decline, but their contribution to the total GDP was still relevant (9.1 per cent). In contrast, chemistry, energy and metallurgy and metal products have followed an increasing pattern in last periods.

Table 4.7 - Structure and growth of industrial GDP in 2005 (BMR)

8		
	Structure	Growth
Chemistry	17	4.4
Metallurgic and metal products	11.1	3.2
Paper and graphic art	10.9	1.9
Transport material	10.7	-0.8
Food, drink and tobacco	9.7	1.8
Electric, electronic and optic equipment	9.1	-5.4
Machinery and mechanic equipment	6.5	-10.2
Textile, leather and shoes	6.1	-12.5
Rubber and plastic	5.3	-0.4
Other minerals non metallic	4.9	1.2
Energy, water and mining	4.6	4.2
Diverse manufacturing	3.3	2.4
Wood and cork	1.0	-1.1
Total	100.0	2.5

Source: Anuari economic comarcal 2006

Tertiary GDP structure (see table 4.8) shows two main activities that contribute with roughly 50 per cent: services related to public administration, and services to enterprises and housing. Besides, retail grew steadily and became another significant contributor to tertiary GDP. In the period 2001-2005 all tertiary activities had positive economic growth, with considerable growths in trade, hotel industries and services to enterprises. The significant rise in public administration services can be accounted for by the fact that in an area with an ageing population the administration is compelled to address its needs, particularly as regards health.

Table 4.8 - Structure and growth of services GDP in 2005 (BMR)

	Structure	Growth
Real estate agencies and business services	26.7	4.0
Public Administrations, private education and health	21.2	4.4
Retail and repairs	17.9	4.1
Transports and communications	15.1	3.7
Hotel and catering	8.7	4.8
Other social activities and services	7.6	3.5
Financial intermediaries	2.7	3.6
Total	100.0	4.1

Source: Anuari economic comarcal 2006

Job structure in the region and in Barcelona itself indicates general economic trends. Thus, the number of jobs in the metropolitan region is on the rise. Figure 4.2 shows unemployment rates between 2001 and 2005 in the metropolitan region. After 2002, when there was a little increase, unemployment decreased every year. Furthermore, the graph shows how unemployment rates for women doubled those for men until 2003, and the rate continues being higher in the next years.

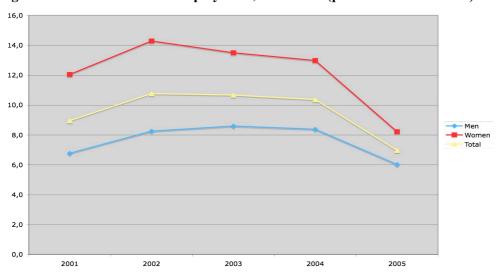


Figure 4.2 - Evolution of unemployment, 2001-2005 (province of Barcelona)

Source: Anuari estadístic de Catalunya 2006

Economic growth and unemployment decre<sup>o</sup>ase do not necessarily imply creation of jobs based on knowledge or that require high qualifications. Observing the average wages reflected in table 4.9 we can see that many growing sectors such as Hotel or Building have very low average wages. Moreover, there are huge differences between men and women, who have lower wages in all sectors. Low average incomes are indicators of poor quality jobs and those affect women and young people in particular.

Table 4.9- Income of wage earners per sectors in the province of Barcelona (2004)

Total	Men	Women
37,403	40,447	27.613
21,882	24,518	16,249
16,534	16,968	14,402
16,883	21,337	12,192
21,717	23,146	18,042
9,488	10,884	8,140
31,255	38,360	22,246
15,865	19,094	12,341
20,505	25,407	18,389
15,643	19,448	13,235
	37,403 21,882 16,534 16,883 21,717 9,488 31,255 15,865 20,505	37,403       40,447         21,882       24,518         16,534       16,968         16,883       21,337         21,717       23,146         9,488       10,884         31,255       38,360         15,865       19,094         20,505       25,407

Source: Departament d'estadística de l'Ajuntament de Barcelona

Table 4.10 shows the evolution of labour market structure. There has been a change in the job composition based at great extent on the change of economic activity in the cities (Trullén, 2001c). Data for to the whole province of Barcelona reveal that 69.2 per cent of total jobs are in tertiary activities. Since 2003, roughly 3 per cent of total industrial sector jobs have disappeared. The sub-sectors that lost a higher number of jobs were textile and electronics. Workers in textile industries decreased 9 per cent in 2004 and 11 per cent in 2005, and the electronics sector lost 5 per cent of jobs every year. In contrast to that, all sub-sectors in services experienced considerable growth with outstanding increases in transports and

communication, housing related services and services to enterprises. Construction activities are creating jobs too. Here the increase was 7.6 per cent in 2005 compared to 2003. We can see this general trend more clearly in Barcelona's labour market (table 4.11). In 2005, 82 per cent of jobs were in the services sectors, whereas industrial jobs meant only 12 per cent of the total. The figure for the whole region stands at 22 per cent.

Table 4.10 - Labour market structure per sectors in the province of Barcelona (2003-2005)

	2003	2004	2005
Agriculture	0.2	0.2	0.3
Industry	24.9	23.7	22.3
Construction	7.9	7.9	8.2
Services	66.9	68.1	69.2

Source: Anuari economic comarcal 2005

Table 4.11 - Labour market structure in the city of Barcelona (2001-2005)

	2001	2002	2003	2004	2005
Agriculture	0.1	0.1	0.1	0.2	0.2
Industry	14.6	14.0	13.6	13.0	12.4
Construction	5.4	5.6	5.4	5.2	5.6
Services	79.8	80.2	80.7	81.6	81.9

Source: Anuari estadístic de la ciutat de Barcelona

Job distribution is not the only parameter that attests to the changes in process. The kind of available jobs has to bee taken into account too. 25 per cent of workers in Catalonia have jobs related to science and technology. This figure falls just under the OECD median (30 per cent). Some studies show an increase in knowledge-intensive based jobs in the region since 1991 and an increase in jobs based on high-tech production. Nevertheless, the region is one of the main providers of low-technology manufactures. In 2001, 10 per cent of jobs were in low technology manufactures, whereas only 1.3 per cent was based on high technology (Boix and Galletto, 2005). We must have into account the fact that knowledge-intensive jobs are concentrated in some cities of the region, whereas former industrial-based cities of the first ring accumulate non-dense knowledge based activities (Trullén, 2001).

Table 4.12 - Human Resources on Science and Technology (2001)

	Total HRST (median)
Catalonia	25,0
BMR	26,9
Barcelona	35,9
OECD	30,7

Source: Nota d'economia 82

Education levels of the population in the region are low for there are a significant number of unskilled people. Only 13 per cent of population have a degree, whereas more than 60 per cent has completed only obligatory education (see table 4.12). The ageing process of the population structure reinforces this pattern, with unskilled people getting older.

Table 4.13 - Education levels of population. BMR. (2001)

Illiterates	2.3
Incomplete primary	11.9
Primary education	24.9
Secondary education	24.3
High school/occupational training	17.2
Qualified occupational training	5.5
Middle Graduates	6.4
Graduates	7.5
Total	100.0

Source: Anuari estadístic de Catalunya (2005)

There is a deficit of skilled labour force in Spain. This is also true for the region of Barcelona, although there the outlook is somehow more positive. Table 4.13 shows the education levels of population. The percentage of active population with a degree or tertiary studies in Catalonia was 13.5 per cent in 2001. Recent studies calculate the current rate at 17.6 per cent, this is still a poor rate compared to the EU-average, which stands at 26.1 per cent (Boix and Galletto, 2005).

**Table 4.14 - Education levels of population (2001)** 

	Barcelona	Metropolitan region	Catalonia
Primary education	31.7	34.8	36.7
Secondary education	47.3	49.0	49.8
Graduates	21.1	16.2	13.5

Source: Departament d'estadística de l'ajuntament de Barcelona

From 1994 to 2005 there was an increase in the percentage of people with medium and high qualifications, that is, in jobs included in the codes that range from 11 to 34 CUIO-88. The percentage rose from 27.6 per cent to 33.6 per cent. In the same period, employment in lower qualification categories decreased. The increase in the proportion of high qualification employment resulted in a reduction of jobs in traditional industries and in an increase in the quality of employment in the province.

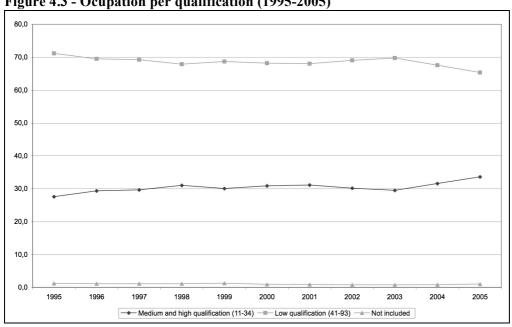


Figure 4.3 - Ocupation per qualification (1995-2005)

Source: IDESCAT, INE

Within employment that requires higher qualifications (figure 4.4), there was a significant rise in activities such as engineering, architecture, and similar professions (21), education (23), as well as in technicians with medium qualifications (24 y 31-33).

Likewise, the rise in employment in technical-professional activities was higher than for those activities related to business management. Employment in the management of small companies decreased. The data reveal, then, a higher rise in professions not directly related to business administration and management.

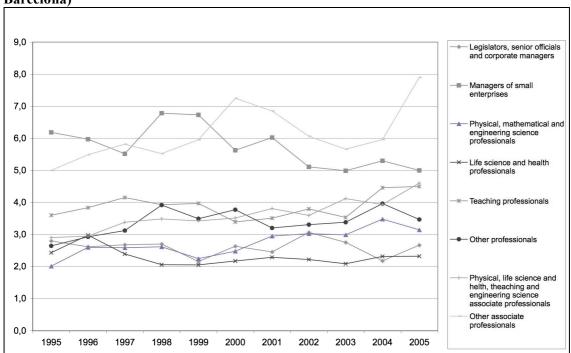


Figure 4.4 -Middle and high qualification employees regarding ocupation profiles (province of Barcelona)

Source: IDESCAT

# 4.4 Economic profile and new specialization activities: towards a knowledge-based society?

Barcelona city region is still the major exporter in Spain, in spite of the crisis of the Spanish external sector in recent years. External demand has suffered an important decrease, with an expansion of the internal markets and growing investments in construction (Oliver, 2006b). This has its effects on the industrial basis of the region, reinforcing low levels on industrial investments and negative expectations.

The economic growth of Barcelona region is sustained at great extent by non-industrial economic activities, mainly services and construction activities. The building sector and the housing market are of paramount importance to understand recent economic development in Spain. Since the mid-90s this sector has been growing dramatically and nowadays accounts for a significant part of total GDP. Its growth is faster than the whole economic growth both in Spain and in Catalonia. Barcelona, as the second biggest city of the country, is strongly affected by this general trend. The entire city-region is suffering a transformation in that direction. The number of enterprises related to these sectors grew 31 per cent between 2000 and 2006 (Güell, 2006).

During the first five years of the new century Barcelona tried to consolidate its position in the knowledge economy, finishing or developing different projects, such as the biomedical research park or the new area of Diagonal Mar. The biomedical research park, recently inaugurated, wants to attract pharmaceutical industries to Barcelona and to promote research in this field. Urbanization of the new area of Diagonal Mar means the creation of new offices and hotel places to attract new industries and tourists. Enterprises like SAP or the Spanish multinationals *Telefonica* and Indra have located in this new area. The city concentrates major leisure activities and cultural equipments of the region and is the provider of these resources to the region (Herce, 2005). This implies main differences between the region, with relatively strong industrial basis and a network of small and medium enterprises, and the city, with financial, housing, tourism and ICT medium and large industries.

The city of Barcelona has knowledge-intensive activities and culture as its main economic specialization objectives. In 2004, the Municipality of Barcelona entrusted the Autonomous University of Barcelona the task of conducting a study to determine the path to be followed by Barcelona in order to become a city of knowledge as opposed to a city of information. Comparing to other cities, two elements emerged as decisive in all cases: on the one hand, research, development and innovation and, on the other, human capital. Several strategies were pointed out for Barcelona (see Figure 4.3). Besides, the role played by the public authorities and policies as well as the need of coordination and interaction between other authorities, were considered essential. The intervention in, for instance, transport infrastructures to improve not only interurban connectivity but also connectivity within the city shows not only involvement of transport authorities from different municipalities but also the consideration of different of modes of transport such as bus or train.

### Figure 4.5 - Strategies for Barcelona

- 1. Increase the knowledge base through the generation of knowledge
  - Codified and explicit knowledge
    - O Human capital: Increase of the average number of years of education
    - o Increase expenditures in R&D&I
    - Interaction between centres of production of knowledge (private and public)
  - Implicit knowledge
    - o Increase of spillovers through interaction (mix use of land)
    - o Transformation of collective knowledge into collective capital
    - Improvement of cultural activities
  - Infrastructures of knowledge: telecommunications, universities and research centres, cultural infrastructures
  - Create and improve the pre-conditions for new enterprises which develop knowledge activities
- 2. Increase the knowledge basis by attracting knowledge
  - Attraction of workers of knowledge
  - Attracting and keeping companies of knowledge
  - Development of strategic sectors
- 3. Intervention in transference and exchange of knowledge
  - Social networks
  - Cities and regions networks
- 4. Management and commercialization of intellectual property and knowledge products
- 5. Re-investment in knowledge: profits re-oriented to the production of knowledge
  - In human capital
  - In R&D&I
  - In infrastructures
- 6. Development of support for knowledge activities
- 7. Compatibility in the development of complementary activities and knowledge activities
- 8. Intervention in complementary infrastructures, specially transport
  - Internal connectivity of the city
  - Connectivity between the metropolitan cities
  - International connectivity
- 9. Land for knowledge activities
- 10. Intervention over quality of life
  - Decrease of environmental pollution
  - Decrease of traffic congestion
  - Architecture and urban design
  - Housing
  - Compact city in adequate densities
- 11. Intervention over the social system
  - Social cohesion
  - Tolerance and multiculturalism
  - Fight against social segregation

Source: Barcelona, Ciutat del Coneixement.

Table 4.15 evidences two relevant facts: firstly, employment shifted from industrial activities to knowledge intensive activities, usually related to services to companies and, secondly, manufactures were relocated from Barcelona to the rest of the BMR.

Table 4.15 - Structure and evolution of employment in Barcelona and the BMR (1991-2004)<sup>12</sup>

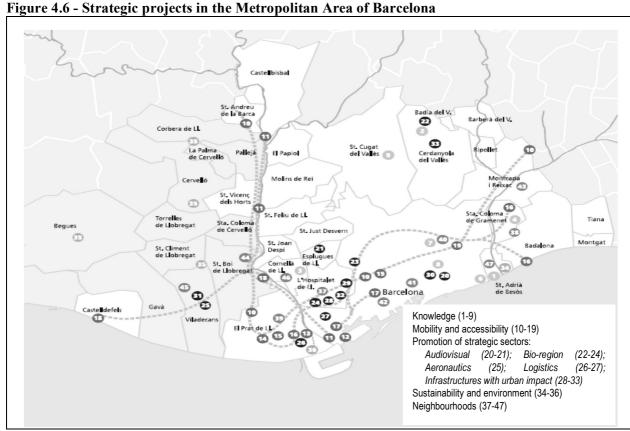
	Barcelona		BMR			
	2004		Growth	2004		Growth
	Number	%	91-04 (%)	Number	%	91-04 (%)
Total activities	866,964	100.0	12.9	1,780,982	100.0	29.8
Knowledge intensive activities	390,517	45.0	58.1	675,512	37.9	76.8
Manufactures using high technologies	3,613	0.4	43.5	11,912	0.7	95.8
Manufactures using medium/high technologies	50,691	5.8	-38.9	140,514	7.9	-6.6
Knowledge intensive services	336,213	38.8	108.3	523,086	29.4	133.5
Non-intensive knowledge activities	476,447	55.0	-8.5	1,105,470	62.1	11.6
Manufactures using medium/low technology	9,662	1.1	-75.6	79,351	4.5	-37.4
Manufactures using low technology	43,139	5.0	-40.0	150,426	8.4	-16.9
Non-intensive knowledge services	370,965	42.8	8.6	730,407	41.0	31.3
Other activities not OECD labelled	52,681	6.1	-22.3	145,286	8.2	18.0

Source: Own calculations from Barcelona Ciutat del Coneixement data(Ajuntament de Barcelona)

The political strategy has led to the development of several projects in the BRM. Figure 4.6 shows the distribution of the projects through the metropolitan area. They deal with a varied range of activities from knowledge to transport (see chapter six for further development of these issues).

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<sup>&</sup>lt;sup>12</sup>OECD activities classification



Source: Metropolitan Strategic Plan of Barcelona, 2006

Barcelona is a leisure-based city with tourism and cultural industries as its main asset and income source (Vives and Torrens, 2004b). In spite of that, the political efforts that we have seen above have made compatible leisure activites with other diversified service activities, namely services to enterprises.

Nevertheless tourism is an economic specialization of the city of Barcleona. As an example, we can say that between 2001 and 2005 visitors to the city grew 50 per cent thus, consolidating tourism as a key economic activity of Barcelona (see figure 4.5).

