

**FOREIGN
DIRECT INVESTMENT
IN BARCELONA**
A CITY FOCUSED ON GROWTH



Ajuntament
de Barcelona



1. QUANTITATIVE ANALYSIS

FDI in Catalonia during the crisis,
a good performance

02

2. QUALITATIVE ANALYSIS

Why do foreign firms invest in Barcelona?

08

What are the obstacles for FDI in Barcelona?

13

3. CONCLUSIONS

Barcelona, a Leading FDI Destination

14

4. RECOMMENDATIONS

Harnessing the potential

18

5. APPENDIX

Technical notes

22

Biography

23

Research Team, list of participants
and acknowledgments

24

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INTRODUCTION

Because global Foreign Direct Investment (FDI) flows are constantly reshaping and competing for FDI among metropolitan areas is dynamic, it is important for the Barcelona area to continually ask the question of why foreign firms invest in the region, and why not. In a globalized economy, it is critical to understand the factors that make this region a favourable area for foreign investment and to be able to formulate insightful recommendations to the authorities.

This document summarizes the seventh edition of the report about the importance of FDI in Barcelona. The report begins with a quantitative analysis based on the exploitation of the main relevant existing public and private databases about FDI (first part). It follows with a qualitative analysis based on focus group meetings and interviews with experts involved in FDI decisions and on a survey to deepen the understanding of the key factors in driving or slowing down foreign firms' decision to invest in Barcelona (second part). The third part summarizes the principal insights. The fourth part provides recommendations for authorities on how to ensure and further strengthen the success of the Barcelona area as a magnet for foreign investment.

Finally, the appendix provides methodological notes, bibliography, list of participants, research team and acknowledgements.

Asian countries are rapidly increasing their FDI flows. In the last 5 years Catalonia has doubled its FDI inflows from East Asian countries

1. QUANTITATIVE ANALYSIS

FDI IN CATALONIA DURING THE CRISIS, A POSITIVE PERFORMANCE

During the period from 2007 to 2013, worldwide FDI flows decreased by almost 27%. In Europe, they declined by 72% and in Spain by 47%. In contrast, Catalonia was able to increase its inflows up to 50% during the same period (→ SEE FIGURE 1).

When considering only productive investment, Catalonia's share in Spain's FDI grew from 7.9% in 2008 to 20.6% in 2013. The increase in productive investment (versus mergers or acquisitions that do not necessarily create activity) was the main driver behind Catalonian high-performance.

FDI in Catalonia has shown great resilience to the crisis, even as developed countries have tended to lose share as investment recipients. European countries have been the main contributors to FDI in Catalonia over the past 10 years. Between 2008 and 2013, these contributions totaled 22,220 million euros (79% of all FDI received within the territory) and this share rises to 85% when looking only at productive investment. This implies that Europe is the major source of productive investment for Catalonia (→ SEE FIGURE 2).

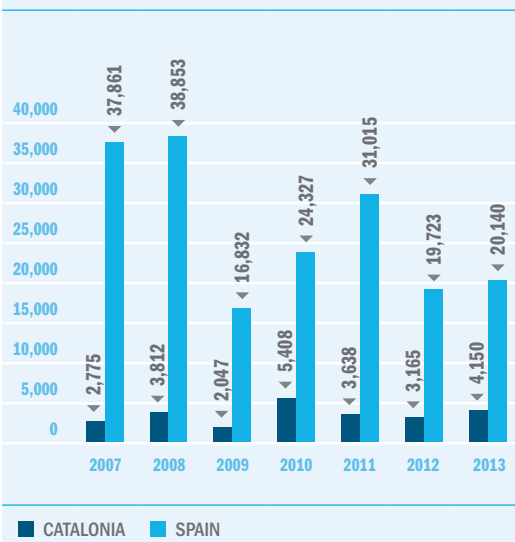
While FDI from developed economies decreased since 2007, emerging-market firms increasingly invest in foreign countries. In 2013, the share of global FDI outflows from emerging and transition economies reached 39% of the total, when 15 years ago they represented only 7%. Whereas the prices of commodities will remain high in next few years, this trend will go on. In Catalonia, growth coming from East Asian countries, whose investments almost doubled in the last five years as compared to 2002-2007, has been remarkable. East Asian flows towards Catalonia were mainly driven by Japan (181 million euros in the last five years). India and China investments still constitute modest inflows (60 and 12 million euros respectively), but they are rapidly increasing.



Catalonia increased its inflows by up to 50% between 2007 and 2013

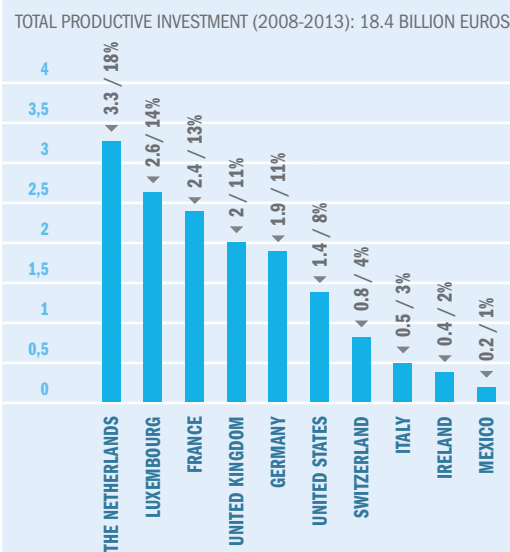
More than 80% of North-American, Italian and Japanese firms with presence in Spain have at least one establishment in Catalonia

FIGURE 1
FDI evolution in Catalonia and Spain
(million euros), 2007-2013



SOURCE: DATAINTEX (SPANISH MINISTRY OF ECONOMY AND COMPETITIVENESS)

FIGURE 2
Major issuers of productive FDI received* in
Catalonia, 2008-2013, billion euros and in % out
of total of productive FDI



*PER COUNTRY OF LAST ORIGIN

SOURCE: OWN ELABORATION FROM DATAINTEX, SPANISH MINISTRY OF ECONOMY AND COMPETITIVENESS

Catalonia hosts nearly half of foreign companies operating in Spain

Some 46% of the foreign firms operating in Spain have at least one establishment in Catalonia. Germany has the strongest presence, with 987 firms located in the region. It is followed by France and the Netherlands, with 908 and 797 companies located in Catalonia, respectively. The United States (U.S.) is the country with the largest presence in Catalonia relative to the rest of Spain (86% of U.S. firms in Spain are in the region), followed by Japan, Italy and Canada (↓SEE TABLE 1).