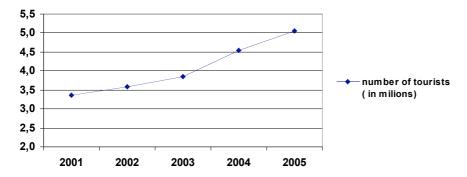


Figure 4.7 - Evolution of tourism in the city of Barcelona

Source: Ajuntament de Barcelona. Departament d'estadística

A recent study by Caixa de Catalunya, (Informe sobre la Coyuntura Económica. Num.112. February 2007) points out that, although tourists in Spain and in particular, Barcelona, have increased in number, the growth of their expenditure in the country is not parallel. This growth is, partly, due to the emergence of the Barcelona's airport as headquarters of low cost companies. In spite of that, some figures show the importance of international meetings celebrated in Barcelona. In this sense, table 4.16 shows the increase in hotel beds for high quality hotels and the decrease in low quality hotels.

Table 4.16 - Hotel supply in Barcelona province

Table 4.10 - Hotel supply in Darcelona province					
		1996		2005	
		Hotel		Hotel	
Stars	Establishments	beds	Establishments	beds	
1	606	18,690	334	9,791	
2	312	22,045	322	16,786	
3	142	27,018	202	38,671	
4	81	19,267	124	28,248	
5	6	3,092	11	6,801	
Total	1147	90,112	993	100,297	

Source: IDESCAT

Besides, and according to data provided by *Barcelona Economia* (number 62) more than half of hotel supply (51,000 hotel beds) is located in the city of Barcelona, more accurately, the supply of 5 star hotels. Observing the nights spent in the city, reflected in table 4.17, we can see that the number of tourists has risen between 1996 and 2005, but nights spent in the city continue to be roughly 2. That has its explanation in business and meetings, as well as the influence of low cost trips.

Table 4.17 - Visitors and habits in the city of Barcelona

	Number of visitors	Nights spent in the city
1996	3,061,994	2.1
2005	5,061,264	2.2

Source: BCN Economía

As can be seen in table 4.18, in 2005, more than 67 per cent of visitors were qualified people; that fact together with the main reason given for visiting the city (45.5 per cent came because of professional/business reasons, 42 per cent on holiday destination and 12.5 per cent came to attend fairs, seminars or conferences) reveal that Barcelona is not only a holiday destination but also as a business centre.

Table 4.18 - Visitor profile, City of Barcelona, 2005

Profile	%		
High profile of manager/civil servant or directive	21.8		
Low profile of manager/civil servant or businessman	20.4		
Self-employed	8.9		
Skilled professional/worker	27.6		
Others (retired, student, etc.)	21.3		

Source: BCN Economía

Finally, in table 4.19 most valuated facts of Barcelona can be seen. The table shows that the most valuated facts are related to leisure and tourism. Respondents gave a satisfaction score ranging from 1-10 (10 being highest satisfaction).

Table 4.19 - Barcelona most valued facts (1-10) (2005)

Facts	range
Architecture	8.6
Culture activities	8.4
Leisure activities	8.2
Character of people	8.0
Public transport	8
Infrastructures	7.8
Information	7.6
Safety	7.2

Source: BCN Economía

In summary, Barcelona has emerged as a tourist destination given the increase in transport infrastructure and facilities —low fare flights, motorways and high speed trains— and facilities —hotels and restaurants. The main challenge for Barcelona in terms of tourism is the consolidation of high quality tourism, that is, the attraction of visitors interested in cultural facilities and amenities —museums, theatres and architecture, among others— available in the city.

# 4.5 Housing market and infrastructure: changes in the territorial model of the BMR

Barcelona follows the general trend of Spanish housing market. The main feature of housing in Spain is the tenure pattern, with ownership as the favourite tenure form. This trend has increased since mid-1950's and experienced an important rise in recent decades (Pareja et al., 2003). Housing policies, done during the dictatorship promoted this trend, stimulating ownership through social programmes, mainly through the building of "officially protected houses". This programme was based on developing dwellings under estate-regulated conditions and financial support for residents. The democratic governments maintained these policies and developed new forms of ownership promotion based on the encouragement of buying a house as a means to access housing (Pareja et al., 2003).

A second main characteristic of housing in Spain is the prevalence of free market construction in front of social dwelling, which has been decreasing since the 1980s. The importance of the construction sector in the whole economy is basic to understand this trend. In economic recession periods construction sector turned to social housing, which is regulated by the state and provides lower profits, but it is a safe business. In periods of economic growth, the sector concentrates mainly on the free market. Thus, since 1998, there has been an enormous increase in the construction of dwellings for the free market, while the construction of social housing has decrease dramatically. Apart from that, rented housing has experienced a downward trend since the 1950s and nowadays is minimal. This applies both to social and private rent.

Since the late 1990s there has been a huge increase in housing prices for different reasons. The economic context of low interest rates in Europe, dwelling as a form of investment and saving for citizens and land speculation are the main reasons that explain this increase. The number of new built houses has also increased, and, as we have seen above, the construction sector has become a significant contributor to Spanish economic growth. In the Spanish context, the demand for a second house account for the increase in construction with urban sprawl in many tourist destinations of Spain such as the Valencia coastline.

Large cities, such as Madrid and Barcelona, are the most important Spanish housing markets, where the growth in prices is especially dramatic (see figure 4.6 for Barcelona and Barcelona province). Due to its huge urban growth during the second half of the past century, Barcelona suffers from a lack of available land.

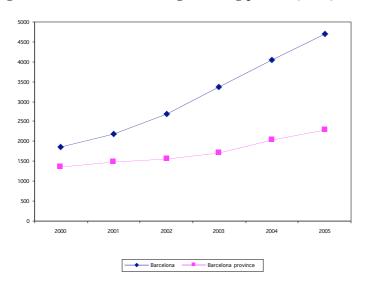


Figure 4.6 Evolution of average housing prices (€/m2)

Source: Barcelona Economia, 62

Different factors explain this huge increase. As we have said, the economic context has favoured the price increase not only in terms of favourable mortgage conditions but also in terms of good credit conditions for promoters. Another important factor is the use of housing market as a safer place to invest after a crisis in the stock exchange markets. Finally, the owner's speculation with land prices is important to understand the increase of prices (Pareja, 2004). Surprisingly at first sight, the price increase is not related with lack of urban land. The urbanized surface has grown from 52 square metres per inhabitant in 1980 to 110 square metres in 2000. Construction has increased whereas population remained stable. In the case of Barcelona, the lack of land to be developed was accompanied by a decrease in population until recent years. Table 4.20 shows the evolution of developed land in Barcelona and the BMR between 1986 and 2000.

Table 4.20 - Evolution of land to be developed (in ha)

	1986	1992	2000
Barcelona	5.078	6.040	6.166
Barcelona Region	37.140	44.399	48.572

Source: (Herce, 2005)

The rising of housing prices creates problems of affordability that can lead to social exclusion, especially for young population, migrants and most vulnerable social groups. The problem is not only the growth in prices but also the lack of any alternative to access housing. This situation creates new dwelling structures and new residential forms, especially in the city of Barcelona. Local and regional authorities have realized the affordability problem is on the media agenda and have started a discourse based on facing the problem through an intensification of social programmes. At the same time new urban social movements emerged to protest and demand solutions of the administrations.

Dynamics of housing market in large cities with lack of urban land (mainly Barcelona), and the creation of communication infrastructures within the region, based by and large on private transport, have resulted in the urban growth of other municipalities where there were lower prices. For that reason, increase of communication networks has led to a redistribution of population in the territory, as well as changes in territorial functionality, with small and medium cities becoming residential and Barcelona absorbing all services and leisure activities. Thus, the region is becoming even more a widespread city, losing its former multi-nuclear basis with medium cities providers of services, job and residence (Herce, 2005). Urban growth is not regular through the territory. Some areas are growing faster than others, depending of its spreading possibilities. Table 4.21 shows new dwellings per 1000 inhabitants. As can be seen Barcelona and Baix Llobregat have low rates of new construction, whereas the second ring (Alt Penedès, Maresme, Garraf, Vallès Oriental and Vallès Occidental) shows high rates (between 15.7 and 25).

Table 4.21 - New dwellings per 1000 inhabitants

County	July 2005- June 2006
Barcelonès	4.0
Garraf	19.2
Vallès occidental	19.1
Vallès Oriental	18.0
Maresme	15.7
Alt Penedès	25.0
Baix Llobregat	8.2

Source: Informe sobre el sector de l'habitatge a Catalunya (2006)

The change in the spatial distribution of population means changes in the housing prices as well as new infrastructural needs. Growth of housing prices in a municipality depends mainly on its public and private transport connections with the city centre and on its potential to spread. Communication networks of the region, based on toll motorways, have created discrimination in terms of territorial distribution and access to resources, despite its apparent intention of territorial balance. Thus, new private transport networks to Barcelona have created medium and high-class concentrations in some cities. These classes can afford living in residential areas near Barcelona and use the car as the main means of transport. On the

other hand the tolls discriminate the lower incomes that must access the city. The lack of collective transport networks outside the central area of the region contributes to discrimination, which is reinforced by the residential nature of the worst connected areas. The above facts have resulted in social segregation with a disperse city model based on private transport in the peripheral areas and a dense city centre who acts as the provider of services and leisure (Herce, 2005).

Regional and local authorities are confronted with the need of new transport infrastructures within the region. After the regional elections of 2003 the new regional government, a coalition of centre-left political forces led by the socialist Catalan party, put regional collective transport on the political agenda, with the aim of improving railway investments and the creation of new railway infrastructures. Despite of that, there is a strong debate about Barcelona's transport needs. The proposal of a new private transport roadway surrounding Barcelona that would connect the surrounding and neighbouring cities is the most polemical issue. Indeed, behind this particular debate there is a more general one about the territorial model, urban growth and sustainability.

There are, though, other transport infrastructures that are essential to the development of the area, such as the High Speed Train or the international airport of Barcelona-El Prat. The High Speed Train will connect Barcelona with the capital, Madrid, and with France, namely Paris. The railway construction between Barcelona and Madrid is coming to an end. The expected date for its arrival in Barcelona is the end of 2007, but the stretch between Barcelona and Paris has not been started yet.

The international airport of Barcelona-El Prat is the second most important airport in Unlike most EU countries, Spain has not decentralized airport management. Airports are managed by an institution called AENA (Aeropuertos Españoles y Navegación Aérea<sup>13</sup>), which understands all Spanish airports as a single infrastructure. The argument for this kind of management is based on granting territorial cohesion via funding less competitive airports with profits from most important ones. Despite that, an analysis of investments related to traffic shows that Madrid is receiving more investments (Bel and Fageda, 2006). Barcelona regional authorities and the autonomous government demand participation in the management of the airport in order to improve it. The airport is considered a key factor of economic growth in various ways. Firstly, it is necessary to intensify the economic transformation of the city-region since it is a fact that knowledge-based business and high-tech industries need adequate air connections. Secondly, the majority of tourists arrive in Barcelona by airplane. Given the above circumstances, intercontinental connections are considered essential. Nowadays, intercontinental flights in Spain are concentrated in Madrid and this is seen as a factor that hinders Barcelona's economic competitiveness. Not surprisingly then, the capacity to participate in the management of the airport is becoming a political issue.

## 4.6 Conclusions and main challenges

As many other European cities, Barcelona has a weak industrial sector in the inner city, where services are the main economic activity, but a stronger one in the outer region. Thus, the

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<sup>&</sup>lt;sup>13</sup> Spanish Airports and Aerial Navigation

economic trends of the city differ from those of the whole region. Since 2000, the city's strategy to tackle economic transformation has been based on the "knowledge city" discourse. Not surprisingly, the first aim of city and regional authorities is to transform Barcelona into an innovation cluster in the European context. This affects all urban management dimensions including urban planning, cultural policies, transport, tourism and trade. One main aspect of the city strategy is the creation of a knowledge-based economy district to attract capital to the city. The new district (called 22@) is currently under construction in Poblenou, an area in the east of Barcelona that was the former industrial core of the city. The project should attract this activity not only to the city but also to the whole region. For this reason new public and private transport infrastructures are being built. Besides, there is a common strategy for all the municipalities involved in the process (see Chapter six).

Culture and cultural industries have played a central role in the city council policies in order to stimulate economic growth too. In that sense it is important to mention Forum de les Cultures 20004, a grand event organized by Barcelona authorities in 2004 with the objective of reinforcing the image of Barcelona as a cultural capital and to urbanize a vast area in south-east Barcelona. Although the event was a failure in terms of tourism attraction, the whole cultural policy implemented for the event influenced the growth of the cultural sector (see Chapter six for further development). As we shall see, tourism is an important asset of the city of Barcelona, which promotes its cultural heritage and its quality of life. Between 2001 and 2005 visitors to the city increased 50 per cent every year. This represents a considerable growth for the sector.

Economic development in the whole region shows differences from Barcelona's main economic trends. In the first place it is a region with strong industrial heritage, with still growing industrial sectors. Knowledge-based industries and jobs are increasing in the region but not as fast as in Barcelona. Some traditionally industrial cities in the region have problems to create knowledge-based dynamics, whereas others are achieving this objective. The economic structure of the region, based on a network of medium cities surrounding Barcelona, influences these trends with new deprived areas and flourishing economic centres. From 2001 onwards, local, regional and national authorities are facing the lack of infrastructures in the region in order to improve regional competitiveness.



"Inside, people merged with the echoes of other times. Accountants, dreamers and apprentices of genius shared table with the mirage of Pablo Picasso, Isaac Albéniz, Federico García Lorca or Salvador Dalí. There, everybody might feel for a while a historical character for the price of a coffee."

About the café "Els Quatre Gats" in Barcelona **The shadow of the wind, Carlos Ruiz Zafón** 

### 5 THE STATE OF THE CREATIVE KNOWLEDGE SECTORS

Although the BMR is still one of the main industrial agglomerations in the EU, the tertiarization process underway since the beginning of the nineties has gone hand in hand with a significant increase in knowledge intensive activities (see Chapter four) and with a relocation of manufacturing activities from Barcelona to the rest of the region. Nowadays, Barcelona and its metropolitan surroundings are competing with other European regions to attract certain activities where creativity, innovation and knowledge are the key elements of success. In this Chapter, we will analyse the role played and the trend followed by these "innovative" and "creative" sectors in the whole economy of BMR. Besides, we will explore the current situation of those activities which constitute the creative sector, paying special attention to the cultural sector as a hard core of them.

### 5.1 Creative industries in the BMR: towards a new model of economic growth

The rise of the creative industry sector in the BMR and its impact is related to a change in the economic and urban model of development. The need for a new model based on the culture of knowledge and sustainability emerges in opposition to the traditional patterns that shaped the city in the industrial period (Barceló and Oliva, 2002). Thus, as we have seen in previous chapters, in recent decades Barcelona and its Metropolitan area have ceased to be the industrial motor of Spain to become a service metropolis. This process should culminate in technological changes and the establishment of information and communication technologies. The process is causing significant territorial, economic and political transformations, which are often fostered by means of Strategic Plans.

The first steps towards this new model of development were taken in the late 1980s and early 1990s and rested on urban and metropolitan polices that aimed at improving the quality of life in the city at all levels. Thus, initiatives to improve the periphery and infrastructures and services for connectedness in the core city and with the different towns that shape the metropolitan area were conducted. At the same time, changes in essential elements in modes of production that were different from previous and traditional forms occurred: an alternative economic model based on the scientific and technological revolution emerged. As this new model originates new forms of production, it is determining economic and urban transformations in the city (Trullén, 2001b).

In this context and with the political determination to take the city towards a development based on a creative and knowledge society, new areas and new industrial activities, creative industries, measures to foster creative sectors and policies to concentrate activities related to information and communication technologies are promoted. Moreover, there is a determined will to attract competitive companies dedicated to the new economy.

A closer look to the different service activities related both to knowledge and cultural activities, reveals that there has been an increase in employment in the sector. A fact that further confirms the changes outlined so far. Table 5.1 details how employment in information and cultural industries and in "arts, entertainment and creativity" increased in Barcelona and the BMR from 1991 to 2001. However, the significant growth is partly explained by the fact that the initial figures were quite low. Indeed, in 1991 the percentage of

people employed in the same group of activities that table 5.3 details was 6.4, while by 2001 it had risen to 8.1.

Table 5.1 - Employment growth rate in the quinary sectors 14. 1991-2001

	City of Barcelona	Rest of BMR	Rest of Catalonia
Information and cultural industries	53.1	126.9	79.6
Professional, scientific and technological	-1.8	55.1	30.5
services			
Education services	30.4	75.3	54.8
Health and social services	43.6	133.5	126.1
Arts, entertainment and creation	23.8	104.1	88.7
TOTAL Quinary services	33.0	100.0	75.7

Source: Sectors quinaris. Motor de desenvolupament de l'Àrea Metropolitana de Barcelona (2005)

The impact of the knowledge economy and creative industries brings about urban transformation. On the one hand the limits of the city change: the core city becomes the regional city. On the other hand, there are changes within the core city, Barcelona. Two elements underline this fact; firstly, as we will see in Chapter six, the strategic planning of the city of Barcelona elaborated during the nineties became metropolitan strategic planning in 2002 and, secondly, nowadays, the largest development in the city of Barcelona, the new district 22@, houses activities related to creative knowledge sectors such as media or bio (see chapter six).

In spite of the proliferation of activities that are taking Barcelona towards the creative and knowledge economy, we need to underline, at this point of our research, a particular characteristic in the model of economic development of Barcelona and its metropolitan region, which is productive diversification. There is productive diversification because there is still considerable industrial activity in the area and because within the sector of creative industries, strategies are directed to reaching specialization in quite a varied set of sub-sectors going from media to information technologies. Rather than cluster specialisation, the Barcelona economic pattern follows the industrial district concept (Becattini, 1986; Trullén, 2006) where diversification within the district is the main characteristic.

As far as knowledge intensive activities are concerned and despite the existence of a series of industries, that will be addressed later on in this section, which are relevant because of their initial momentum, Barcelona hosts a creative and knowledge industry "specialized in diversity": "Economy specialized in diversity, this is our asset, Barcelona, obviously wants to attract activities with more added value, but we won't reject any products, anything that is creative, anything related to culture, design, tourism, etc. the mixture of cultural and creative

<sup>&</sup>lt;sup>14</sup> Quinary sectors can be defined as follows: "[...] Cities are composed of services of different income elasticity. Ordered from lesser to greater growth potential they are as follows: 1) Tertiary services, preferably serving families (restaurants, hotels, hairdressers, and beauty services etc.) 2) Quaternary services, primarily transaction services to companies (local and international trade, transport and communications, insurance and finance, real estate activities, but also public administration services, legislative, judicial, police, security and international relations. 3) **Quinary services**, usually called knowledge-based services or creative industries, because the have more specialised employment with longer education and aim to increase and maintain the human and social capital but particularly to create it; made up of scientific and professional activities, those of information and communication, education, social and hygiene and health, creative industries, those of entertainment and shows." (Lausén and Baró, 2005).

industries is what counts for Barcelona" (Interview *Promoció Econòmica Ajuntament de Barcelona*).

## 5.1.1 The importance of the transformation of traditional sectors

The great diversification of the creative sector is stimulated through not only the current production of technological industries but also thanks to the incorporation of new technology in industries belonging to traditional sectors (Trullén, 2001b). The transformation experienced by traditional industries is worth mentioning. There are, in Barcelona, a series of industries that have contributed to metropolitan development. These have been kept and have evolved to incorporate new activities, with more added value, and have undergone processes of innovation.

The transformation of these industries is actively supported and some of the changes can be considered clear examples of the new strategies to effect metropolitan development. The chemical sector has succeeded in developing a consolidated pharmaceutical industry. The publishing industry, with significant historical relevance in Catalonia, has managed to incorporate ICT practices and is becoming one of the most advanced industries in the tertiary sector. Moreover, it is one of the leaders in the Catalan economy. The food industry has, as well, evolved and is becoming a flagship in terms of promoting Barcelona. Thus Barcelona Town Council; the Ministry for Agriculture, Fishery and Food; and the autonomous government are the main patrons of the Mediterranean Diet Foundation. The Foundation has, in its mission statement, defined Barcelona as the capital of the world food sector. Barcelona has a unique tradition in the agricultural and food sector. This has facilitated the development of a particular environment which goes from a solid scientific base to a diversified business activity. The activities range from production and transformation of produce to finished products and food services. Consequently, Barcelona has become a real cluster and international referent for the sector.

There are other creative industries, such as architecture and design, that from the 1990s onwards, have made of Barcelona one of the international referents in their areas. Certainly, Barcelona has been frequently labelled as "The City of Architects" given not only the traditional influence of well-known famous architects such as Gaudí but also the relevance that architecture acquired since the Olympics as one of our knowledge-export sectors (Miralles and Tagliabue; Martorell, Bohigas and Mackay, among others). It has contributed to promoting the city and to attracting tourism, which is a key sector for the Catalan economy. The Strategic Metropolitan Plan states that Barcelona is the capital of architecture and design. Currently The Design Cultural Centre is under construction. This new equipment will have 20,000 square metres and it is going to be a platform for the promotion of design originated in Barcelona, the metropolitan region, and Catalonia.

### 5.1.2 The importance of soft factors for creative business location in BMR

Both urban and economic transformations have determined a qualitative and quantitative improvement of the city of Barcelona in international spheres. In 2006, *The European Cities Monitor* placed Barcelona in fourth position out of thirty-three European cities as places for

business location<sup>15</sup>. Moreover, the survey reveals that the city position has constantly improved since it moved from position eleventh in 1990 to position fifth in 2005.

For the period 2000-2004, Catalonia has been the third European reception centre of foreign investment projects (368 projects). According to Ernst & Young (2005) Catalonia was, during this period, the first region in attracting industrial projects and research centres. In fact, the volume of foreign investment increased 42 per cent between 2004 and 2005. According to the Chamber of Commerce-Ajuntament de Barcelona (*Observatori de Barcelona*, 2006), foreign investment has shifted towards sectors with high added value such as telecommunications, information technologies and services to companies.

BMR is one of the ten major European concentrations in knowledge-intensive (production, exchange and use) activities and companies. 21.5 per cent of companies in BMR have, as their main activity a knowledge intensive sector. They represent 72 per cent of knowledge and technology intensive businesses in Catalonia and are mainly located in the Barcelona region. Barcelona is, therefore, oriented towards production of knowledge and, especially, services of knowledge (*Observatori de Barcelona*, 2006).

Quality of life is one of the main reasons why Barcelona is considered an ideal business location since the city ranks number one in this category. Quality of life is certainly related to intangible soft factors. However, the city has made a sustained effort to move away from the stereotype that regards the city as a place for the sun and beach type of tourism towards a more "business oriented city". According to European Cities Monitor, for the ninth consecutive time, European executives interviewed in 2006 considered Barcelona as the city which offers better quality of life to employees. Zurich and Madrid share the second position. Certainly, the good ranking in quality of life is explained by the low cost of life in the city. However, the image of a "cheap city" is disappearing given the increase in prices during the last years.

The favourable position accorded to Barcelona by quantitative surveys such as the ones that have been given thus far, is further emphasised through another relevant soft factor which is clearly related to intangible factors, namely, the image linked to the "Barcelona model". This denomination refers to the particular urban and economic development model of Barcelona and the image that the city projects. This perception gained momentum with the 1992 Olympic Games thanks to the transformations experienced in the city and the international resonance of the event. Later on, this denomination was transformed by the municipal government through branding the Barcelona image for business location (see Chapter six).

From the 1992 Olympic Games onwards, public institutions reinforce this soft factor through marketing and promotional strategies aimed at raising the city's profile not only at an international level but also in the eyes of Barcelona's citizens. It is therefore, an initiative created and disseminated by governmental institutions (Gaete, 2003). Some of the data collected in the survey *European cities monitor* offer clues about the vigour of Barcelona's image: in 2006, Barcelona featured first in the category "most improving cities" and it was among the ten top cities where "governments have managed to create the right conditions to

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<sup>&</sup>lt;sup>15</sup> According to the National Institute of Statistics, at the beginning of 2005, the Barcelona area accommodated more than 436,000 business venues (this means 14.2 per cent of Spanish businesses and 77 per cent of Catalan businesses).

locate businesses and to attract corporations". This particular type of promotion does not only affect favourably the establishment of new businesses and creative industries but also increases the inflow of capital through upmarket tourism and activities in the cultural sector. It becomes evident that the brand is directly related to the perception that Barcelona offers high quality of life and tolerance. The Strategic Plan for Culture refers to the "trademark" when assessing as positive the performance of Barcelona as a platform for promoting cultural activity.

#### Terminal B, Barcelona Creative Database

As Barcelona has become "a favoured centre for architects, designers, stylists, illustrators, photographers, publicists and creative professionals from all over the world (...) and one of the largest reservoirs of talent in the world" (Terminal B website), Terminal B emerged as an initiative of FAD, Promoting Arts and Design<sup>16</sup>-Foment de les Arts Decoratives i el Disseny-. This initiative was launched in June 2006 and aimed at creating a database, the Barcelona Creative Database, a virtual space open to everyone to sign in and become a member. Such a database aspires to catalogue the best creative talents in design, arts and crafts, architecture, image and communication produced in Barcelona. It is promoted by FAD, Foundation Caixa de Catalunya and the Catalan Institute of Cultural Industries.

The website (www.terminalb.org, visited on 24<sup>th</sup> January 2007) allows to identify some of the characteristics of those who have already signed in:

Figure 5.1 - Characteristics of Barcelona creative people

Reasons for moving to Barcelona:	Year of arrival:	Type of studies:
96 attracted by the city	1998-2000: 121	University: 4
19 geographical climate and location	2001-2003: 188	Master: 395
223 study reasons	2004-2006: 236	Postgraduate: 187
146 professional reasons		Other: 911
742 personal reasons		

Source: Barcelona Creative database

A recent publication (Volume 1, Terminal B, Barcelona Creative Database) in February, 2007, has selected 100 creative individuals, "all of whom have chosen to apply the Barcelona trademark to the fruits of their labour" (Jordi Hereu, Mayor of Barcelona). Three languages

(FAD website).

<sup>&</sup>lt;sup>16</sup>A private, non-profit institution founded in 1903. It is made up of over one thousand five hundred professionals in design, architecture and other creative fields. Its aim is to promote these disciplines as part of the cultural and economic life of Catalonia. It is made up of six associations that represent different areas of design:

<sup>-</sup> arts and handicrafts

<sup>-</sup> graphic design and visual communication

<sup>-</sup> industrial design

<sup>-</sup> architecture and interior design

<sup>-</sup> image and fashion

<sup>-</sup> contemporary jewellery.

(Catalan, Spanish and English) explain the work done by each creator/artist, giving some hints of their reasons to locate in Barcelona.

### Figure 5.2 - Comments on the city of Barcelona by professionals

- << What she likes about Barcelona is the "spontaneous and widespread" affection of people in the city towards children and the elderly, and she is surprised when people call her "princess" in the market even when they do not know her at all>> ( Jeannette Altherr, German, industrial designer and stylist)
- << ...(he) decided to try his luck in a city that combined "the best aspects of San Francisco-its cultural activity- with the benefits of Hong-Kong-its links with the world>> (Nick Angel, American, designer)
- <<..(he) has seen the evolution of Barcelona design, from the classical style of the eighties to the boom of the Olympic Games and the current professionalism, although he is surprised by the lack of a robust industry here, as there is in Milan...>> (Jonathan Daifuku, American, architect and product designer)
- << ...(he) originally came for just a couple of months, with the intention of returning to Madrid, but the "highly creative" city, as well as personal circumstances, encouraged to change his plans...what he likes of Barcelona is the way it welcomes people who come from elsewhere, as well as its atmosphere, which is more open>> (Román Ávila, Spanish graphic designer)
- << it's a city offering plenty of cultural activity, with a surprising capacity for accepting new and interesting initiatives, without prejudice in accepting what is new, but with the judgement to get rid of it if the standard isn't high enough>>> (J.M Bejarano, Spanish, magazine director)
- <<..he observes that the quality of life that brought him here is clearly declining: "quality has been exchanged for fame" although this transformation is due to an "error of judgement in recent years" he hopes it will not put an end to "the cultural charm of an entire lifetime" >> (André Bluth, Uruguaian, designer)
- What she likes about Barcelona is the rhythm of life, and the fact that it is less competitive than her native country. However, she does complain about a certain laxness and lack of responsibility among the people of Barcelona, which creates obstacles in everyday life>>> (Stefanie Herr, German, model maker)
- ...Barcelona, a city that allows professionals to work on very different projects, combining commercial work with personal projects. He also values the attitude of the people here, which is warmer and more straightforward than in his native London..>> (Cosmo Campbell, English, camera operator and director of photography)
- <<...as an inhabitant of the Raval, he is a fervent admirer of multicultural society, not just in that neighbourhood but also in the whole city, and of the area's colour and vivacity, which is the "real motor of Barcelona">>>(Juan Carter, Chilean, caricaturist, architect, painter and illustrator)
- <<..she liked (of Barcelona) the mixture of people, and the many and varied influences that have an effect on the city (...) "open, and with a lot of cultural activity". She was impressed by the great number of small but varied cultural events>>(Mona Kim, Korean, designer)
- <<..once he had moved to Barcelona, liked the "intense activity that surrounds design", in other words, schools, exhibitions and trade fairs that mean this discipline has a high profile in the life of the city>> (Fabio Maria de Silva, Italian, designer)
- << The simple nature of Barcelona, a city where "you don't have to pretend", a more relaxed pace of life and the completely respectful curiosity and interest that the people of Barcelona show towards foreigners convinced him>>(Nicolás Estrada, Colombian, jeweller maker)

<<Barcelona and Amsterdam are similar cities, they are big but they are not capitals, they are small, comfortable cities but with a great deal of cultural activity>> (Ariel Guersenzvaig, Argentinian, designer)

Source: Barcelona Creative Database. Terminal B. Volume 1

The capacity of the city of Barcelona as organizer of trade fairs and events, which might be considered as another soft factor, plays an important role in projecting the desired image of the city since Barcelona is one of the cities in the world where a higher number of trade fairs and events are held. In 2005, according to the Union of International Associations (UIA), Barcelona was in fifth position in the world ranking of cities organisers of conferences and conventions. The city was further ahead than New York and improving positions since 2002 when Barcelona occupied the seventh place. Barcelona is the Spanish city with a higher number of trade fairs and meetings and it aims at becoming the second European city, after Milan, in this area. In order to accomplish this purpose, Barcelona's main exhibition site, *Fira de Barcelona*, will be enlarged so that in 2009 the city will have 355,000 square metres available for exhibition. The relevance and the economic growth of *Fira de Barcelona* is on the rise and this institution is therefore meeting the objectives of the strategic metropolitan plan (*Pla Estratègic Metropolità*) which designated it as one of the main platforms of international promotion. In 2005, its turnover rose by ten per cent to reach the fourteen million euro mark.

Certainly, from the late 1980s and up to the present time, Barcelona and its metropolitan area have used the organization of numerous international events such as the Olympic Games in 1992 or the Forum of Cultures in 2004, the above mentioned numerous annual international trade fairs<sup>17</sup> and the thematic years<sup>18</sup> to stimulate a particular model of urban development, to transform several urban areas, to attract foreign and national investment, and to promote the city internationally.

Finally, as seen in Chapter four, the social landscape of Barcelona is changing fast. 7.8 per cent of the population in the province of Barcelona and 8.9 per cent in the BMR are immigrants (2003). The increase in the number of immigrants has taken place in a relatively short period of time. In 1996, the percentage was 1.9, rising to 7.6 per cent in 2001 and doubling in the last five years. The accelerated nature of the rise has not, up to now, translated into an increase of social conflict or extreme cases of social and cultural exclusion. Local and regional institutions coincide in regarding multiculturalism as an asset and are keen on relating diversity to integration and inclusion. (De Semir, 2001). El Pla d'Acció Municipal de Barcelona, has, for some time now, set social cohesion as one of its main objectives. The different levels of government address immigration as a transversal concern and decline to implement exclusive measures. Therefore, a join action that involves all the governments -Pla Interdepartamental d'Immigració- has been implemented. However, the concentration of immigrant population in certain districts and cities in the BMR, with some areas that exceed 30 per cent of total population, is turning these locations into potential areas of conflict, where mainly the education system has been forced to react, introducing diversity, multiculturalism and the teaching of respect in the syllabus.

<sup>18</sup> Gaudi year in 2005, International Book year in 2006, International Science Year in 2007

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<sup>&</sup>lt;sup>17</sup> Automobile Fair, Alimentaria, 3GSM, Bread and Butter, Cosmobelleza, Graphispag, among others

# 5.2 The quinary sector in BMR: composition and development

Creative industries in the Barcelona metropolitan region are based mainly on the cultural sector which has a growing importance especially in the city of Barcelona. As we will see later, one of the main difficulties when analysing the cultural sector is to assess the degree in which culture contributes to the economic development of the metropolitan territory. The cultural industry sector in itself poses a problem in terms of definition, measurements and indicators. Apart from cultural industries, there are other significant creative industries based on ICT or audiovisual activities. Figure 5.3 shows the evolution of enterprises in different creative activities in whole Catalonia. As can be seen, enterprises concentrate in the arts and antiques, architecture and designer fashion as main activities. Nevertheless the other activities such as music and visual and performing arts have been growing in the last years. These data can be used to illustrate main trends in the metropolitan region.

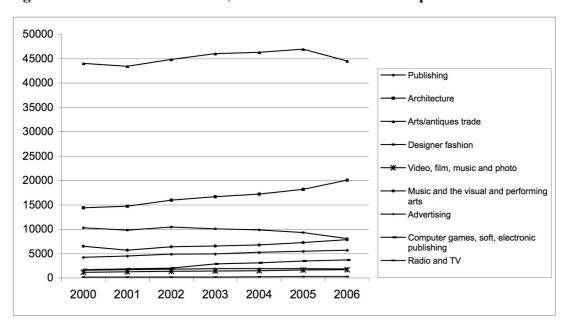


Figure 5.3 -- Creative industries, 2000-2006. Number of companies in Catalonia

Source: DIRCE, INE

Figure 5.4 shows the evolution in the number of companies per sectors. Creative industries have experienced an important growth, as well as law and other business services. In the next sections we analyse the evolution of different sub-sectors.