When looking exclusively at foreign headquarters in Spain, Catalonia hosts 31.6% of foreign headquarters within Spain. Germany is also the country with the most headquarters, namely 547. Catalonia is the preferred destination for establishing headquarters in Spain for foreign investors from several European countries (such as Italy, Austria, Switzerland or Belgium) and for East Asia and BRICS countries (Brazil, Russia, India, China and South Africa), which places 278 and 202 Spanish head offices in Catalonia, respectively.

TABLE 1
Foreign companies established in Catalonia, 2013

	ESTABLISHMENTS IN CATALUNYA	% ESTABLISHMENT CATALUNYA / SPAIN
Germany	987	42%
France	908	64%
Netherlands	797	38%
United States	692	86%
Italy	670	80%
United Kingdom	474	33%
Switzerland	365	51%
Luxembourg	329	48%
Denmark	223	69%
Japan	186	80%
Portugal	176	28%
Belgium	144	55%
Austria	104	68%
Other countries	945	30%
TOTAL	7,000	46%

SOURCE: INVEST IN CATALUNYA-ACCIÓ (CATALUNYA GOVERNMENT AGENCY)

Opportunities in key sectors

Data on FDI projects in the region show that Information and Communication Technologies (ICT) was the most popular sector for investments over the last decade. However, the logistics sector has also seen growing capital investments and has spurred the creation of more jobs (→ SEE TABLE 2). The leading sector for job creation was mobility, which includes the region's traditionally strong automotive industry.

Between 2003 and 2013, 20% of all FDI projects came from the U.S. with these projects totaling 11% of total capital investment. With respect to capital invested, Germany is the leader, totaling 21%. This difference in capital investment is because U.S. companies and projects are mainly focused on ICT, which require smaller levels of capital. Germany, meanwhile, is the leader in capital-intensive sectors such as mobility, design, medicine, biotechnology and life science. France stands out as the main foreign investor for logistics, tourism, creative industries/media and in the energy sector in the region.

It is estimated that FDI has created over 87,500 jobs in Catalonia during the past ten years

TABLE 2
Number of FDI Projects in Catalonia,
Capital Invested and Jobs Created
(% by Sector and Cluster), 2003 -2013

CATALONIA (2003 - 2013)			
SECTORS	NUMBER OF FDI PROJECTS	CAPITAL INVESTMENT (IN MILLION DOLLARS)	JOBS CREATED
	% Share	% Share	% Share
ICT*	21%	14%	15%
Logistics*	8%	22%	15%
Mobility*	7%	20%	18%
Biotech. and Life Science*	7%	5%	5%
Financial Services	6%	5%	2%
Consumer Goods	6%	3%	5%
Physical Sciences	6%	6%	2%
Food and agriculture*	6%	4%	5%
Industrial	6%	2%	3%
Professional Services	5%	1%	5%
Construction	4%	4%	14%
Tourism*	3%	2%	2%
Design*	3%	1%	2%
Creative industries/ Media*	3%	1%	2%
Energy*	2%	6%	1%
Other sectors	8%	5%	4%
TOTAL	836	36,074	87,526

*SECTORS CONSIDERED AS STRATEGICAL BY THE BARCELONA MUNICIPALITY. WE MATCH THE FDI-MARKETS DATABASE DEFINITIONS WITH THE CATALAN CLASSIFICATION OF ECONOMIC ACTIVITIES DEFINED IN 2009 (CCAE-2009).

SOURCE: OWN ELABORATION FROM FDI-MARKET DATABASE

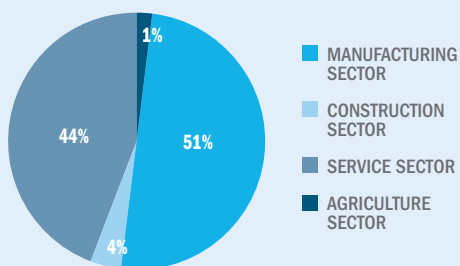
BARCELONA is the first city in Europe attracting FDI without English native population

Manufacturing investment is taking a back seat to investments in the service sector. The service sector is expanding and in the period 2008-2013 its relative weight was 13 percentage points higher than in the period 2002-2007 (↓ SEE FIGURE 3). Most FDI increases in the past five years were driven by investments in the services sector. Agriculture and construction are relatively small sectors for investment, and account only for 4% and 5% of total FDI, respectively.

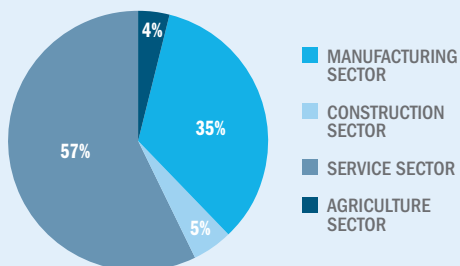
In terms of FDI by branch of activity, pharmaceutical manufacturing, information and communication technologies (ICT), storage and transport activities (logistics) and vehicle manufacturing stand out as the fastest-growing areas in the region, along with activities related to the financial sector.

FIGURE 3
Total FDI received in Catalonia per sector of activity, 2002-2007 and 2008-2013

2002-2007 Total: 18.97 Billion euros



2008-2013 Total: 22.22 Billion euros



SOURCE: OWN ELABORATION FROM DATAINVEX, SPANISH MINISTRY OF ECONOMY AND COMPETITIVENESS

Barcelona, a European Leader in FDI-driven Job Creation

By analyzing the FDI-Market database, we identified 5,369 investment projects to compare the 39 main European Union (EU) metropolitan areas between January 2011 and October 2013. It was estimated that these projects represented \$133,144 million in investments and created 316,349 jobs.

In Barcelona, 270 foreign direct investments created 20,334 jobs and drew \$7,460 million. Barcelona ranked 6th in number of projects, but 3rd in terms of capital invested. Regarding job creation, Barcelona ranks 5th among all the European cities, after London, Bucharest, Dublin and Warsaw. If we exclude the cluster of construction – since these activities are of temporary nature – Barcelona ranks third in Europe among cities where FDI creates the most jobs (↓ SEE TABLE 3).