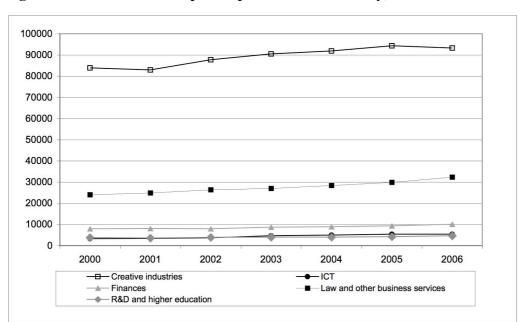
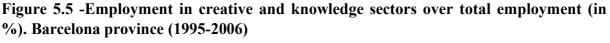
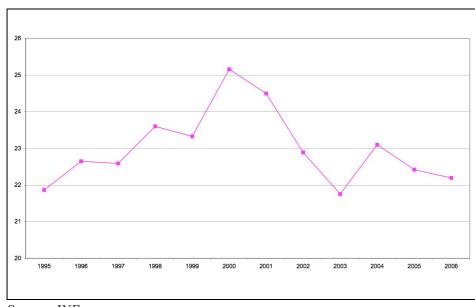


Figure 5.4 -Number of companies per sectors of activity, 2000-2006

Source: DIRCE, INE

Employment in the creative and knowledge intensive sectors, measured taking into account the percentage of employment it represents within total employment, experienced a slight increase in the 1995-2000 period. It is significant that the increase occurred at a time when around 900,000 new jobs were created in Barcelona. Moreover, employment in creative and knowledge intensive sectors rose relatively, in spite of the fact that jobs were lost in some of the manufacturing activities under study, above all in those related to the textile industry. For instance, the designer fashion sector lost 16,000 jobs between 1995 and 2006. However, the relevance for economic activity and employment in the province of the total of activities under study increased.





Source: INE

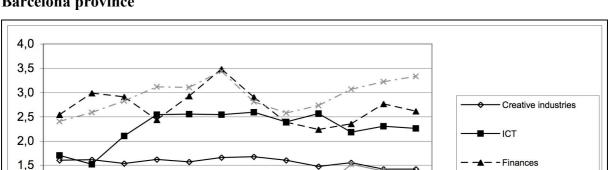
In the later decades of the twentieth century, creative and knowledge intensive activities that employed a higher proportion of people were designer fashion, an activity connected to the traditional textile industry of the region, and other trading activities and business services activities, such as arts/antiques, law and other business services and finance.

However, the trend in recent years (figure 5.6), reveals a relative loss in the significance of designer fashion, arts/antiques, and, to a lesser extent in finance. A new trend emerges, instead, for there is a relative rise in activities such as computer, architecture, and R&D and higher education. These sectors are becoming key for the development of new technologies, creativity, and knowledge in Barcelona. Law and other business services, activities intrinsically related to the development of business activity, experience a significant rise.

6,0 - Advertising 5,0 Architecture 4.0 Arts/Antiques trade Designer fashion 3,0 Video, Film, music and photography Music and the visual and 2,0 performing arts Publishina 1,0 Computer games, sofware, electronic publishing 0,0 Radio and TV 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006

Figure 5.6 -Employment in creative sectors over total employment in Barcelona province

Source: Encuesta de Población Activa, INE



1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006

Figure 5.7 - Employment in knowledge-intensive sectors over total employment in Barcelona province

Source: Encuesta de Población Activa, INE

1,0

0,5

0.0

Law and other business

services

R&D and higher education

# 5.2.1 Cultural Industries: the hard core of creative industries in BMR

The importance of the cultural sector as a key sector in the economic development and growth of the BMR is evident as many books, ad hoc planning and reports on the sector have been recently published; in 1999, the Institut Municipal de Cultura de Barcelona designed the first Strategic Plan for Culture (Pla Estratègic de la Cultura) (See Chapter six); in 2002, the most important report on Cultural Industries in Catalonia was produced —Llibre Blanc de les Indústries Culturals— assigned by the Culture Department of the Autonomous Government in Catalonia; in 2005, the Chamber of Commerce published a large study on the cultural sector in Catalonia —El sector cultural a Catalunya—; in 2006, many indicators and statistics were elaborated on the cultural sector in Catalonia by the Autonomous government, — Indicadors i estadístiques culturals a Catalunya—. Besides, in 2006, a second Strategic Cultural Plan for the city of Barcelona was developed. Not all of them focus on the same sectors, however, the following are featured in all of them: book (edition, distribution and bookshops), music (production, distribution and trade), audiovisual (production, distribution, cinema exhibition and video-clubs), stage arts (theatre, music and dancing) and visual arts. These activities include on the one hand, those which are susceptible of improvement thanks to technology and, on the other hand, those that are more artistically oriented.

The growing importance of the cultural sector in Catalonia and, in particular, in Barcelona, is evident according to the following data: in 2001, the sector in Catalonia represented 1.2 per cent of the Added Value and around 0.9 per cent of employment (Cultural Department, *Generalitat de Catalunya*). Productivity was higher than for the rest of the economy (31 per cent higher) and for the period 1998-2001 and for the sectors mentioned above the percentage of growth was 20.8.

Considering sectors, the most active sector in terms of contribution to the cultural added value was audiovisual (see table 5.2). Audiovisual and multimedia industries are, according to the Strategic Metropolitan Plan, strategic sectors for the development of the quinary sector. Audiovisual and multimedia activities are one of the emergent sectors thanks to production and exports. Moreover, the urban macro-project that plans the construction of a new economic and innovation district, 22@, will significantly back the growth of this sector. Indeed, the district will host, among other initiatives, a Centre for Audiovisual Production (Centre de Producció Audiovisual).

Table 5.2 - Value of production of cultural sector in Catalonia

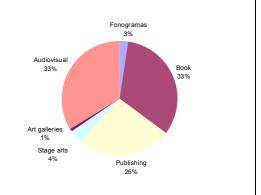
I more ora	production of co	iturur sector in s	Cuturoniu		
	1998	1999	2000	2001	Growth
Books	1,187,167	1,300,987	1,308,698	1,313,000	10.6
Press	728,718	804,113	869,018	864,127	18.6
Phonogram	195,026	221,112	245,825	264,897	35.8
Audiovisual	521,407	591,917	661,045	734,201	40.8
Performing arts	53,120	60,319	70,054	63,444	19.4
Visual arts	13,627	16,299	18,226	21,390	57.0
Total	2,699,065	2,994,747	3,172,866		20.8

Source: El sector cultural a Catalunya based in Department of Culture, Generalitat de Catalunya

Figure 5.8 shows the evolution of several cultural industries in the city of Barcelona. It stresses the good performance of the publishing and audiovisual industries. The table illustrates, as well, the growth experienced in the cultural sector in general.

Figure 5.8 - Gross Added Value of cultural industries and communication. Barcelona. 2000-2003.

	2000	2001	2002	2003
Phonogram	37,109	39,278	53,710	37,296
Books	456,697	472,141	466,698	485,924
Press	372,027	356,757	362,104	387,851
Performing arts	37,277	37,710	51,903	59,046
Art galleries	8,798	10,929	10,875	11,049
Audiovisual	381,989	430,744	490,147	503,454
TOTAL	1,293,897	1,347,559	1,435,437	1,484,620



Source: Nous Accents 2006-Pla Estratègic de la Cultura, 2006

As we have seen above, the publishing sector is one of the most significant traditional cultural industries in Barcelona. Catalan publishing industries accounted for 57.4 per cent of sales in the Spanish market in 2000. In the same year, there were 250 companies in the sector that produced a total of 25,467 books (*Llibre Blanc de les Indústries Culturals*, 2002). The region plays a leading role in the editorial sector in Spain. However, the sector is not only relevant for the domestic market. Books are one of Spain's main exports, and in recent years, Catalonia was responsible for 50 per cent of total sales (See Table 5.3). However, the sector has slightly stagnated since 1998 due to the emergence of new digital technologies, the maturity of the sector and the decline in the publishing of large products such as dictionaries or encyclopaedias (*El sector cultural a Catalunya*, Chamber of Commerce, 2005).

Table 5.3 – Exports of books, Catalonia and Spain (million of euros) 1996-2000.

	1996	1997	1998	1999	2000	2001
Catalonia	148.7	204.5	202.2	192.0	230.9	252.1
Spain	266.6	365.3	382.8	376.1	462.5	n.a.
% Catalonia vs.	55.8	56.0	52.8	51.1	49.9	n.a.
Spain						

Source: Llibre Blanc de les indústries culturals, 2002

#### 5.2.2 *ICT*

The role of ICTs as essential infrastructures of the knowledge society and key agents in economic development has increased considerable in the last decade. In Spain, the sector grew by 15 per cent in 1997 and employed 205,000 people, a figure that meant 5.7 per cent increase from the previous year (Barceló and Oliva, 2002).

The group of activities that fall under the ICT denomination accounted for 4.45 per cent of GDP in the province of Barcelona in 2001. Within the total, services represented 3.72 per cent of the province's GDP. There were a total of 2,830 ICT businesses in the province of Barcelona in 2004, and 95 per cent of those were located in the BMR. They employed over 53,000 people and their average size was 16.6 employees per company. Around 78 per cent of the companies were dedicated to ICT services.

In spite of the steady increase and the favourable position of Barcelona, when compared to that of Spain, there are low levels of ICT use in a society that aims at becoming a knowledge and creative economy. The shortcomings are evident when we look at internet use. In Catalonia, in 2004, internet was used by 49.6 per cent of individuals who were over 15 years of age. The percentage was 47 per cent in the EU (*Observatori de la Societat de la Informació*, 2005).

Table 5.4 - ICT equipment in households. 2004.

% over total households	UE15	Catalonia	BMR	Spain
Household with mobile	80	79.7	80.4	76.9
Household with computer	53	54.7	56	48.1
Household with internet	45	40.4	41.7	30.9
Household with broad band	10	17.8	19.3	13.7

Source: Equipament i ús de les tecnologies de la informació i la comunicació, Generalitat de Catalunya, 2005. INE/ Eurostat

However, the number of homes equipped with a computer is higher than both the Spanish and the European average. As this aspect is key for internet access, it is foreseeable that in the next years there will be an increase in the use of ICT in the homes. Finally, we would like to highlight the fact that it is the Barcelona Metropolitan area the territory that registers a higher use of ICT in Catalonia (See Table 5.5)

Barcelona and its Metropolitan Region try to compensate for the deficit, compared to European standards, in ICT and for a poor culture of innovation with public initiatives and projects on innovation. An example would be the local agency *Barcelona Innova*, which was created to promote and publicize innovation both among companies and individuals and to promote Barcelona as an innovating city (See Chapter six). However, the clearest example of all is the macro-project 22@: activities that will be granted priority in 22@ are those characteristic of the knowledge economy, intensive in ICTs, and employing qualified people. The table that follows illustrates how businesses in the ICT sector prevail among the companies that are already located in the district.

Table 5.5 - Enterprises in the 22@ Barcelona per sectors (accumulative data)

Sector	Number of companies
ICT	83
Media, marketing and communication	34
Bio-health	9
Energy	11
Education	6
Institutions of promotion of economic activity	8
Other institutions and services	10
Real estates, building sectors, infrastructures and architects	19
Finances, insurances	24
Fashion	8
Food and hotel and catering	23
Transports	3
Unknown	9
Others	10
Total	257

Source: Informe 22@, 2006

### 5.2.3 Financial services in the BMR

Barcelona is not a leading financial centre in the sense that cities such as London, Frankfurt, and even Madrid are. The majority of financial companies located in Spain have their corporative sites in Madrid, which is Spain's financial capital. Barcelona has its own Stock Exchange, though. The stock systems in Madrid and Barcelona are connected. Madrid is the actual controller of the system but it is possible to conduct operations and transactions from Barcelona.

One of the main activities in the Spanish stock market is the transaction —buying and selling— of Latin American financial products. This is due to increasing Spanish investment in Latin America. Barcelona is an active player in these operations.

The integration of European stock markets into EMU will increase the centralization of financial markets. Within that environment Barcelona will have to strive for competitiveness by means of virtual systems.

As mentioned in Chapter three, savings banks (*Caixes d'Estalvi*) are a particular feature of Catalonia and the BMR. These institutions are obliged by law to allocate part of their profit to social projects. A considerable part of the projects funded by savings banks are cultural projects. Thus, the two most relevant savings banks in Catalonia<sup>19</sup> spent 175.7 million euros on cultural activities in 2005. Among the activities that received their support there were temporal and permanent art exhibitions, museums, and heritage. Besides, they helped finance environmental action, and social projects whose aim was the integration of immigrants.

#### 5.2.4 Law and other business services

Barcelona's tertiarization process has seen the significant increase of the sector that specializes in business services. This is a key sector for a city whose activities fall mainly under the service sector, but with a metropolitan region where there is still significant industrial activity. The rise of the business service sector was due to several factors: economic diversification, the reduction of activities directly related to production —a fact that has resulted in the externalization of certain processes—, and the retention of industrial activity in the BMR. Besides, the increase in outsourcing practices has facilitated the creation of companies that were ready to provide the services in demand (Barceló and Oliva, 2002).

The increase in the number of companies dedicated to business services in the city of Barcelona is shown in table 5.6. They clearly exceed other sectors such as finance and health services.

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<sup>&</sup>lt;sup>19</sup> La Caixa d'Estalvis i Pensions and Caixa de Catalunya.

Table 5.6 - Professional and enterprise activities in Barcelona

	TOTAL	Hotel &	Transport and	Financial	Real estate	Education	Other
		catering	communication	intermediation	& company	and health	services
		services			services		
2000	73,249	12,199	13,578	3,697	22,509	5,955	15,311
2001	75,183	12,360	13,480	3,624	24,017	6,069	15,633
2002	77,271	12,506	13,235	3,568	25,730	6,213	16,019
2003	78,941	12,496	13,137	3,566	27,250	6,307	16,185

Source: Ajuntament de Barcelona

However, the existence of this type of activity does not offer any guaranties towards a model of development based on creative and knowledge industries. The sector evidences certain shortcomings: the need of balance with other knowledge intensive activities, the need to differentiate, within the sector, between those companies that are knowledge intensive and those that are not, and to encourage innovation among the latter. Finally, clear sector specific indicators are needed.

### 5.2.5 R&D and higher education activities in the BMR

Spain's investment in R&D is lower than the European average. According to OECD, average European investment reached 1.81 per cent of GDP in 2003 while the figure for Spain was 1.13 per cent. Nevertheless the current government is making real effort in order to increase R&D expenditure. The increase in 2005 was 14 per cent when compared to the previous year. The aim is to increase the percentage by 25 per cent in a four year period.

In this general framework, and according to INE figures for 2005, Catalonia was the fourth Spanish autonomous community in R&D expenditure. The figures are above the national average and account for 1.35 per cent of GDP. In euros the amount was 2,302,350, of which 63.1 per cent were implemented by private companies, 11.43 by public administration and 25.1 per cent went to tertiary education.

The different experts we interviewed coincide in highlighting that in order to tackle research and development we must look beyond R&D expenditure. Several factors affect the development of research and innovation in the region. A positive aspect is the tradition of private-public cooperation, which in the Barcelona region is higher than in other Spanish metropolitan areas. This cooperation has evolved favourably in the last two decades. However, there are still some shortcomings: in-company training needs to be increased and improved; there should be more cooperation between companies and research centres/universities. (Interviews *Promoció Econòmica Ajuntament de Barcelona, Strategic Plan* and *Barcelona Innova*).

As far as universities are concerned, the experts agree on the fact that the current university system is not adequate in order to facilitate cooperation with companies in R&D. There is still too little contact with companies. "The university system has to adapt better to the new city of knowledge (...) It has to be more flexible and capable to take the role of creator, producer, and disseminator of knowledge (...) we need to abolish the obstacles that prevent people from working in companies and the university at the same time (...) We need more resources to

promote research in public centres that encourage the participation of the private sector" (Barceló and Oliva, 2002, p.192).

There are a total of twelve universities in Catalonia, and seven of these are in the Barcelona Metropolitan Region. This fact has been instrumental in improving the education level of the population of the region. This is shown in Table 5.7, where we can see population percentages and their education level measured in terms of OECD standards<sup>20</sup>. It the period of time that goes from 1991 to 2001 there was a considerable improvement in the education level of the population that was potentially employable. This becomes obvious when we look at the percentage of people who had completed tertiary education, which were 18.9 of those aged between 16 and 64 in 2001.

Table 5.7 - Education level for population between 16 and 64 years, in the BMR

	1991	2001
Illiterate	1.8	1.3
Primary education	52.0	26.6
Secondary education	33.3	53.1
Tertiary	12.8	18.9

Source: Barcelona Ciutat del Coneixement (Ajuntament de Barcelona)

The figures do not compare favourably, though, to other European regions. Table 5.8 details the percentages of people with tertiary education over 25 years of age. Barcelona is in position 16<sup>th</sup>. Just above Milan and far from the heading positions where cities such as Helsinki and Paris feature.

Table 5.8 - Percentage of population older than 25 years with tertiary education (2001)

	Place in the European ranking	% with tertiary studies
Helsinki	1	38.5
Paris	2	33.5
Toulouse	3	32.1
London	4	29.1
Amsterdam	7	27.2
Munich	8	26.8
Dublin	9	23.9
Barcelona	16	15.6
Milan	19	12.1

Source: Barcelona Ciutat del Coneixement (Ajuntament de Barcelona)

The percentage of population over 10 years of age which had completed tertiary education in Catalonia in 2001 was 12.8. This was slightly above the national average which stood at 12.6 per cent. The number of graduated population increased steadily in recent decades. The figure for 1994 was 19,010 and rose to 32, 753 in the 2003-2004 academic year. Nevertheless, these figures have been decelerating significantly in the last three years.

Catalonia is the Autonomous Community that has a higher number of science parks. In 2003 *Generalitat de Catalunya* created the Science and Technology Parks network of Catalonia, with the aim of being the motor of the transference of knowledge and science in the

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 $<sup>^{20}</sup>$  According to these criteria, tertiary studies include all education received after secondary education.

autonomous region. At its first stage the network included 11 parks, 9 of them located in the Barcelona Metropolitan Region. Besides, 4 are in Barcelona city (*Ministerio de Educación y Ciencia*). 173 enterprises collaborated in the public-private research partnership and 4,500 persons were employed. Nowadays the network includes 17 parks. One of the last science parks to be opened in the city will be dedicated to biomedical research. This goes in line with other developments in the area since, for quite some time now, Barcelona and its metropolitan area have accorded special attention to the development of "Bio" sectors. In this line the urban renewal of L'Hospitalet, the second most important city in the region, is based at great extent on the creation of a cluster of R&D based on health, the "Biopol". Thus, 26 per cent of biomedical research in Spain is originated in Barcelona and its Metropolitan area. In that sense, the network of hospitals and biomedical research centres confirm the existence of a sanitary cluster in BMR.

Moreover, in the period 1996 - 2001, Barcelona was the 9th European city as far as the number of articles published in academic journals is concerned. The increase —36.8 per cent— in this area is one of the highest in Europe in the last 20 years.

Table 5.9 - Academic production in 2004

City	Published articles	Global	European
City	r ublished afficies	ranking	ranking
Tokyo	24,673	1	-
London	22,288	2	1
New York	16,993	3	-
Boston	16,537	4	-
Paris	16,449	5	2
Beijing	15,537	6	-
Moscow	13,088	7	3
Seul	12,239	8	-
Los Angeles	10,081	9	-
Baltimore	9,989	10	-
Philadelphia	9,897	11	-
Osaka	9,857	12	-
Cambridge Massachusetts	9,176	13	-
Houston	9,130	14	-
Chicago	9,091	15	-
Berlin	8,550	16	4
Roma	8,404	17	5
Madrid	8,393	18	6
Toronto	8,142	19	-
Hong Kong	7,618	20	-
Cambridge	7,499	21	7
Changai	7,365	22	-
Munich	7,272	23	8
Montreal	7,047	24	-
Barcelona	6,860	25	9
Milan	6,787	26	10
Pittsburgh	6,620	27	-
Stanford	6,512	28	-
Sao Paulo	6,355	29	-
Oxford	6,338	30	11

Source: Observatori Barcelona, 2007

Since the 1990s, a distinctive feature in Catalonia and, particularly in the BMR, is the recent creation of capital risk societies. In Barcelona, investment rose from 10.4 millions in 1993 to 328.3 millions in 2003. These companies behave with a strong cyclical component; taking a higher risk in expansion periods and a lower risk in recession years (Martí, 2004). Among the most relevant activities, these societies are oriented to:

- Companies with a high technological component (many associated to Technology Parks as a way to diversify risks and facilitate the creation of external effects)
- Emerging companies
- Activities related to consumption, specially branding.

# 5.3 Conclusions: The future path of economic development in the BMR

The BMR, understood as a creative and knowledge city, is undergoing a dynamic process of consolidation. In order to culminate the process, there are several challenges that will have to be addressed:

- Unification of concepts and indicators: As evidenced in the present chapter, one of the main challenges is the unification and delimitation of concepts. Currently the administrations and institutions that are working to reach similar objectives lack common definitions. Consequently, we encounter varied and/or relative classifications in the creative industry sector. There are, moreover, no indicators at all for certain key sub-sectors. The challenge is to establish common criteria in order to obtain indicators so that a clear strategy can be defined and followed. The conclusions of the fourth meeting of the Barcelona Strategic Metropolitan Plan asked of the different institutions an effort in order to obtain data on the quinary sector so that common plans of action could be established.
- Consolidation of the BMR as single cultural space: Currently the different towns and cities in the BMR collaborate for particular purposes and events. However, the initial purpose of *Forum Metropolità de Regidors de Cultura* in 2002 which aimed at cultural-territorial integration through the construction of a metropolitan cultural space that would involve local administrations, governments and society, never went much further.
- New infrastructures and upgrading existent infrastructures: Barcelona and its Metropolitan Region must face new challenges in this aspect. First of all telecommunication infrastructures have to be improved. The *European Cities Monitor* granted the area 19<sup>th</sup> position in 2006. Poor technological infrastructures produce poor results in innovation and ICT (Vives and Torrents, 2004).

The construction of new infrastructures and managing better existing infrastructures is a priority in order to effect economic growth in the Barcelona Metropolitan Region. Air and rail networks are far from optimal. Barcelona airport is the 9<sup>th</sup> European airport as far as number of passengers is concerned. There were 27 million passengers in 2005, but the airport has only 37 direct intercontinental flights a year. Besides, these flights are directed to tourism and not to professionals. Cities such as Zurich, Milan, Manchester or Brussels experience a lower volume of traffic but have more intercontinental flights than Barcelona (Bel and Fageda, 2006). The cause of the above deficit is the management system of airports in Spain. The scarce number of intercontinental flights hinders for the location of activities that fall under the knowledge economy. The delay in the construction of AVE (Spansh High Speed Train), namely its arrival in Barcelona and the connection to France is another deficit in the

infrastructure of the region. Given the above communication drawbacks, it does not come as a surprise that Barcelona features in position 10<sup>th</sup> in the category "Best cities in terms of external transport links" of the *European Cities Monitor*.

In the near future, the situation will be redressed by the enlargement of the airport where a new track and a new terminal are under construction, new infrastructure in the port of Barcelona will allow it to become the first European port as far as number of annual cruises is concerned, and finally the AVE will get to Barcelona city in 2007.

- Targeting upmarket tourism: Despite the outlined transport deficit, tourism has been a major instrument in the economic development of Barcelona since the 1990s. The sector has grown steadily from 1,500,000 visitors in 1990 to 6,036,888 in 2006. The increase in the last year was 19.3 per cent. The prospects for coming years are also positive (El País, 9<sup>th</sup> December 06). Several surveys reveal that Barcelona is becoming an entertainment city and not a Region of innovation. The scale of the sector needs to be checked in order to redirect growth from sectors such as tourism and construction towards a knowledge society, which is the desired direction of different governmental institutions. The challenge will be to intervene adequately in order to adjust the part that tourism has to play in the desired model of development. The aim has to be the attraction of cultural and quality tourism.
- A more stable housing market: Public intervention is also needed in order to face the challenge that overpricing in the housing market poses. High and constantly rising house prices are a major problem all over Spain, and particularly in the province of Barcelona. Since 1997 housing prices in Spain have experienced a 140 per cent increase. Needless to say that the growth has been dramatic in the Barcelona Metropolitan Region. In Barcelona city, prices have trebled since 1990 and there are no prospects of immediate deceleration. The opposite is true, prices rise steadily. "Overpricing affects low-income social groups, but not only them, nowadays other social groups that previously had no difficulty in accessing the market are encountering serious difficulties, and even exclusion(...). The social groups that are obliged to live in sub-standard accommodation are becoming more heterogeneous every day" (Tatjer and Garcia, 2006, p.89). The challenge is to guarantee the right of people to affordable housing as established both in the Spanish and European Constitutions. This is the challenge if we want to become a knowledge society whose pillars are tolerance, social cohesion and equal opportunity.
- A coherent public sector with one-direction objectives towards a knowledge and creative city: Finally, we would like to underline some of the conclusions arrived at in the third technical meeting of the Metropolitan Strategic Plan about the challenges for Barcelona and its Metropolitan area in order to promote the development of the creative industries, and of the metropolis as an innovating city: the need for clear and consistent institutional coordination for establishing unique concepts and strategies was identified. Moreover, the need of a working framework to coordinate the course of action that involves the sector is felt. The need to establish leadership and to identify the sectors that are of desirable promotion. Finally, measures for the attraction of talent and the creation of environments that foster innovation have to be implemented.



Palau de la Virreina, Institut de Cultura de Barcelona site

"For good or for bad, urban development of Barcelona has taken place under a spasmodic rhythm. This fact has involved periods of difficulties, where an obsolete model of city narrowed local life; and other periods of relief and rest, after one of such a large reforms that the city undertakes every now and then in order to adequate the citizen's suit to the growing size of its census."

The city of architects, Llàtzer Moix

# 6 Analysis of Policy applied over the past decade (1996-2006) AIMED AT IMPROVING COMPETITIVENESS

The intensive de-industrialization which is taking place in Spanish cities specialized in traditional manufacturing activities such as the textile or the automobile industry is being counteracted by governments using "a series of traditional supply policies: encouraging research, development and innovation, improving education, providing infrastructures to integrate markets and liberalising factors and product markets. And, in some cases, with industrial policies that defend strategic sectors and creating and strengthening national champions" (Lasuén, 2006).

As Vives and Torrens point out, regions compete in a varied set of fronts (location, variety of resources, quality of life and infrastructures, among others) being human capital, capability for innovation, infrastructures of services, adequate funding for companies, a fair and efficient fiscal system and a cohesive social fabric, key factors for success (Vives and Torrens, 2004a). Public policy is, therefore, essential in providing or creating the framework for provision for these elements.

With the growing impact of globalisation of the productive systems, competitiveness might shift from low cost products towards quality and innovation. The path adopted by each urban agglomeration in order to be internationally competitive varies according to many elements; among them, the role played by the public sector in enhancing and elaborating several strategies to cope with competition through:

- providing public goods (transport and communication infrastructures, R&D investment, education and competitive research centres)
- urban planning and provision of public services
- guaranteeing an efficient and competitive market

In short, the public sector might create the adequate environment and a reliable framework where private companies and individuals invest and develop their initiatives. Since the arrival of democracy, three basic levels of government coexist in Barcelona (see Chapter three) with responsibilities to improve competitiveness; the national government, whose weight in the area has relatively decreased, the Autonomous Community government or *Generalitat de Catalunya* which is still assuming new responsibilities, specially since the approval of the last *Estatut d'Autonomia*—Autonomous Community Chart— in 2006, and the municipality, *Ajuntament de Barcelona*. Besides, other two local bodies must be taken into account even when their political and economic weight is relatively weak; the provincial government or *Diputació de Barcelona* and the county government or *Consell Comarcal del Barcelonès*.

In addition, other bodies or agencies created by the authorities but with a particular profile are involved in the future of the city and the metropolitan region. Two examples are noteworthy; one the one hand, Barcelona Activa, a municipal company created in 1986 which promotes employment and new quality enterprises throughout seven lines of activity (Action

Plan 2004-2007)<sup>21</sup>. Nowadays, Barcelona Activa has become an international referent for its role as supporter of new entrepreneurs, innovation and professional improvement and as a creator of employment. On the other hand, Barcelona Regional which is a limited liability company founded in 1993 whose shareholders<sup>22</sup> represent different public bodies, mainly local authorities. Its main function is to provide technical support and assistance to its members in the study and design of infrastructures and systems for putting together urban development proposals in the Barcelona Metropolitan Area.

But, the question is, which is (and has been) the model to be followed by Barcelona as a competitive city towards which strategies should be oriented? What is the framework agreed and expected? How long is the path towards a competitive environment? How is the public intervention going to cope with the stimulus of competitiveness without being "excessively interventionist"? How does the overlapping of governments work? What are the main challenges ahead? In the following sections, these questions will be explored. Section 6.1 deals with the role played by public bodies in recent urban transformations; special attention will be paid to the well-known concept of "Barcelona model". The following section, section 6.2, elaborates on the role played by strategic planning as a key factor for success. Specific creative projects supported by the municipality will be explored in section 6.3 and finally, section 6.4 will identify the main challenges for public action today.

# 6.1 Coping with new challenges: the transformation of the city and the role of public bodies

The tremendous economic change which took place in the second half of the past century deeply affected the industrial sector located in the city of Barcelona (between 1960 and 1985, the city lost 42 per cent of manufacturing employment and representative factories such as SEAT or La Seda). The orientation towards the service sector became evident from the very end of the eighties (see Chapter three) and, simultaneously, industrial firms followed a process of decentralisation towards other areas of the Metropolitan Region of Barcelona: new manufacturing sites emerged out of the city. This was possible thanks to the improvement of connectivity between the different urban cores.

From the economic perspective, the 1990s saw a change in the scale of the city and a new model of metropolis with several cores emerged; certain concentrations of economic specialisation and also a diverse production and an organised urban network formed a networks of cities (Trullén and Boix, 2003). Therefore and from then on, public intervention oriented to improving the competitiveness of the city should include also the territorial network of cities already established. From the political and institutional perspective, the need of an instrument which allowed the city to plan in the long run considering not only the city of Barcelona but also its metropolitan influence was required<sup>23</sup>. However, as the Spanish

<sup>22</sup> Municipality of Barcelona; Transports of Barcelona, S.A; Metropolitan Trains of Barcelona, S.A; Metropolitan Planning Society of rehabilitation and management (REGESA); Metropolitan Company of "Sanejament"; Consortium of the Zona Franca of Barcelona; Port of Barcelona; Spanish Airports Society (AENA); National Network of Trains (RENFE) and the Barcelona providers market (MERCABARNA)

<sup>&</sup>lt;sup>21</sup>Promotion of entrepreneurial initiative, consolidation and growth of new enterprises, new opportunities of employment, access, inclusion and improvement of employment, Educational activities, dissemination of technological abilities, promotion of innovation

<sup>&</sup>lt;sup>23</sup> As mentioned in Chapter 4, the existent Metropolitan Government was abolished by the regional government in an evident fight of power by the two institutions.

municipalities were in a relatively recent process of democratization —in 1979, the first democratic elections took place—, other priorities and emergencies were on the political agenda. During the period 1987-1991, new objectives were identified in order to develop and improve the city which coincided with the candidacy and posterior nomination to host the Olympics. Cooperation between the public and private sector was essential: in April 1988, the document "The economic and social development of Barcelona: the Strategic Plan under the perspective of the year 2000" was published. As Santacana stresses, the strategic planning in Barcelona was "citizen oriented" rather than "business oriented" as it was in former North-American models (Santacana, 2000).

# 6.1.1 The Olympic turning point: a "Barcelona model"?

Considering the trajectory of the city and its position on the international arena, two periods might be distinguished, before and after the Olympics. The pre-Olympic period was characterised by the need of convincing the international landscape about the potentialities and "normal" functioning of a Southern city, recently integrated in the democratic system<sup>24</sup>, and the second stage, the post-Olympic period, characterised by the segmentation of both, products and markets to compete; the economic promotion of the city was by sector (i.e. logistics, universities, etc.) and targeted to a determined market (i.e. South American, Asian, etc). (Interview *Promoció Econòmica Exterior*).

The environment and results originated by the Olympics suggested the existence of a "Barcelona Model". Mainly, this model might be understood from two complementary perspectives: on the one side, some authors (i.e. Bohigas) consider the Barcelona model as the set of aspects related to design and quality of public spaces. This perspective would follow the "event-related" city development; certainly, Barcelona has not been an isolated case where a Universal Exhibition (Seville) or the Olympic Games (Los Angeles) has been the turning point in the urban development of the city. The originality of Barcelona is due to the public sector participation and the political and collective consensus. On the other side, the managerial ability shown in certain events such as the Olympics is identified as the main reflection of the "Barcelona model".

There has been and still is a big controversy about the utility and even the existence or not of such a model<sup>25</sup>. Interpretations of the model have been developed from "outside" of the city (Ward, 2002) and also from within by those intimately involved in the process (for instance, (Borja, 1995; Montaner, 1990). For both, those defending the existence of the model and those with critic perspectives, it is evident that the "Barcelona model" has become a international referent; many other cities have chosen Barcelona as an example to follow. Written contributions in international organisations (i.e. Habitat conference) by many of the technicians involved in the process and also by well-recognised sociologists (i.e. Borja and Castells) together with the external assessment in international urban projects (i.e. the new waterfront of Buenos Aires) have extended the Barcelona influence and knowledge around.

However, and according to Monclús (2003), the key question is not about the existence of such a model but about the successful implementation of an already known urban strategy. The transferability of the strategy followed by Barcelona must take into account the particular characteristics of the historical and political context where the transformation took

<sup>25</sup> Well-known authors such as David Harvey, Neil Smith, Jordi Borja, Manuel Castells, Oriol Bohigas, Joan Busquets or Horacio Capel are still debating on the Model

<sup>&</sup>lt;sup>24</sup> As a result, Barcelona has become as well known destination not only for business but also for tourism.

place; certainly, specificities such as the recent democracy, the active participation of citizens and the role played by some architects and planners, cannot be transferred (Calavita and Ferrer, 2002).

According to Sisternas Surís (2002), former head of the Department of Quality and Economic Promotion of the Municipality of Barcelona, the Barcelona model is a model of "public management which combines strategic vision, political leadership, professional management, innovation and partnership with closeness to the citizens, civic culture, citizen's participation and quality" (Sisternas i Suris, 2002: 13) (see Figure 6.1).