TABLE 3
European city ranking of job creation by FDI

CITY	TOTAL FDI JOBS	CONSTRUCTION JOBS	FDI JOBS WITHOUT CONSTRUCTION
Dublin	31,799	178	31,621
London	36,638	9,941	26,697
Barcelona	20,334	4,387	15,947
Warsaw	21,631	9,397	12,234
Bucharest	35,862	28,665	7,197

SOURCE: FDI-MARKETS DATABASE

Information and Communication Technology (ICT)

During these years and in terms of job creation ICT is the most important sector for Barcelona, followed by mobility (mainly in the automotive industry) and logistics –excluding construction- (→ SEE TABLE 4). ICT investments have exceeded pre-crisis levels, placing the metropolitan area of Barcelona among the major European areas receiving FDI projects in ICT. In fact, the city has become specialized in attracting projects from Europe and Japan and projects of design and development centres. At a European level, ICT investments are becoming focused on specific subsectors (such as shared services or technical support centres), in which Barcelona is becoming a strong player. The Barcelona ICT-mobile industry is benefitting from its reputation as the world's mobile technology capital and related service activities.

Other Key Sectors

The Barcelona region stands out as the leader in logistics and design sectors, accounting for 22% of all jobs created in Europe in the latter sector, and it ranks in the Top 5 in 12 out the 15 sectors considered: construction, ICT, logistics, mobility, retail and consumer goods, biotechnology and life sciences, tourism, food and agriculture, creative industries/ media, design, energy, and higher education and research. Moreover, Barcelona is the most diversified city in attracting investments in different sectors (→ SEE TABLE 4). Barcelona is one of the preferred FDI destinations from Europe and Japan, and has the potential to attract other major worldwide players as U.S. or China.

When analyzing investments by activities or parts of the value added chain, Barcelona is the most attractive city for investment in logistics, distribution and transportation activities, and ranks in the Top 5 in 8 out the 16 sectors activities: construction, manufacturing (ranks 2nd), sales, marketing and support, logistics, headquarters, design, development and testing, technical support centres and shared services centres. Only London and Dublin, with 11 appearances in the Top 5 industry activities outperform Barcelona.

ICT, logistics
and the automotive
industry are the key sectors
attracting FDI in
Barcelona

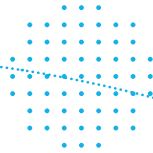


TABLE 4
POSITION OF BARCELONA IN FDI BY SECTORS AND ACTIVITIES/PARTS OF THE ADDED VALUE CHAIN

FDI IN MAIN EUROPEAN CITIES (2011 - OCT 2013)

SECTOR	#	TOP EUROPEAN CITIES	JOBS CREATED	ACTIVITY	#	TOP EUROPEAN CITIES	JOBS CREATED
Construction	1	Bucharest	28,665	Construction	1	Bucharest	28,747
	4	Barcelona	4,387		5	Barcelona	4,469
		Total	74,597			Total	90,981
ICT	1	Dublin	15,125	Business Services	1	London	6,909
	3	Barcelona	5,315		25	Barcelona	430
		Total	70,350			Total	42,520
Financial Services	1	Warsaw	4,669	Manufacturing	1	Dublin	4,680
	12	Barcelona	582		2	Barcelona	3,853
		Total	24,244			Total	39,181
Logistics	1	Barcelona	1,663	Sales, Marketing & Support	1	London	5,415
		Total	17,075		5	Barcelona	1,981
Professional Services	1	Dublin	3,016		Total	33,694	
	16	Barcelona	276	Logistics, Distribution & Transportation	1	Barcelona	3,053
		Total	16,821			Total	28,400
Mobility	1	Birmingham	2,410	Headquarters	1	Dublin	5,841
	2	Barcelona	1,904		4	Barcelona	1,399
		Total	16,242			Total	24,242
Retail and Consumer Goods	1	Stuttgart	1,368	Design, Development & Testing	1	Dublin	3,556
	5	Barcelona	1,008		2	Barcelona	3,286
		Total	12,867			Total	20,389
Biotech. & Sciences of Life	1	Dublin	4,263	Customer Contact Centre	1	Dublin	2,187
	4	Barcelona	745		6	Barcelona	565
		Total	11,797			Total	9,382
Tourism	1	Birmingham	1,968	ICT & Internet infrastructure	1	London	1,584
	5	Barcelona	529		14	Barcelona	172
		Total	8,978			Total	8,130
Food and Agriculture	1	Dublin	764	Research & Development	1	London	3,227
	2	Barcelona	577		8	Barcelona	148
		Total	7,643			Total	6,302
Creatives Industries/Media	1	London	1,860	Technical Support Centre	1	Dublin	1,607
	4	Barcelona	575		5	Barcelona	300
		Total	7,265			Total	4,165
Design	1	Barcelona	1,028	Shared Services Centre	1	Dublin	1,290
		Total	4,776		3	Barcelona	428
Energy	1	Copenhagen	591			Total	3,992
	3	Barcelona	392	Education & Training	1	London	296
		Total	4,273		8	Barcelona	81
Aeronautics	1	Madrid	446		Total	1,799	
	16	Barcelona	21	Maintenance & Servicing	1	Sofiya	200
		Total	2,547		6	Barcelona	96
Higher education & research	1	Paris	306		Total	1,685	
	5	Barcelona	64	Electricity	1	Antwerp	147
		Total	1,246		8	Barcelona	73
Other sectors	1	Frankfurt am Main	2,792		Total	943	
	11	Barcelona	1,268	Recycling	1	Paris	135
		Total	35,628			Total	544

SOURCE: FDI-MARKETS DATABASE AND OWN ELABORATION

2. QUALITATIVE ANALYSIS

Barcelona's quality of life, image, and infrastructure lead the ranking of FDI motives



Why do foreign firms invest in Barcelona?

Overall, consulted experts in focus groups, questionnaires, interviews and surveys stated that the factors influencing FDI in the Barcelona area range from personal and micro-level economic factors to macroeconomic considerations. Participants stated that Barcelona attracts foreigners and consequently foreign investment because it is a pleasant city to live. Second, from a micro-economic perspective, participants argued that the Barcelona area offers a well-qualified pool of human resources, competitive labour cost and attractive business ecosystems. And third, from a macro-economic perspective, interviewees argued that the Barcelona area has a geo-economic strategic advantage since it is the centre of the Mediterranean region, which is reinforced by its logistics and transportation infrastructure.

Based on the survey, experts indicated that intangible factors such as quality of life and the image of Barcelona are the most important motives for FDI in the Barcelona area (→ SEE FIGURE 4). Barcelona's reputation as a pleasant place to live and its positive brand image constitute valuable intangible assets that explain why Barcelona attracts foreign investors as an FDI destination. Moreover, the experts widely agreed that Barcelona's transportation and logistics infrastructure, airport and geo-economic location provide important motives for foreign firms to invest in the Barcelona area. The availability of the well-qualified yet low-cost labour force and the existence of thriving business ecosystems have been also crucial factors in attracting FDI into the region.

People love Barcelona

Barcelona continuously rated among cities with highest quality of life. The weather, the cultural and architectural heritage, the leisure and sport activities and a growing cosmopolitanism (foreign students, researchers and skilled workers) join together with a wide range of educational offer at all levels and high quality public services to make a very attractive and affordable place compared to other major European cities.

Barcelona continuously rates among cities in the world with highest quality of life

Barcelona stands out for its talented and motivated skilled workforce at competitive costs

Similarly, participants in the study stated that the high quality of life – reflected by the same factors and others such as the quality of public and private schools and universities, convenient local transportation and security – attracts an international talent pool, making the region attractive for foreign investments. Because of this positive image of Barcelona, foreign investors and employees enjoy relocating with their families in Barcelona.

Favourable geographic location and infrastructure

Barcelona area provides a favourable distribution hub that is close to the rest of Europe and with global connectivity. The participants were generally satisfied with the logistics infrastructure and transportation systems. The port of Barcelona offers favourable opportunities for global trade, connecting the Barcelona area with Asia and the Americas. Also, being only 7 km from the city centre, the Barcelona airport is considered convenient for European business trips. However, participants stated that direct intercontinental flight connections could be improved to facilitate global business meetings. Moreover, participants argued that they were generally satisfied with the road and railroad network but the scope of the port of Barcelona should be extended with freight rail. Finally, interviewees were satisfied with the quality of government support in developing an efficient Information Technology (IT) infrastructure.

Skilled labour force and low labour cost

The combination of a qualified labour force and low labour cost makes the Barcelona area attractive for FDI as compared with other Western European cities. Specifically, several interviewees stated that the Barcelona area offers a pool of talented engineers with relatively low labour costs. Participants also highlighted the high motivation of employees which has been further increased during the crisis. The availability of a skilled and motivated workforce and the most competitive labour costs in Western Europe has increased the competitiveness of the Barcelona area in attracting FDI. The participants were also generally satisfied with the labour reforms, arguing that these reforms provide reasons to invest in the Barcelona area. Moreover, participants noted favourably that there is a relatively low employee turnover in companies and that it is relatively easy to recruit young talent.

FIGURE 4
Ranking of top-25 FDI motives

Quality of life	4.02
Image of Barcelona	3.87
Transportation and logistics infrastructure	3.81
Barcelona airport and its connections	3.72
Geo-economic location of Barcelona	3.69
Skilled workforce availability	3.44
Port of Barcelona	3.40
Proximity to customers	3.38
Entrepreneurial spirit	3.38
Network linkages with business partners	3.35
ICT infrastructure	3.34
Opportunity for alliances	3.28
Climate to foster innovation	3.27
Attractive industry clusters / critical mass	3.22
Presence of foreign companies	3.21
Legal security	3.13
Access to advanced local knowledge	3.11
Deployment of existing advanced knowledge	3.10
Local market size	3.09
Local market profitability	2.96
Local market growth potential	2.96
General competitive operating cost	2.95
Low labour cost	2.92
Geographic proximity to the home country	2.90
Ease of doing business	2.80

SOURCE: IESE SURVEY

Network/innovation-based motives have emerged as differentiated reasons to invest in Barcelona beyond classic factors

Competitive labour costs and income tax

Average labour costs in Spain remain among the lowest in the EU15 and nominally on the same level as in 2009. Spanish labour costs exceed only those of Portugal and Greece. The other EU-15 countries in 2013 had costs per hour between 17% and 50% higher.

Similarly, labour taxation rates are among the lowest of the EU15 for both low and average wages, as well as for highest (following the OECD's tax calculator and KPMG's Individual Income Tax and Social Security report). In particular, the Spanish tax system has a special regime for displaced workers from abroad in the first 6 years, paying only a flat 24.75% tax rate on their salary income (24% probably in 2015). This legislation (known as "Beckham's Law") provides greater benefits for wages between 50,000 and 600,000 euros.

In the ICT/computer programming sector, Catalonia labour costs rank 30th among the 39 EU-28 regions, with the highest number of people employed in the sector, and only above three regions in the EU-15. Combining labour with other operational costs, IBM's global report *The World's Most Competitive Cities* places Barcelona in the group of world cities that offer the greatest possible competitiveness to firms at the least possible cost for both ICT sector and Shared Services Centres.

A thriving business ecosystem for FDI

The Barcelona area offers a favourable place for foreign firms to establish links with suppliers, customers, business partners and research centres, and take advantage of the knowledge generated by creative entrepreneurs, innovation centres, and new technology and consumer trends. The Barcelona area has one of the most diversified industry sectors in Europe, maximizing the opportunity for finding the right suppliers for developing innovative projects.

Barcelona is creating favourable business ecosystems in various sectors (as in ICT or in biotechnology) and the opportunities to collaborate could be further improved to intensify positive network effects. There is a favourable presence of foreign firms and a potential to incorporate more local firms in the business ecosystems. Overall, the Barcelona area is increasing its presence as a hub of knowledge in emerging technology-based sectors. Moreover, low renting prices and good availability of new office space is contributing positively to the creation of business ecosystems.

In this research, a new factor clustered as "network/innovation-based" emerged as a differentiated motive from the four classical groups of motives behind FDI – infrastructure, market, efficiency and institutional (→ SEE FIGURE 5). The analysis showed that the factor "infrastructure-based motives" is the most important in explaining FDI in the Barcelona area and that other FDI motives, such as "market-based" and "efficiency-based," are significantly less important for the Barcelona area than "network/innovation-based motives."