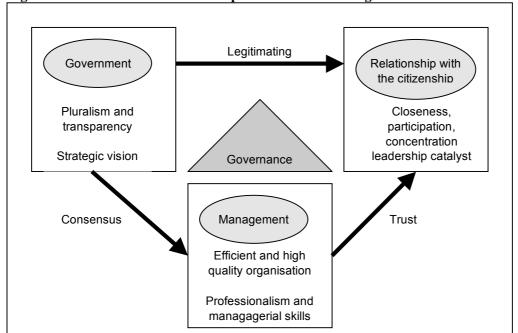


Figure 6.1. Barcelona model: conceptual elements of the government relational model.

Source: Barcelona: Gobierno y Gestión de la Ciudad (Several Authors, 1999)

A weak spot of such a model might be the exclusion of certain collectives of the city development due to unexpected side effects -some of them related to elements belonging to other dimensions such as the huge increase in housing prices-. Certainly, as it will be explained in section 6.2, social cohesion is among the key vectors of action of the Metropolitan Strategic Plan.

In summary, the Olympic Games undoubtedly represented a turning point for the city, when the involvement of different administrations and also citizenship created a positive environment -and the required funding- to solve several pending questions such as the ring road (*Les Rondes*) or the development of the coastal area. It became clear for several keyactors such as the former mayor of the city and later on, president of the Autonomous Community, Pascual Maragall, that a large event such as the Olympics had been the catalyst to start many processes that were absolutely required for achieving a better city. Besides, and even prior to the realisation of the Olympics, it became also evident that the city and the metropolitan surroundings were demanding a set of objectives aimed to be developed throughout strategic planning with a long run horizon.

As a result, two somehow different outputs would follow; on the one hand, the above mentioned (Chapter four) celebration of the Forum of Cultures 2004<sup>26</sup> which was meant to provide justified reasons for the development of the coastal area of the city, the largest plot of land still available for development in Barcelona (Diagonal Mar) and that represented another large event to be held in the city. This strategic project was planned following a similar structure to the planning of the Olympic Games (Clusa, 1999). On the other hand, the First Strategic Plan of Barcelona was created and developed in 1988. It clearly had the year 2000 on the horizon. This Plan and the ones that followed are discussed in next section.

The Forum of Cultures 2004 took place during the summer months of the year 2004. It was the first edition of the event and created a lot of controversy from the very beginning. As mentioned in Chapter four, this event was less successful than the Olympics and it might even question the event-related development of the city. However, some urban developments and new facilities for the city such as the photovoltaic energy plate, a new marina or a new convention centre, were built on account of the project. However, some of these new spaces are nowadays underused. The connection between the centre and the Northern area of the coast is still a pending question. Probably, in the near future, when the site destined for the Zoo is completely developed, the area might become attractive.

### 6.1.2 Barcelona City Council current strategy

Certainly, the Barcelona City Council has exercised a "push" effect in some sectors in order to stimulate innovation and restructuring. This role is shared by other levels of government, specially, the Autonomous Government of Catalonia and its institutions (for instance, CIDEM) together with the Chamber of Commerce and other private entities. In addition, the municipality of Barcelona plays a leading role in stimulating agreements between different public institutions, trade unions and other agents. This attests to the existence of urban governance in the area<sup>27</sup>.

Currently, the city strategy coincides with the political cycle, that is, four years. For each period, a Municipal Action Programme (MAP) that determines the main lines of intervention according to certain objectives is elaborated. Taking into account that the municipal government has been in the hands of the same political parties since around 1995, lately the MAP evolves around the same three main axes: economic development and competitiveness, sustainability and quality of life and social cohesion. It must be stressed that such a political stability has favoured a stable path and the adoption of a long run strategy.

The transformation of the somehow large and general objectives set in MAP into specific ones falls on each municipal department or agency —Economic Promotion Sector<sup>28</sup>, Trade Department, Market Department and Barcelona Activa, among others—. The Research Service of the municipality is the transversal link between the different services and areas of the Economic Promotion Sector. For instance, the mission of the Barcelona's city Council Economic Promotion Sector of the municipality is "to maximise Barcelona's economic

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<sup>&</sup>lt;sup>26</sup> Pascual Maragall, former Mayor of Barcelona, suggested the city as a candidate for a Universal Exhibition in 2004, the 75<sup>th</sup> Anniversary of the 1929 Barcelona Universal Exhibition. Unfortunately, such a candidacy involved a timing problem.

<sup>&</sup>lt;sup>27</sup> The Industrial Pact of the BMR is an example.

<sup>&</sup>lt;sup>28</sup> The Departments of Foreign and Domestic Economic Promotion of Barcelona City Council are two areas of activity pertaining to the Economic Promotion Sector.

potential by establishing high quality companies, strengthening the existing corporate environment and promoting new economic initiatives" (www.bcn.es).<sup>29</sup>

The Research Service of the Municipality is the actor that primarily identifies where the economic opportunities are. It usually develops partnerships with other bodies in order to research on the topic. For instance, for the food sector works together with the Mediterranean Diet Foundation and for studying labour productivity with the Chamber of Commerce. Gastronomy in particular is considered one of the concepts which could be associated to the Barcelona brand and productivity of labour is still lower than the European average. The background of such a research becomes decisive to orientate the immediate future.

Policies aimed at improving the competitiveness of Barcelona must encompass two different approaches: on the one hand, from the national perspective, making of Barcelona and its metropolitan region the obvious choice for investing and doing business above the capital of the country, Madrid, or other large cities in Spain such as Bilbao or Valencia. On the other hand, from the international perspective, Barcelona and its metropolitan region intend to compete with other European cities, especially those with similar features concerning location (i.e. Southern Europe) or infrastructure facilities (Marseille, Geneva).

From the competitiveness point of view, the post Olympic period inherited a well-known city in international forums and some improved infrastructures. During this second period, the active partnership between the private and the public sector was an essential issue. Nowadays, certain key private partners have been identified and together with the public sector are engaged in the promotion of the Barcelona "brand" (see Figure 6.2.). It aims at benefiting from the good international perception after 1992 and at promoting certain sectors which are considered of high priority in the international competitive arena. The food and the design sector and universities are examples where partnerships have been developed.

Figure 6.2 Logos of strategic institutions branding Barcelona



















Source: Sectores Estratègicos con marca Barcelona. Ajuntament de Barcelona, 2005.

This mission in transformed into the following objectives:

<sup>•</sup> Attract foreign economic activity and promote the Barcelona brand as an attractive setting for business and corporate investment

<sup>•</sup> Promote loyalty and assist in the expansion of the existing economic environment among large companies and multinationals, as well as SMEs (Small and Medium Sized Enterprises)

<sup>•</sup> Assist in the internationalisation of Barcelona's companies

Collaborate and promote public and private collaboration platforms for strategic and forward-looking economic sectors

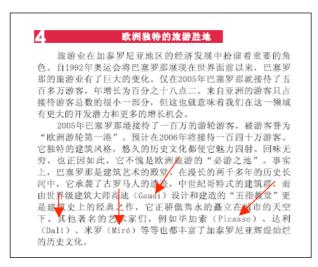
<sup>•</sup> Examine, analyse and promote Barcelona's economic reality

<sup>&</sup>lt;sup>30</sup> Barcelona Logistic Centre, Barcelona University Centre, Barcelona Design Centre are three examples of three different platforms created under the Barcelona label

Taking into account that the Barcelona region represents the centre of main catalonian activities, the commercial relevance in international contexts might be more focused on Barcelona (as a "brand" or "trademark") rather than on Catalonia as a whole (*Interview Promoció Econòmica Exterior*).

Priorities on the sectors to be promoted have changed from the university or tourism to cultural industries and information technologies. An example of the promotion of the city in foreign markets is the "Ten reasons to invest in Barcelona" oriented to the Chinese capital market. As it can be seen in Picture 6.1; the cultural atmosphere of the city is an additional attraction for investing.

Picture 6.1 Reason four to invest in Barcelona for Chinese capital



Source: "Ten reasons to invest in Barcelona" Barcelona City Council, Economic Promotion

Certainly and also according to the recommendations elaborated for Barcelona by Stuttgart-Veit Haug (Corporation for economic development of the Stuttgart region)<sup>31</sup>, Barcelona has to profit from the attractiveness of the city, to project the image of the city as an ideal place for business, to stimulate successful projects and disseminate the results and also attract Spanish capital investment of large enterprises. But, of course, all efforts cannot go towards selling Barcelona image; the improvement of the basis of creation of knowledge (universities, research centres, in) and of the transmission and dissemination channels must also receive the support of the public administration. In fact, an additional aspect should be taken into account for in spite of the high level of quality of life offered by the city, the seven public universities, the amount of technological and research centres and so on, it remains unclear who takes the leading role given the high number of organisations (universities, ministries, governments) involved. Consequently, there is a certain lack of coordination and no agreed list of priorities.

Barcelona Activa: "Barcelona Innova" Project

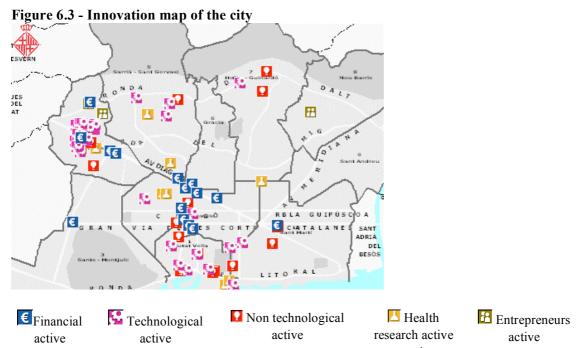
Innovation has been considered as a key factor for success in the competitiveness of the city. First, the Barcelona City Council created a Research Unit on the topic; later on the whole matter was shifted to Barcelona Activa and the recently created "Barcelona Innova" project.

<sup>&</sup>lt;sup>31</sup> Seminar on Strategies for Innovation in 2004, organised by the Metropolitan Strategic Plan of Barcelona where four cities were invited (Stockholm, Stuttgart, Upper Bavaria (Munich) and Uusimaa (Helsinki)

This project shares with Barcelona Activa the purpose of stimulating business and employment of quality. In particular, it promotes innovation in the city and its enterprises. The scope of this project is larger than merely stimulating innovation. It extends to creating an "environment for innovation and creativity" so that Barcelona can be advertised as a creative and innovative city (Interview *Barcelona Innova*). The understanding of "innovation" as a transversal element clearly affects not only business but the whole citizenship. This project offers the opportunity of transforming an idea into a successful business. Creativity is the first step of the "innovative" process. The project also aims at organising creativity workshops in already existent enterprises. According to the above objectives, the project "*Barcelona Innova*" spreads information about some other projects in the city which "*promote creativity, innovation and talent in the city*" (*Barcelona Innova* web site):

- Glòries Entrepreneurial Centre
- Technology Park BCN North
- Biomedical Research Park Barcelona
- 22@ Barcelona
- Hangar

Besides, the so-called "innovation map" of the city is available:



Source: Barcelona Innova web site(www.bcninnova.org) visited at 3<sup>rd</sup> January 2007

BMR's position in innovation is relatively weak compared to other urban agglomerations in Europe (Vives and Torrens, 2004a) however, a considerable effort is being made to overcome this situation.

In 2007, the Spanish Ministry of Education and Science will invest 3,081 million euros in R&D. Of these, 532 million euros will be destined to science and technology. 89 millions will be for parks in Catalonia. As explained in Chapter five, the Catalan Network of Science and Technology Parks has 17 members, 15 in the BMR.

# 6.2 Policy strategies to develop and promote Barcelona: the role of strategic planning

The Strategic Metropolitan Plan is a private, non-profit making association, which was founded in 1988 under the initiative of certain actors such as the Barcelona City Council, the Official Barcelona Chamber of Commerce, Industry and Shipping and Barcelona University<sup>32</sup>. This organisation does not have coercive powers but works in a way that resembles both a lobby and a "think tank" (Interview Strategic Metropolitan Plan). Barcelona is one of the international leaders in City Strategic Planning after San Francisco, which started in 1986.

In 1988, the main reasons behind the initiative were:

- to take advantage of the momentum of the Olympic Games nomination
- to channel efforts in the wake of 92
- to create the best conditions for integration in the EU
- to promote social and economic transformation in the wake of the industrial crisis

Nowadays, the consideration of the metropolitan scope—600 square kilometres and 3 million people— as the territorial basis for strategic planning has been added.

Strategies for the city were the main concern in the three first strategic plans (see figure 6.2A) In 2002 the metropolitan dimension was incorporated (See Figure 6.4 for main milestones). Preparations for establishing a Strategic Plan were formally initiated in May 1988. The First Strategic Plan was approved on 19<sup>th</sup> March 1990. It had the year 2000 on the future horizon. The improvement of the city's economic and social system so that it could compete in Europe was the main target of the first version of the Plan (Strategic Plan of Barcelona website, visited on 15<sup>th</sup> December 2006, 17<sup>th</sup> January 2007, 3<sup>rd</sup> February 2007).

Figure 6.4 - Milestones in the strategic development of the city of Barcelona and its metropolitan surroundings

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1988	Plan initiated
1990	1 <sup>st</sup> Barcelona Strategic Plan approved
1992	The Olympic Games
1994	2 <sup>nd</sup> Plan approved
1999	3 <sup>rd</sup> Plan approved
March 2003	Approval 1 <sup>st</sup> Metropolitan Strategic Plan
2004	The Universal Forum
2005/2007	Review of the Metropolitan Plan
January 2007	Approval revisions of 1 <sup>st</sup> Metropolitan Strategic Plan

The philosophy of the Plans is based on the consensus of all participating actors and the cooperation between public and private business. In summary, it is meant to orientate the development of the area towards an agreed strategy by all the actors potentially involved. As it says in one of the sections: "what we do not want is market forces—as they did previously—

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<sup>&</sup>lt;sup>32</sup> The complete list of first founders: The Barcelona City Council; the Official Barcelona Chamber of Commerce, Industry and Shipping; the Economy Circle; National Promotion of Employment; the Unions, the Workers Commissions of Catalonia (CC.OO.) and the General Union of Workers; Barcelona University Barcelona; the Joint Municipalities of the Barcelona Metropolitan Area; the Barcelona Trade Fair; the Barcelona Port Authority and the Zona Franca Consortium.

to dictate us the future direction" (1st Strategic Metropolitan Plan, p.9) (see in Figure 6.1A in the Annex the organisational model of the Plan).

The First Strategic Metropolitan Plan, approved in 2003, was based on the need to improve the **territory's productivity**<sup>33</sup> throughout **innovation** (i.e. research and generation and transmission of knowledge). Besides, new challenges for the **society** were also considered, especially in the fields of social inclusion and social protection, safety and discrimination, among others. **Culture** was going to play an important role in overcoming problems of social cohesion and also as a key sector for employment and creation of added value. The new model to be adopted by the area should contemplate **sustainability** in its three pillars (social, economic and environmental) and finally, the need of **new political and policy instruments** (new authorities, new methods, and new agents) was questioned as sufficient and adequate to promote and ensure this new desirable future.

The shift from a city strategic plan to a metropolitan plan indirectly dealt with one of the targets of the Autonomous Community government which was the recognition of the formerly abolished metropolitan government (see Chapter three). Therefore, it meant "establishing a supra-municipal identity and bond as the foundation for metropolitan strategic vision. This seems to be essential if we are to eventually institutionalise the Metropolitan Area of Barcelona (MAB)" (2<sup>nd</sup> Metropolitan Strategic Plan, 2007).

The scope of the process is, therefore, large and concerns not only the economic aspects of the future development of the city but also the societal and territorial challenges and the range of tools available to achieve the different objectives.

The Mission of the 1st Metropolitan Strategic Plan of Barcelona is "to propose, within a framework of public-private and inter-municipal cooperation, and with the participation of economic and social agents, the processes of change that are required in the Barcelona Metropolitan Region, in order to give direction to the economic and social development of this territory and that are necessary for constant regeneration of its potential for growth" (1st Strategic Plan, p. 14). In the above mission statement for innovation, creativity and knowledge are specified as being the basis competitiveness and progress in Barcelona Metropolitan Region. Furthermore improving territorial productivity will guarantee progress within a framework of economic, social and environmental sustainability. Finally, the region needs to be equipped with the necessary mechanisms to ensure efficient territorial management.

As the evaluation of the First Metropolitan Strategic Plan points out (Metropolitan Strategic Plan of Barcelona, Period 2006-2010), still more involvement by all the municipalities which conform the BMR is required. Besides, certain shortcomings have been detected because representatives of public institutions and representatives of social and economic institutions share leadership in some projects. In addition, a higher connectivity is needed between the vision or general objectives of the strategy and their implementation.

# 6.2.1 Platform Barcelona Knowledge and Growth

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<sup>&</sup>lt;sup>33</sup> (i.e. a metropolitan mobility model –for people and goods–, a system for the generation and efficient dissemination of knowledge, a network of communications and connectivity for the 21st century, schemes suitable for the rehabilitation of the historical centres of the towns making up the metropolitan network, an efficient system of economic promotion, etc.)