The emergence of this motive reflects a shift from the traditional reasons behind FDI in Barcelona, as measured in previous studies. The importance of the domestic market in FDI decisions has dropped over the last three years, and other factors such as a skilled workforce, industrial clusters and universities and research centres have become more important.

FIGURE 5
Relative importance of factors of FDI motives

Infrastructures-based motives	4.5
Network/Innovation-based motives	3.8
Market-based motives	3.4
Administration/Institution-based motives	3.1
Efficiency-based motives	3.0

SOURCE: IESE SURVEY

In Barcelona, 70,000 employees, more than 3,400 companies (200 of them being foreign companies) are directly involved in the ICT business cluster.

Barcelona's ICT business ecosystem

ICT industry is an important sector in the economy of Barcelona, with nearly 70,000 employees and more than 3,400 companies with at least one employee, and 200 of them being foreign companies. Barcelona is the Mobile World Capital (MWC) and the most important congress of this industry will be organized annually in the city until 2018. In Barcelona, there is a powerful cluster of internationally leading e-commerce and internet companies. The Mobile World Capital Foundation also develops several public-private initiatives in order to transform Barcelona into a living lab for mobility solutions (m-health, m-education) and to foster the development of an entrepreneurial mobile ecosystem with initiatives such as Barcelona Soft Landing. The city also organizes other global ICT industry activities such as Management and Clinical Innovation on Health (MIHEALTH) focused on e-health or 4 Years From Now (together with the MWC Congress) to foster new business. Moreover, Barcelona has the most important conference focused on Smart Cities: the Smart City Expo World Congress. Barcelona was the genesis of the City Protocol, for creating an international common exchange system of smart cities data. Barcelona City Council (by means of the Economic Promotion Agency Barcelona Activa and the Municipal Institute of Informatics-IMI) is a catalyst of technological change and innovation. IMI created the Centres for Shared Innovation to conduct innovation activities, which are useful for the municipality, with companies and research centres. Barcelona has launched a potent programme on e-government (open data, transparency and e-democracy) and on innovative public procurement (Open Challenge Barcelona). The objective is to make Barcelona an urban laboratory for testing hardware and software (apps, etc.) to improve the efficiency in management and in quality of urban life. Barcelona has more than 400 public hotspots WIFI (the largest network in southern Europe), as well as wide coverage of optical fibre and 4G. As a result of this commitment to innovation, in 2014 Barcelona received the European Commission award for being the European Capital of Innovation.

Barcelona Growth Centre: Starting in 2014, the Barcelona City Council has concentrated several facilities to foster innovation and entrepreneurship in the MediaTIC building in the 22@ innovation district. These foster innovation and entrepreneurship and include the Business Support Office as a showroom of city strengths and to assist new companies in Barcelona; Barcelona Soft Landing; Mobile Startup Barcelona and Corporate Startup Barcelona incubators; Barcelona Brand Agency; and two university research centres.

Education, research and clusters

Barcelona has an extensive network of universities and research centres across all disciplines. There are some of the best rated business schools in the world (two of them are ranked in the top 10 among European business schools). There are more than 200,000 students in nine universities in the area of Barcelona (20,000 in ICT-related careers); around 5,900 engineers graduate annually (3,000 in ICT) and more than 300 doctoral PhD theses are awarded every year. The area of Barcelona hosts 23,000 foreign students, being a top destination of the Erasmus programme. Additionally, vocational schools in Barcelona area educate 8,000 students annually in specialties related to ICT. The Catalan Government also has an ambitious plan to scale up dual vocational training and forecasts that 3,500 students will be studying and working in companies through this initiative in the 2014-15 course. Among research centres, technology centres and specialized clusters in ICT, noteworthy are the world-class facilities of the Barcelona Supercomputing Centre, Alba Synchrotron, the headquarters of the global ITER (International Thermonuclear Experimental Reactor) project, the Research Institute on Artificial Intelligence or the Microelectronics National Centre. In the regional network of Catalonia research centres (CERCA) and technology transfer centres (TECNIO), there are centres such as the Computer Vision Centre, the BDigital technology centre, Barcelona Media centre, the Internet Research Centre (I2CAT) foundation, TIC-Salut foundation and the Centre for Numerical Methods in Engineering (CIMNE).

Barcelona's port is a key asset in attracting investments from Asia-based firms

Regarding associations or clusters, initiatives such as C-Tecno (forum of ICT companies, universities and administration), E-commerce & Tech Barcelona (retail and internet firms and investing companies) Digital Cluster of BDigital and Edutech (educational technologies firms) have been established.

Enablers

The ICT sector is considered by the Catalan Government as a driver of technologies in its Regional Research and Innovation Strategies for Smart Specialisation (RIS3) for focusing its European Structural Investment Funds from EU for the 2014-2020 period. Catalonia also has its own European Enterprise Network office to facilitate Small and Medium-sized Enterprise (SME) access to European funding. The Catalan Government and Barcelona City Council are carrying out an active policy to support the participation in European Research and Development (R&D) projects (Horizon 2020). In the previous European R&D 2007-2013 framework programme (FP7), Catalonia was paired with countries receiving more grants per capita from the European Research Council.

Access to banking and non-banking finance is improving and there are new subsidies to foster job creation, not only in the ICT sector:

- For start-ups that aim to grow and operate in Barcelona there are over 30 private and public equity funds covering the different stages from the seed capital.
- Barcelona Activa (municipal economic promotion agency) has several incubation facilities, and there are also several additional private programmes of incubators and accelerators.
- Catalan and Spanish government facilitate obtaining loans and guarantees for operations with the traditional financial sector through public banking.
- The Catalan government and Barcelona municipality also grant investments creating jobs.
- The Spanish government has an aggressive policy of tax incentives for R&D as well as to favour the recruitment of disadvantaged groups (young people, long-term unemployed). The Catalan government also offers support for the recruitment of PhDs by companies.

There are other significant results observed by analyzing the responses to the survey by type of respondent:

Entrepreneurial firms rated the motives for FDI in the Barcelona area stronger than established firms and are slightly more likely to invest in the future. For entrepreneurs the main motives to invest in Barcelona are the existence of attractive industry clusters, critical mass and ecosystems with a large presence of foreign companies, along with local market growth potential. Because the presence of innovative entrepreneurial firms increases the value of business ecosystems, and therefore also attracts established firms, the Barcelona area has opportunities to continue to agglomerate an attractive mix of entrepreneurial and established firms. Experts located in Spain perceive most FDI motives but also most FDI barriers stronger than experts located outside of Spain. Importantly, experts located in Spain were significantly more satisfied with their FDI projects in the Barcelona area and also significantly more likely to (re-)invest in the Barcelona area, both in the short and long term.

Moreover, the survey indicated that emerging-market firms perceive most FDI motives in the Barcelona area stronger and FDI barriers weaker than developed-market firms. In particular, South American firms appear to perceive FDI motives stronger than other firms and Asia-Pacific firms indicate that they are most likely to invest in the long run. Because the port of Barcelona provides the faster entry point into Western Europe for trade and commerce shipped from the Asia-Pacific region, our results show that Barcelona's port is a valuable asset in attracting investments from Asia-based firms, which has yet to be fully exploited, especially when the freight railway connection with Europe is completely operational.

What are the obstacles for FDI in the Barcelona?

Experts from focus groups from the survey indicated that institutional and administrative processes, as well as the current economic and political environment, represent the main obstacles for FDI in the Barcelona area.

Institutional and administrative obstacles

Participants perceived *taxes, regulations, and legal security* as the most important barriers for FDI in the Barcelona area. Although the participants stated that the tax benefits for displaced workers is attractive and provides incentives for executives to re-locate in Barcelona, over-regulation, bureaucracy and delays in the deadlines of public management and administrative procedures in individual and business administrative processes represent substantial barriers.

The new Spanish Law 14/2013 on support for entrepreneurs substantially reduced the requirements and time periods to obtain residence and working permits for five groups of non-EU foreigners: a) investors in real or personal property; b) entrepreneurs creating jobs and contributing to the scientific and technological innovation; c) Researchers and teachers; d) highly qualified professional managers of large enterprises, strategic industries, companies with business projects creating jobs and graduates and postgraduates from prestigious universities and business schools; and e) for intra-company transfers (from a company abroad to a parent or subsidiary in Spain). According to available data, the processing time has been reduced from 99 to 76 days on average and the minimum time processing a permit has been reduced from 55 to 30 days. Spain has recently become the EU country with greater flexibility in the processing of working and residence permits.

This law was also accompanied by the Law 20/2013 on the Single Market that facilitates business throughout the national territory. The law establishes the principle that any business entity (or good) operating (or being distributed) in a part of the Spanish territory shall be entitled to move to another part without further restrictions.

Economic and political uncertainty

Some *unpredictability of law courts and frequent changes of taxes and rules* constitute considerable barriers for FDI in the Barcelona area. The law is often unclear and interpretation is difficult. Although in general, political uncertainty is considered as negative for long-term oriented investments, the data do not show any measurable impact in the Barcelona Area. FDI decisions, especially of U.S. and Asia based firms, are not affected by the current political uncertainty. Only if the independence movement jeopardizes Catalanian membership in the EU or Eurozone, would it be a concern for foreign investors.

There are significant differences in perception of FDI barriers regarding experts' origin

Experts from emerging-market firms and specifically from South America perceive FDI barriers in the Barcelona area relative to other European metropolitan areas weaker than developed-market firms. Experts from North American firms tend to perceive FDI barriers weaker than the remainder of firms. Firms from Asia-Pacific perceive bureaucracy as a significantly higher barrier than do firms from other world regions, while experts from Spain perceive the political uncertainty and cost and time to start a business as a significantly higher barrier than the remainder of firms.

3. CONCLUSIONS

Barcelona ranks in top-5 in 12 out of 15 most important sectors receiving FDI



BARCELONA, A LEADING FDI DESTINATION

The Barcelona area's relatively favourable performance in FDI has resulted in a positive impact on employment and in terms of leadership in several sectors at a European level. The highly valued intangible assets, the favourable geographic location and infrastructure, the well-qualified yet low-cost workforce along with the development of attractive business ecosystems have been crucial factors in attracting FDI into the region. Improving perceptions is essential in order to lure new firms, ensure re-investments and seize the important growth opportunity provided by emerging market firms. To this end, Barcelona should increase the economic and political certainty and consolidate the city as an international ICT benchmark. The future of FDI is about cities, not countries.

1. During the crisis, FDI in Barcelona has grown more than in Europe and Spain

Catalonia (mainly the Barcelona area, which accounts for 91% of foreign companies settled in the region) was able to increase its inflows up to 65% between 2007 and 2013. The region is host to 7,000 foreign firm establishments, with 50% of foreign firms located in Spain having at least one establishment in Catalonia. Barcelona is accommodating successfully the growth of emerging economies, which in 2012 and 2013 surpassed developed countries in volume of captured foreign investments.

2. Barcelona ranks third among European cities where FDI creates more jobs and it is the leading city of FDI inflows in several sectors

Between January 2011 and October 2013, 270 foreign direct investments led to the creation of 20,334 jobs in Barcelona and drew \$7,460 million, which placed Barcelona 3rd in terms of job creation. Barcelona stands out as the European leader in logistics and design, accounting for 22% of all jobs created in Europe in the latter sector, and it ranks in the Top 5 in 12 out of 15 most important sectors. ICT, logistics and mobility, along with the financial sector, currently appear to be the trendiest industries in Barcelona for foreign investors.

3. The value of Barcelona's intangible assets

Although tangible assets such as the roads and railways, airport, and port are important factors for the Barcelona area in attracting FDI, it is difficult to differentiate from competing Western European cities solely over infrastructure. What makes a difference in the perception of the consulted experts is the life quality that Barcelona offers, as reflected in factors such as the quality of public and private schools and universities, convenient local transportation services, security, and last but not least the climate, sea, architecture and recreational areas of Barcelona.

Quality of life constitutes an important part of Barcelona's FDI value proposition attracting not only foreign entrepreneurs or firms active in tourism and entertainment, but also executives of established companies from all other sectors. Barcelona's quality of life attracts people and companies follow people, placing Barcelona in the eye of FDI decision makers. Overall, our results suggest that the image and brand of Barcelona as a pleasant place to live and do global business has a positive influence on FDI decisions, which should not be underestimated but preserved.