This platform is formed by a relatively small number of institutions (Barcelona City Council, Chamber of Commerce of Barcelona, federation of financial entities, the Autonomous University – representing the other public universities in the region- and the Association of Metropolitan Municipalities – *Mancomunitat de Municipis*- which are considered to be the main agents in promoting change and which might play a leading role. It is supported by the Metropolitan Strategic Plan and it is still developing. The Platform aims at sharing information and coordinating the efforts made in several areas of the city:

- Establishing a political pact involving citizenship, understood as being responsible for put into practise the agreements needed to orientate the city change towards knowledge as a basis for growth
- Creating the strategic vision of Barcelona, knowledge and growth
- Stimulating innovative processes in all spheres in the metropolitan area of Barcelona.
- Establishing objectives of sector innovation and promote active participation of all agents involved
- Following up current education schemes in order to guarantee the existence of future experts

This platform is oriented to coordinating the initiatives which determine the competitiveness of Barcelona as a city of knowledge in several fields. Although it is still at its very beginning, this initiative might lead the transformation of the city without wasting energies and resources

# 6.3 Specific Creative Projects in Barcelona supported by public authorities

According to Lausen (2006), Barcelona posesses, in addition to its manufacturing specialisation," a long history of quaternary and quinary services, of creative industries, and has a highly competitive structure and location to carry these activities out, probably the best in Spain and one of the best in the Mediterranean" (Lasuén, 2006). In his opinion, the city must invest in improving and expanding these qualities as a way to compensate for the negative effects of globalisation.

Several projects currently underway in the region of Barcelona fall certainly under the "creative" label. Some of the most relevant are described in this section.

#### 6.3.1 The district of activities 22@

22@ is located in Poblenou (576 ha), a district that was, in the past, one of the most industrialised areas of Barcelona.. It was quite isolated from the rest of the city and dedicated to manufacturing activities. There, in the first half of the twentieth century, a rich and diverse industrial fabric emerged. The displacement of large companies to peripheral sites affected Poblenou later and to a lesser extent than it had affected other parts of the city. This is the reason why, before the intervention, the district was still highly productive, although with visible signs of decay; about 5,000 houses were illegal and the core of the neighbourhood was degraded and isolated form the rest of the city due to lack of infrastructures. However, the population of the district was active and engaged. The area was known as the "Catalan Manchester".

The Olympic Games enabled the first intervention in the district for part of the territory was used to build the Olympic Village. Other side projects of the time were, to mention just two, the southern ring road and the recovery of the beaches. Later on, the extension of the Diagonal to the sea and the construction of facilities around the district followed. These developments enhanced the centrality of the area. Moreover, many of them were linked to the cultural or creative sector (i.e. the National Theatre of Catalonia, the shopping centre Glòries or the location of the Pompeu Fabra University). Artists (i.e. Mariscal, el Submarino, Hangar collective) chose the area attracted by the availability of large spaces -former industrial factories-. Other factories were reconverted into housing, workshops or institutional organisations (i.e. Catalan Institute of Technology). At night, the area became popular due to its many clubs and discothèques.

The publication of the document "Poblenou. La renovació de les àrees industrials. Criteris, objectius i solucions generals" elaborated by the Municipality of Barcelona in 1998 is considered the starting point of the project 22@ and the opening of a large debate on the future of the area. The Catalan Institute of Technology was entrusted with the task of researching on the development of the ICT sector by the Industrial Pact of the Region of Barcelona<sup>34</sup>. A multidisciplinary team elaborated the research document named "Digital city" which suggested a set of reasons to legitimate the modification of the Metropolitan Urban Plan –Plan General Metropolità, PGM- in order to develop the new district of activities 22@. It was going to transform 198,26 ha involving 4,000,000 square metres of constructed land (circa 3,200,000 for productive activities and 800,000 for other uses such as housing or equipments).

However, residents' associations in the district reacted negatively to some of the contents of the project such as the building of skyscrapers. Thus, the involved parties entered negotiations and some changes in the initial plans were made in order to accommodate resident's demands.

This project was not merely a planning project for it signalled a new form of understanding the city (Oliva, 2003) and might be understood as a central piece of the large project of the municipality of Barcelona "Barcelona, city of knowledge". The main objective is to transform what used to be the paradigm of the industrial society in Barcelona into one of the leading areas of the knowledge society, in particular in new-generation activities related to and requiring education, creativity and innovation.

The following are the axes of the project:

- Complexity and variety of uses in the district
- Facilities related to the productive system (7@) in addition to the traditional ones related to housing. It must stimulate the economic development of the area but also affect the dynamics of the whole territory. In 2001, the Municipality and the

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<sup>&</sup>lt;sup>34</sup> The industrial pact of the Barcelona Metropolitan region is a non profit organisation created in 1997 with the aim of promoting a common space for all the agents implied in the economic dynamics and employment of the region. It is formed by 45 municipalities, provincial and regional authorities, fifteen entrepreneurs' associations and two main trade unions, as well as the Catalan university system and other organizations. Its aim is to improve the working of regional labour market which is based on two main features: diversification as a transversal issue jointly with specialization in specific municipalities.

- neighbours agreed on the Facilities Plan (*Pla d'Equipaments*) for Poblenou. More than 40 new equipments were going to be built.
- Link between building density and the use of the building- That is, those developers who aim at a dense area, should build up some spaces for @ activities defined as those "...related to information technologies and communications, with research, design, culture and knowledge" (Memòria de la modificació del Pla, 1999, 22@ web site, visited on 10<sup>th</sup> December 2006). In other words, they are compelled to provide spaces for knowledge intensive activities.
- Densification; increasing the density of construction determines the increase of building density of the area. As a result, the urban fabric is complete, rich and diverse.
- Flexibility in transformation. The wish of the authorities is a flexible planning tool that enables them to cope with the transformation of the territory in the long run.
- Public infrastructures; the existing deficit will be overcome by the increase in infrastructures as a differential element of the district. A Special Plan of Infrastructures for the district was approved in 2000. It addressed the following aspects: New model of mobility, renovation of the public space, new networks of energy and telecommunications, pneumatic collection of waste, centralised acclimatisation, underground registered galleries. The investment in infrastructure is estimated at 180 million euros.

At the 22@ district four clusters can be identified; Media, ICTs, Energy and Bio. All of them involve companies, institutions, specific areas, universities, technological centres, incubators, and housing. Besides, they foresee the existence of divulgation and dissemination areas. In June 2006, and according to data provided by 22@, 229 companies had located in the district and 28 were in the process of location. Of those, 53.3 per cent of companies belonged to the four clusters mentioned above and 46.7 per cent belonged to other sectors.

Figure 6.5 Examples of mix uses in the district by cluster

	Media	Energy	ICT	Bio
Companies	Mediapro,	Endesa, Ecotècnia	T-Systems, Indra,	Sanofi Aventis,
	Lavinia		Telefónica	Semillas Fitó
Institutions	RNE, CAC,	ITER, Chamber	DURSI, CMT,	IBEC , DURSI
	Barcelona TV	of Commerce	FBD, Localret	
Universities	UPF, UB, UOC	UB, UPC	UB, UPC, La	UB, UPF, UPC
			Salle	
Specific spaces	Production centre	Campus services	Interface	Parc Empresarial
	Barcelona Media		Building, Edifici	BIO
			MediaTIC	
Technological	Innovation centre	CR Energy, CT	Technological	IBEC
centres	Barcelona Media	Energy	Centre TIC	
Incubators	Incubator PBM	Incubator b_TEC	Edifici mediaTIC	Post Incubator
				Bio
Housing	Zamora-	Residence b_TEC	Zamora -	Zamora-
	Almogàvers		Almogàvers	Almogàvers
Divulgation	Fàbrica dels	Campus services	The House of the	Parc Empresarial
	Media		TIC	

Source: 22@

Certainly, one of the most successful and active scenarios for cultural production and creativity have been some of the recovered factories used by artists in the District. However, between 1994 and 2006 Poblenou has lost 18 cultural centres and 133 artists. The New Strategic Cultural Plan – Nous Accents 2006 (outlined in the following section) foresees the creation of a network of cultural centres but certainly, dismisses the already existing and functioning networks, which were the result of civil society initiatives. Although the official position of the Barcelona City Council is to reach agreements with the existing centres, only one of them, Hangar<sup>35</sup>, has managed to maintain its status and is collaborating with the authorities.

The City Council is currently engaged in a process to vacate various factories that were being used by artists and "creators" and make them available for other uses such as housing. An example of the risks affecting these cultural spaces is the recent eviction of La Makabra, a cultural association specialized in circus activities, who was active in an old factory in the area. After the eviction, the site was demolished to build flats and offices for the new 22@ district. Although, the municipality promised that it would provide spaces for this and other groups in the same situation, solutions are still pending.

# 6.3.2 The cultural sector: Cultural policies and strategic planning

As mentioned in Chapter four, culture and related industries and actors are considered as one of the strengths of Barcelona. The responsibility for designing and executing cultural policy in Catalonia belongs to the regional government, the *Generalitat de Catalunya*. However, municipalities play a decisive role too. As seen in table 6.6, expenditures in culture, radio and TV excluded, increased by 67.3 per cent during the period 1997-2002 for the whole Autonomous Community.

Table 6.6 - Public expenditure in culture, per levels of government in Catalonia and Spain (Thousands of euros)

(Thousands of	<del>• • • • • • • • • • • • • • • • • • • </del>							
	1996	1997	1998	1999	2000	2001	2002	% Growth
Catalonia								
Autonomous Government								
of Catalonia		122,697	142,596	145,440	147,983	157,496	180,484	47.1
Local bodies		264,957	312,624	354,909	370,421	402,626	468,104	76.7
Provincial government		44,757	53,721	63,873	68,453	76,289	76,757	71.5
Municipalities		220,200	258,902	291,036	301,968	326,337	391,347	77.7
TOTAL CATALONIA		387,655	455,220	500,349	518,404	560,122	648,588	67.3
Spain								
Central government	635,780	535,147	542,395	583,389	715,974			12.6
<b>Autonomous Communities</b>	670,735	742,283	802,027	864,958	945,437			41.0
Local bodies	607,858							
TOTAL SPAIN	1,914,373							

Source: Indicadors i estadístiques culturals a Catalunya, 2006.

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<sup>&</sup>lt;sup>35</sup> Hangar is a cultural centre created in 1997 and managed by Association of Visual Artists of Catalonia (AAVC). The centre is placed in Can Ricart, a former textile factory and the City Council has approved its enlargement in order to improve the spaces for artistic activities.

In 2000, the Institute for Cultural Industries was created (ICIC)- The Department of Culture of the *Generalitat de Catalunya* is responsible for the institution and its inception was a significant step in the direction of articulating, with various public and private authorities within the different cultural industries, the necessary means to reinforce the industrial framework though "dialogue, new funding, renewed aid to export cultural products and to ensure presence in the domestic market" (Bonet, 2002).

These are the proposals made in the White Book of Culture (2002) in order to improve competitiveness in the sector:

- Policies supporting the cultural industries must be redirected towards favouring processes that facilitate a major competitive advantage for Catalan cultural businesses, with the efficient use of an entire range of fiscal and financial instruments at hand.
- Given the oligopolistic structure that characterizes many world cultural markets and the predominately small and mid-sized businesses in Catalonia, it is essential to maintain conditions that ensure free competition and go against all abusive practices by a dominating leader
- Support must be extended to restructure retail to fight against the high level of business remoteness and weakness, both in the production and distribution processes, with the latter carried out by an especially tiny minority of players. This can be brought about by strengthening the concentration of business in culture, forming purchasing centres and associative networks, and promoting international co-production and other forms of business cooperation.
- The provisions for infrastructures in information and communication technology must be improved, as it is a deciding factor in the competitiveness of contemporary cultural industries. At the same time, the cultural industries could play an important role in the research and development of this technology by serving as a field of experimentation in the formation of "new" digital on-line and off-line services used for offering information content, or in the research on interactivity.
- Major Catalan businesses must be supported and the attractive qualities of Barcelona and Catalonia must be promoted to large foreign businesses interested in establishing operations in the region. This should be accomplished for the purpose of attracting the corresponding decision making agents and making the Catalan cultural industries more competitive.
- In all cultural activities, the talents of the creative worker constitute a key factor for competitive development. In this sense, the processes of basic and continued education, the strength of information networks (for example, modern libraries), and the transferral of talent from education to business, should be at the forefront.

Many of the public infrastructures devoted to the sector are located in the city of Barcelona. According to the criteria of the Chamber of Commerce (*El sector de la cultura a Catalunya*, 2005), the following are of relevance: in theatre, the National Theatre of Catalonia (TNC); in music, The Auditorium and the *Gran Teatre del Liceu* (Opera house); in museums, the National Museum of Art of Catalonia (MNAC) and the Contemporary Art Museum of Barcelona (MACBA) and finally, the space for dialogue and thought, The Contemporary Culture Centre of Barcelona. Not surprisingly, the TNC and the Auditorium are located nearby the 22@ district.

In 1999, the first Cultural Strategic Plan was approved under the initiative of the recently created Cultural Institute of Barcelona (ICUB) with metropolitan Barcelona as the target of

action and the period 2000-2010 as the temporal horizon. Taking into account the particular characteristics of the cultural sector, planning was understood as "being respectful with the urban cultural processes, avoiding any perspective of cultural paternalism and, the comprehension of the cultural scene where many influences can be identified - the international context, history, cultural background, the configuration (and model) of the State, the creative production, the linguistic vector, migration flows, technological revolutions-..." (Strategic Plan of Culture, 1999). It was the first document which included the term "cultural industry" in Catalonia.

The six strategic lines together with their development into specific objectives and projects under which the Strategic Plan of Culture was developed are described below:

#### 1. To reinforce Barcelona as a production factory of cultural contents

- Consolidation of Hangar (founded in 1997)
- Creation of the new Centre for Arts in Movement
- The contribution of the different Civic Centres of the districts in terms of music and dance
- The creation in 2002 of the Catalan Institute for Cultural Industries (ICIC)
- The project "Any seat empty" was not strictly implemented but certain facilities were given in order to buy cheaper tickets for cultural events.

# 2. To consider culture as a key factor for social cohesion

- Implementation of the Libraries Programme (1998-2010); at the moment 30 public libraries participate
- The approval of the 21 Agenda of Culture
- The dialogues in the Forum of Culture in 2004
- The process towards the approval of the Chart of cultural duties and rights

#### 3. To include Barcelona in the digital cultural flows

- The development of the Cultural Channel, a network of networks to connect and communicate those agents involved in culture, from the creator to the consumer

#### 4. To activate the heritage of Barcelona

- Improvements of many Museums in the metropolitan area such as the enlargement of the Picasso Museum or maintenance works of MNAC.
- New Museum of Music (to be inaugurated in 2007)
- New Design centre

# 5. To articulate Barcelona as a singular cultural metropolitan space

# 6. To project Barcelona as an international promotion platform

- Consolidation of the Barcelona brand
- Internationalisation of the main cultural equipments of the city (MACBA, CCCB) and festivals (the GREC, in particular)
- Location of many international cultural events in Barcelona

In November 2006, a new strategic cultural plan was introduced, the so-called "Nous Accents 2006" (New Accents 2006). This new project is the updating of the previous one throughout a series of debates and workshops with all the agents involved in the production, creation and distribution of culture in Barcelona. The new 2006 Plan aims at "...reinforcing the position of Barcelona as a city which is meant to be a laboratory (of coexistence, of democracy and of culture) as a challenge and as an opportunity" (Jordi Hereu, Mayor of Barcelona, Nous Accents 2006)

The three basic lines of the new Cultural Strategic Plan are the following:

- 1. Proximity to citizens
- 2. Quality and excellence in the cultural production of the city
- 3. A more interconnected cultural ecosystem

Ten programmes – Laboratory Barcelona, Culture, Education and Proximity, Barcelona Reading City, Multicultural dialogue Programme, Science Barcelona, cultural equipments quality, Knowledge, memory and city, Cultural Capital Barcelona, Cultural connectivity and Cultural Council of Barcelona - structure the different proposals and specific programmes. (Strategic Cultural Plan, 2006)

According to Ferran Mascarell, former responsible for Culture at the Barcelona's City Council, several cultural projects are going on in the Metropolitan Region of Barcelona. In addition, public infrastructures devoted to the sector are under construction.

#### o The Barcelona Plató Film Commission- Parc Barcelona Media

This commission is a promoting body for Barcelona as a city for film production, which is being expanded throughout Catalonia. Its main objective is to promote the entire region as a setting for international and regional filming (creation of the Barcelona-Catalonia Film Commission, in cooperation with the Catalan Government).

- Associations and Networks; Network of production spaces of visual arts of Catalonia and Foundation of artists of visual arts AAVC (Associació d'Artistes Visuals de Catalunya)
- o CIDEA. Centre d'Innovació i Desenvolupament Econòmic de les Arts
- o Museums and exhibitions
- o **New-generation cultural facilities:** These include the Borne Cultural Centre (8,000 square metres of space devoted to recovering the historic memory of the city) and the Cultural Centre for Design (new facilities measuring 20,000 square metres that will become a platform for the promotion of design developed in Barcelona and Catalonia)
- Theme years: Gaudí Year (2002), to contribute to the revaluation of heritage and collective cultural memory; the Year of Design (2003), to promote design, one of Barcelona's most powerful creative industries; the Year of the Book and Reading (2005), to support the publishing industry and foster the habit of reading; the Year of Science (2007), an instrument to endorse the integration of science in the city's overall cultural construction.
- A commitment to self-expression, creativity and innovation, implemented, amongst others, through the *Mercat de les Flors* municipal theatre, which was converted into a Centre for Movement Arts as a space for specialised dance creation and coproduction; Barcelona's Grec Festival, a festival with a firm commitment to creative

people; the BAM Urban Music Festival; programmes that are closer to the districts' civic centres, a decentralised cultural supply that offers everyone the opportunity to come into contact with new artistic expressions, with a schedule of events in five fields: contemporary art, theatre, dance, children's shows, and music.