4. Barcelona's well-qualified yet low-cost workforce attracts FDI

The availability of a skilled and motivated workforce at a price that is highly competitive in Western Europe attracts foreign investors. The combination of low-cost high-qualified people is especially attractive for firms from labour- and knowledge-intensive industries. Moreover, the interviewed experts argued that the presence of an international talent pool, which is mainly attracted by the high quality of life, provides important incentives for foreign firms to invest in the Barcelona area.

5. Barcelona is developing attractive business ecosystems

The Barcelona area is being able to differentiate itself from competing metropolitan areas by focusing on evolving attractive business ecosystems. Barcelona has a long and proven track record of public-private partnerships in organizing large events and urban development, which is currently evolving into a strategy to foster an ecosystem of innovation and entrepreneurship. Network- and innovation-based motives are highly important factors in explaining why foreign firms invest in the Barcelona area.

Experts that perceive business ecosystems as important are typically also more satisfied with their investments in the Barcelona area and have a higher intention to re-invest in the future. Since business ecosystems encompass links with suppliers, customers, business partners, research centres and knowledge networks, they can have a profound impact on technology and knowledge spillovers between foreign and domestic firms, the development of efficient and specialized supporting industries, and the emergence of a specialized and skilled workforce. Consequently, our findings indicate that business networks provide an important vehicle for economic development of the Barcelona area.

6. Improving perceptions to attract new firms ensures re-investments

The willingness to invest in the Barcelona area depends therefore crucially on an investor's knowledge about the Barcelona area. The preferences and requirements of expert groups differ substantially, suggesting that the Barcelona area needs to develop differentiated policy actions to target foreign investors located inside and outside of Spain, and according of being entrepreneurial or established firms, the country (or continent) of origin and the sector they are investing in.

7. Emerging-market firms provide an important growth opportunity in the long term

Barcelona is one of the preferred European destinations of firms from Europe and Japan, and it has the potential to attract other major worldwide FDI players. Those metropolitan areas that earn the attention of emerging-market firms can realize growth of FDI inflows in the long term. The survey indicated that emerging-market firms perceive most FDI motives in the Barcelona area stronger and FDI barriers weaker than developed-market firms. Our results show that Barcelona's port is a valuable asset in attracting investments from Asia-based firms, which has yet to be fully exploited, especially when the freight railway connection with Europe be completely operational. Overall, although European firms will continue contributing the largest share of productive FDI in the Barcelona area, emerging-market firms can provide an important opportunity to accelerate Barcelona's economic growth in the medium and long term.

8. Economic and political certainty will increase the confidence of some FDI decision makers

Barcelona should focus on improving its institutional and administrative framework relating to taxation, regulations, and legal security, which are perceived as main barriers to FDI. With respect to political uncertainty in Catalonia, some interviewees perceive the process as unfavourable but without a strong effect on FDI decisions maybe except for capital intensive, long-term oriented projects. These concerns are also mentioned in the survey, which indicates that political uncertainty represents a barrier for FDI in the Barcelona area. Therefore, an important challenge for the Barcelona area is to increase the economic and political certainty, stabilizing the confidence of foreign investors and safeguarding foreign investments in the region.



Barcelona's Mobile World Capital is improving the attractiveness for investing in ICT services



Globalization drives cities as major landmarks in investors strategies

9. Consolidating Barcelona as an international ICT benchmark

Barcelona has a rich ICT ecosystem that is benefiting from coverage of the Mobile World Capital and Barcelona's brand image and quality of life. The perception of Barcelona's ability in attracting ICT firms has grown in recent years, placing Barcelona as the 3rd most important city in the sector and the first non-English native city. However, Barcelona's economy is highly diversified but is losing industrial activities (as the rest of non-Germanic Europe), particularly in the ICT sector. Barcelona should stop this trend because ICT industrial activities provide productivity growth and competitiveness to the whole of the economy.

10. The Future of FDI is about cities, not countries

With about two-thirds of Europe's consumers and workforce living in metropolitan areas, cities increasingly emerge as FDI magnets and the new epicentres of power. The gradual law harmonization within Europe in recent decades, the adoption of a common currency and a single European market were some factors that facilitated the direct comparisons between cities by international investors. The institutional and economic environment along with the more recent boost to political, financial and fiscal European integration will continue to pave the competition across cities to attract FDI in the future.

Accordingly, the interviewed experts of this study stated that FDI decision-makers directly compare cities such as London, Madrid, or Barcelona rather than countries such as the UK or Spain when they evaluate FDI destinations, although the context of the host country continues to have an influence. This shift in managers' attention towards metropolitan areas provides enormous opportunities for the Barcelona area in positioning itself as a worldwide leading FDI destination, largely independent of the current economic image of Spain. Indeed, the findings of this study indicate that the interest of foreign investors in the Barcelona area recently increased and the interviewed experts predicted a positive trend for FDI in the Barcelona area, especially in the long term. Based on Barcelona's geo-economic location and a growing international recognition of Barcelona Brand, experts reinforces the trends that the metropolitan area of Barcelona has potential of becoming a leading destination of global FDI flows in several sectors such as information and communication technologies (ICT), logistics or mobility.

4. RECOMMENDATIONS



A customized and coordinated message has to be given to investors by all stakeholders involved in promoting the Barcelona area, taking into account the different profiles and specific needs.

HARNESSING THE POTENTIAL

Based on our quantitative analysis, focus group discussions and interviews, we provide several recommendations about how the Barcelona area could become more attractive for FDI.

1. Barcelona, the “Best City in the Best Time Zone”

Because of its favourable geo-economic location and time zone between the Americas and Asia that allows conducting business uninterruptedly, paired with the high quality of life, Barcelona is the ideal place for doing global business. Therefore, Barcelona should take a leading role in Europe in attracting FDI by establishing an image as the “best city in the best time zone” for doing global business. For this goal, it is very important to improve the intercontinental connectivity.

2. Barcelona area as the base for “Regional Sales Operations”

Because of the geo-economic location of Barcelona and the fact that sales people have to travel frequently, authorities could promote Barcelona by focusing on investments that build the base for regional sales operations (serving South Europe or Europe as a whole). Even if a foreign firm’s local base for serving the domestic market could be in the capital, its regional base for serving larger European markets could be located in Barcelona. Moreover, Barcelona also has a great potential as a bridgehead for operations and investments in Latin America and the South Mediterranean area.