- O **Risk Capital Funds** for cultural projects: this is an innovative tool within the public administrations that will give priority to cultural sectors that are considered to be strategic for the upcoming years: the audiovisual or multimedia sector, publishing, the performing arts sector, and that of the plastic arts.
- The Foundation Barcelona Culture: This foundation was conceived with the aim of creating closer connections between the business world and the social dimension of culture.

# 6.4 Conclusions and critical challenges

The competitiveness of the Metropolitan Region of Barcelona has been certainly re-oriented towards the service sector, in particular the quinary one understood as the basis for growth in innovation and talent. Many policies and institutional bodies are engaged in the promotion of Barcelona as a creative knowledge city where the cultural sector plays a key role. This change of model not based in traditional activities such as the real estate or massive tourism but that relies on innovative and creative activities requires a change in the attitude of public entities and of all agents potentially involved.

In the past, the city of Barcelona has followed the event-related path of development with an unequal result; while the Olympics in 1992 represented a turning point for the city, the Forum of Cultures 2004 gave a blurred picture and caused the questioning of such a model. For many urban developments took place as a side effect of the celebration of the event but the event in itself suffered from an agreed discourse between the different sectors eligible to participate.

One of the relevant results of the so-called "Barcelona model" which determined many of the following strategies adopted by the city from 1992 on was the partnership created between actors, the coordinated efforts not only at the public level but also including the citizenship as a key element of success. Such a join action takes place in many spheres of the city, for instance, the industrial Pact and the Strategic Plan of culture are both good examples.

Certainly, Barcelona, as an international leader in strategic planning, is working to follow an agreed path of development where not only public but also private agents are meant to be involved in the design of the future. However, this orientation might find certain obstacles to develop successfully due to a certain conflict in putting into practise the theory or philosophy of policies: the lack of a clear and precise line of thought that begins with the initial idea and follows through to the specific project with a budget and leadership (Evaluation 1<sup>st</sup> Metropolitan Strategic Plan).

The region should tackle also a problem of leadership in the design of policies and objectives towards a knowledge economy: for instance, mayors and leaders of the metropolitan region have not yet actively taken on the First Strategic Plan. In other words, there is no decisive leadership for the different projects and objectives with a clear and comprehensible message for the people. As it has been mentioned, several levels of government coexist and share responsibilities related to the competitiveness of the city.

Rather than working together, the main characteristic is isolated action. An obvious exemption is the Metropolitan Strategic Plan, although it lacks political power and merely "recommends". The last word is, of course, in the hands of politicians. Besides, there are gaps in the shared leadership among the representatives of the public sectors and those of the social and economic institutions (Evaluation 1<sup>st</sup> Metropolitan Strategic Plans).

According to data compiled by the Strategic Metropolitan Plan of Barcelona, the region has poor levels of R&D. therefore, public investment in this field in order to improve the innovation patterns is extremely necessary. Investment should be focused on the creation of new innovative enterprises, transferability of technology and particularly on education. The creation of laboratories for innovation and creativity should be stimulated from the public sector without forgetting the existing network of social initiatives. Programmes oriented to promote innovation in small and medium enterprises are needed for, certainly, the problem is not really the lack of infrastructure but of the knowledge to use it.

The private sector should find investment in innovation more attractive through paths of public guarantee. For instance, public investment in telecommunication infrastructures would represent the initial push to foster the use of new technologies by companies. Therefore, the private sector must take a more significant role in the process of innovation alone or in partnership with the public bodies as the nature of this sector in the region is characterised mainly by little or medium enterprises.

Traditional sectors should be recognised by the public sector not only as objectives for regeneration but also as potential areas to develop creativity and innovation. The BMR does not have a clear strategy on innovation since former most relevant sectors such as textile are being ignored and the current strategies focus on biotechnology and ICT. Given the fact that these sectors are being targeted by many European cities, some of them with a best position than Barcelona, the region has tried to innovate in sectors where it did not have any experience.

In addition, the collaboration between universities and the private sector results insufficient, especially if we compare it to other European cities. As the former Town Councillor-Chair of the Culture, Education and Social Welfare Commission at Barcelona City Council, Ferran Mascarell points out for the cultural sector, it is necessary to intensify cooperative strategies between public and private initiatives and more specifically in the field defined by the creative industries, the university (research) and public initiative;

Barcelona has certainly created a public image based mainly on the attractiveness of the city as a place to live and enjoy oneself; however, innovation still does not play a key role. This hinders the incoming of innovative and risk capital, as well as of highly qualified human resources.



View of Agbar Tower from National Theatre of Catalonia in 22@ district

"In Barcelona there is no need to prepare the revolution, simply because it is always ready. It leans out of the window on the street every day"

City governor, 1909 Quoted in "The New York Times" on Friday, March 9<sup>th</sup>, 2007

In the last decades, Spain has experienced huge social, political and economic changes. With the arrival of democracy and accession to the EU, living standards and demographic structure (i.e. aging population, new household forms) started to conform to those in other European countries. In the late 1990s, the effects of international migration inflows, especially from South America and the North of Africa, began to be felt. Not only did non-nationals become visible, but also their arrival turned the country into the main gateway to Europe. These processes have shaped the current social structure of the country.

For the last years, Spanish GDP average growth has been higher than the European average due to the enormous strength of internal demand, in particular, related to the construction sector. Spain, as the rest of European countries, is forced to compete in highly internationalised markets; in the past, Spanish competitiveness was based on the relatively low prices and wages compared to those in the rest of EU. Nowadays, the challenge of competitiveness must be met through a general improvement of labour productivity which is still under the European average and has not accompanied the general economic growth. Besides, since the beginning of the nineties, macroeconomic stability has contributed to creating a stable framework for economic growth.

R& D increased its GDP participation until the mid-nineties, but stagnated from then on. The contribution is, in general, below European standards, although certain large internationalised sectors such as automobile, transport equipment, machinery, engineering and civil construction and even other high technology activity such as aeronautics evidence a better situation.

Up to the nineties, Spanish economy achieved a high level of diversification and specialisation in traditional manufactures, that is, in those with a low level of technological intensity. However, the change of the international landscape presents a new scenario for competitiveness where the past advantages are not enough to cope with the new challenges. Transformations are required for all EU countries (Lisbon 2000) but, the Spanish effort has to be greater given the relatively low degree of economic development at the beginning of the process. As innovation has become the key element to benefit from better productivity levels and a larger share of international trade, social and economic bodies are engaged in providing new forms of capital (social, human, entrepreneurial) in order to create, and not only imitate, better technologies to cope with the new competitive environment. Nowadays, the stimulus for competitiveness involves promoting activities where innovation and knowledge play a key role.

Currently, urban regions in Spain are the territorial axis where industrial and service activities are conducted. Madrid and Barcelona represent the major competing poles of the country. There are noticeable differences between both cities; while Madrid functions as the capital of the country and is considered an administrative city, where large firms and financial entities locate their headquarters, Barcelona evidences a more dynamic character, a larger experience in the manufacturing sector and in trade, a broader diversification of activities, and intensive collaboration between the public and the private sector.

The BMR is one of the largest industrial urban agglomerations in Spain. However, the shift towards a service oriented sector is nowadays visible. The majority of industrial activities have moved to the periphery while those related to services are located in the urban core.

As Barcelona improves its international position as a good place for business, not only the recent improvements in infrastructures and communication technologies represent a key factor in such a progress but also the contribution of other factors, namely "soft factors" related to quality of life and environment. As we have seen in the previous chapters, certain aspects must be taken into account in order to explain the current situation of Barcelona and the Metropolitan Region in the international landscape:

- 1. The path dependency of the city of Barcelona has determined the current panorama as regards economic and social issues
  - a. Industrial development has provided experience for business implementation. Since its origins the industrialization process of Barcelona was diversified. Industrial diversification was brought about with the adoption of a model not based on specialization. This makes of Barcelona place where new activities can emerge.
  - b. An entrepreneurial bourgeoisie has played a key role in stimulating culture and creativity in general
  - c. The harbour as a key element for trading and exporting. Barcelona is not only industrial city but also a trading one. Both activites are empowered by its harbour. For Barcelona is one of the main Mediterranean harbours. In consequence the city is both the centre of the industrial region and the harbour *hinterland*.
  - d. Cultural development and tradition as an asset for the attractiveness of the city.
  - e. Cultural and architectonic assets of the city generates a favourable environment for creativity giving a quality of life based on landscape. Strategic plan refers to a quality of lige with a rich landscape.
  - f. A widespread culture of association
  - g. The event-related urban development, in particular the successful organisation of the Olympic Games
  - h. Political stability at the municipal level
- 2. Political will and partnership with the private sector together with the civil society not only at the strategic level, but also at the implementation of certain policies aimed at exporting a certain image of the city is certainly relevant as a determining factor of competitiveness.
- 3. The "Barcelona model" understood as a particular way of efficient public management at the municipal level.
- 4. The leadership in strategic planning of Barcelona is definitely accompanied by an effective way to look at the future and set targets and objectives for the long run.
- 5. The role of the municipality is not neutral, but the projection of a determined image of the city, in fact, the purposeful branding of the image of the city is directly related to the existence of non tangible factors which favour attraction of certain activities, specially those related to creativity and talent
- 6. The perception of Barcelona as an urban agglomeration with a multi-nuclear core has favoured the comprehension of the BMR in its complexity. Barcelona is the centre of a polycentric region with intraregional specialization. While Barcelona concentrates

the main intensive knowledge activities, the region combines both intensive and non-intensive knowledge manufacturing. Two different reasons explain this trend: the high land prices cause manufactures to leave Barcelona and the existing creative environment of the city attracts new creative and intensive-knowledge enterprises.

The issues pointed out reveals that Barcelona is a dynamic economic region with enough critical mass to compete in a European, and even in a world context. The province of Barcelona has created more than 900,000 jobs in the last decade. Consequently, Barcelona has become an attractive region for economic activity. However, certain challenges are nowadays on the city's agenda:

- Although the perception of the city is based on soft factors such as artistic tradition or a high quality of life, those elements which are sometimes taken for granted must be improved; this is the case, for instance, of connectivity between nodes of activity throughout roads, high speed trains, the port and the airport. Efforts are being made and the city will benefit from a new airport and an improved port in the immediate future. However, the delay with respect to other cities is already noticeable, and might have affected the area negatively.
- Targeting foreign competitiveness as an objective for the immediate future of the city must be accompanied by a set of measures oriented to guaranteeing a proper quality of life for its citizens. In particular, the housing situation should be improved.
- To comprehend the importance of education and training as a basis for future creativeness and innovation. Recent revisions of the education system in Spain seek to improve education and training at all levels; from primary school to university. Besides, knowledge networks must be reinforced, especially knowledge transmission from the university system to the private entrepreneurial sector. In fact, a competitive university system should offer high quality research to companies. Although the upward trend of scientific production is evident at the moment, a greater effort should be made by providing adequate mechanisms for a competitive research.
- Multiculturalism and diversity should be encompassed by public bodies and citizenship. The challenge is present in current policies oriented to facilitate the encounter between different lifestyles and cultures.
- Efforts should be made in order to guarantee a city with a wide supply of high quality entertainment activities for residents and visitors alike. Thus linking entertainment to the creative industries of the area.
- Certainly, the potential of Barcelona as a pole of talent attraction is clear. However, the city should offer an innovative environment rather than only a leisure one. For this, larger investments in innovation and creativity are expected in the sphere of knowledge generation in all the potential fields involved.
- The involvement of all actors is needed in designing the future for the city. Certainly, agreement on end goals was clear in the past. However, the coordination in the daily practise of policy implementation might be a challenge, not only horizontally (interdepartmental) but also vertically (between levels of government) Joint action is, as we see it, a guarantee for avoiding waste of economic resources on the one hand and keeping people's engagement on the other.
- Concerning the cultural sector, Barcelona has clearly supported the image of a cultural city. However, the recognition of culture at its broadest means accommodating a wide range of initiatives originated by the rich social fabric —even the most marginal- for these manifestations are the stimulus for creativity and innovation. Finally, the increase of culture consumption is one of the main challenges for the future.

In clonclusion, the development of creative knowledge seems to be shaping the future of the BMR into a segmented territory. Thus, while the city of Barcelona is becoming a neuralgic core for cultural creativity and creative industries, the rest of the region —medium sized cities— are attracting non-cultural knowledge, that is, they are turning into poles for knowledge and technological innovation. The above trends would be in accordance with the historical manufacturing development of the metropolitan region, where there is a city, Barcelona, that specialises in services, whereas industrial activity relocates to neighbouring cities. However, still retains two relevant poles of attraction. On the one hand, the district 22@ which aims at excelling in creative knowledge, and on the other hand, BIOPOL located at the other end of the city— which is destined to become a referent for the attraction of technological knowledge. These two poles must be considered in a regional perspective. Their aim is to attract knowledge-intensive and creative industries to the whole region, creating a core of the most representative industries in the city itself. Policies for the development of creative knowledge, will help to make the trends evident in the near future. Thus, we can see that Barcelona is the spearhead of the ongoing tertiarization process with the region following at a slower speed.

Figure 6.1A - Organisation of actors participating in Strategic Plans

# 1. Governing bodies:

- a. General Council of the Plan; which was the maximum representative formed by the Mayor of the city and the representatives of all the institutions willing to take part (more than 300)
- b. Executive Committee of the Plan; Formed by the representatives of all economic and social institutions
- 2. Reflection boards (experts):
  - a. Outlook committee
  - b. Barcelona Metropolitan Strategic Development Board
  - c. Strategic Committee
- 3. Liaison Committees
  - a. Strategic Economic Sectors Liaison Committee
  - b. Territorial Liaison Committee
  - c. Economic Analysis Liaison Committee
  - d. Environment, Strategy and Urban Planning Liaison Committee
  - e. Specific Strategic Plans Liaison Committee (culture, sport, training and seafront)

Figure 6.2A - Objectives and Strategic lines of previous Strategic Plans

1 iguit 0.2A - Objectives and Strategic files of previous Strategic 1 lans		
Plan	Objectives	Strategic Lines
1 <sup>st</sup>	To consolidate Barcelona as an enterprising	- Centre of a macro-European region
Strategic	European metropolis with influence over a	- Quality of life
Plan	geographic region, socially balanced with a	- Industry and research at the service of companies
	modern standard of living and profoundly	
	rooted in Mediterranean culture.	
2 <sup>nd</sup>	To accentuate the integration of the	- Adapting the economic sectors of the BMA to the
Strategic	Barcelona Metropolitan Area in the	international economy
Plan	international economy with the aim of	- Socioeconomic integration of the BMA
	ensuring its growth in terms of economic and	- New demands for social integration
	social progress and improvements in quality	- New economic activities
	of life.	- The BMA in the international economy
3 <sup>rd</sup>	To gain a position within the group that is	- To continue to advance in the positioning of the
Strategic	leading urban regions in the spheres of the	Metropolitan Region of Barcelona as one of the
Plan	new technologies of the 21st century's	most active and sustainable urban areas in the
	knowledge society. To consolidate its	European Union
	position as one of the most important	
	metropolitan regions in the European	- To give priority to policies which stimulate and
	network of cities, projecting its own identity	increase employment, with special relevance for
	and particularities to the worldwide network	the least favoured groups: women, young people
	of cities.	and the over 45's. This policy must be
		complemented by others that also stimulate and

increase the rate of employment

- To foster evolution towards the city of knowledge providing new activity sectors within the framework of efficiency and participation, in order to guarantee a stable quality of life and progress for its citizens

- To guarantee the social cohesion of citizens, by intensifying the participative culture of the city and creating the spaces that will become necessary in order to make this participation a reality

- To achieve a significant role in European growth and to develop a specific position in Spain, and in

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particular, in the Mediterranean and Latin

capacity for solidarity in order to favour

development.

America, as a factor that increases the attraction of the city. With a view to this last area, to promote a

- Esteve Caramés, Institut de Cultura de Barcelona ICUB- Municipality of Barcelona, on 21st November 2006
- Xavier Gràcia, 22@ on 11<sup>th</sup> January 2007
- Mònica Madrigal, Strategic Metropolitan Plan on 7<sup>th</sup> November 2006
- Xavier Marcé Carol, Institut Català de les Indústries Culturals –ICIC-Autonomous Community government, Generalitat de Catalunya on 4<sup>th</sup> December 2006
- Mario Rubert, Economic Promotion, Municipality of Barcelona on 24<sup>th</sup> November 2006
- Àngels Santigosa, Research Service of Economic Activity, Municipality of Barcelona on 23rd November 2006
- Maria Vila, Barcelona Activa / Barcelona Innova, Municipality of Barcelona on 8<sup>th</sup> November 2006

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