3. A tailored Barcelona offer for different investor’s profiles

Both qualitative and quantitative studies show some significant differences in the perceptions of the attractions and barriers of Barcelona to foreign investment in terms of different investor profiles. Combining the different sources of information of this study, the table below summarizes the typical FDI profiles of investors and potential investors regarding their origin (→ TABLE 5, where # indicates order of investor’s preferences).

Emerging countries seek the intangible values or positioning the city to enter Europe and value less cost differentials than developed countries. Entrepreneurs and ICT companies equally value access to an innovative business ecosystem and penalize weak cosmopolitan and business friendly features.

All stakeholders involved in promoting the Barcelona area must understand these profiles and coordinate among themselves to transmit the same message and be adaptive to specific needs of potential investors. This includes developing systematic strategies of competitive intelligence.

4. Barcelona, gateway of Asia

The Investor's Profile shows that, currently, Asian countries typically invest in London, Köln-Düsseldorf, Barcelona and Birmingham. Asian presence in Barcelona is led by Japanese investment in the automotive industry, whereas FDI from China or South Korea is more restrained. Given that Asia is an important and fast emerging geo-economic area (the region multiplied almost 10 times its FDI outflows in the past 10 years), the findings of this study suggest that Barcelona should focus on improving its position, attracting FDI from Asia-based firms and investors mainly in the areas of logistics, ICT and services sectors, where the city is more competitive.

TABLE 5
Investors' profiles

WHERE DO I COME FROM?	#	EUROPE	NORTH AMERICA	SOUTH AMERICA	ASIA
In which sectors do I typically invest?	1	ICT	ICT	Industrial	ICT
	2	Logistics	Financial services	Food & Agriculture	Automotive
	3	Tourism	Biotechnology	Financial Services	Construction
In which areas does my FDI create most jobs?	1	Real Estate	Headquarters	Headquarters	Manufacturing
	2	Business Services	Sales, Marketing & Support	Business services	Real Estate
	3	Sales, Marketing & Support	Business services	Sales, Marketing & Support	Headquarters
What motivates me to invest in the Barcelona area?	1	Quality of life	ICT infrastructure	Legal security	Port of Barcelona
	2	Low labour cost	Quality of life	Administrative support	Image of Barcelona
	3	Skilled workforce	Image of Barcelona	Entrepreneurial spirit	Geo-economic-location
What concerns me about investing in the Barcelona area?	1	English proficiency	English proficiency	Economic uncertainty	Individual bureaucracy
	2	Political uncertainty	Political uncertainty	Political uncertainty	English proficiency
	3	Economic uncertainty	Company's bureaucracy	Company's bureaucracy	Corporate & Individual taxation
Which other metropolitan areas am I considering?	1	Stuttgart	Dublin	Madrid	London
	2	London	London	London	Köln-Düsseldorf
	3	Dublin	Paris	Wien	Birmingham

SOURCE: DATA FROM FDI-MARKETS DATABASE FOR THE PERIOD (2011-2013), IESE SURVEY, FOCUS GROUPS, INTERVIEWS AND OWN ELABORATION (IESE)

A higher development of business angels and venture capitalists will provide enormous opportunities in attracting foreign investments on innovative activities

Because Barcelona and its port represent the first great entry point in Europe coming from Asia, Barcelona could promote this distance-based competitive advantage better by clearly positioning itself as the most attractive European FDI destination for Asia-based firms. Ships crossing the Suez Canal towards the Atlantic ports take 5 to 6 days more than if they dock in Barcelona. This would also directly help the port of Barcelona and local transportation service providers in capturing higher loads and market share, enabling them to benefit from economies of scale.

5. Barcelona as the worldwide first “One-Click City”

To become a top destination for FDI in the world, Barcelona should further foster technological innovation to simplify administrative processes and make the life of its citizens and companies easier. Specifically, using the emergence of the smartphone and other technologies to automate administrative processes, Barcelona could become the first true ICT-mobile city. Investments in automating all kinds of processes and supplying data in real-time, would foster the innovative and creative image of Barcelona, which is in line with the technology-friendly image already established by the Mobile World Congress and smart city project. Based on the idea of the one-click city, it should be the ambitious objective of Barcelona to make it possible to create a new business in minutes by a one-stop-online-shop. This should include the possibility of creating virtual companies oriented to on-line international markets and services in specific incubators or facilities with attractive conditions.

Investors need reliable frameworks to develop efficient business ecosystems

6. Entrepreneurial mindset

Foreign experts describe Catalans as being realistic and serious business people, doing things “*little by little*” but with *openness to new initiatives*. However, this mentality is often accompanied by a perceived lack of ambition compared to other countries, which could be correlated with the distress about business failures, due to the personal social and economic costs of them. The judicial procedures associated are slow and expensive, and Spain is one of the few European countries that do not have a *fresh start* legislation that allows the restarting of entrepreneurial life after a personal or corporate insolvency. Many EU countries have introduced a fresh start without undermining the payment culture, increasing the cost of credit, or jeopardizing financial stability. This change would strengthen the entrepreneurial and innovative capabilities of the local people and would multiply the business possibilities with it.

7. Excelling in Barcelona’s business ecosystems

Barcelona has an extensive network of universities, research centres and business schools internationally recognized and hosts a very rich ICT ecosystem including the Mobile World Capital, specialized technological centres and a public administration focused on fostering technological change and innovation. To facilitate knowledge spillovers between geographically concentrated businesses and knowledge centres, the Barcelona area can foster cooperation between firms and universities and research centres by providing access to complementary resources as well as business and leisure-time activities.

The Barcelona area should promote on-line and off-line knowledge hubs and platforms such as a unique portal of research and transfer of technology (informing about all the research offer of the area), community clubs and technology events where facilitating face-to-face interactions and promoting the local diffusion of ideas.

Transferring technologies created in universities and R&D centres to companies would improve their professionalism and the wide recognition of their social utility. Their profile should have a combination of scientific and business skills and the capacity of cooperating in the large public-private ecosystem.

Barcelona should both internally continuously reinforce its strengths and going outside to attract investments projects in origin

Given the high importance of network- and innovation-based motives for FDI in the Barcelona area, the long-term commitment in channeling public resources to innovation should be also combined with a higher development of business angels and venture capitalists. The growth of local and international enablers will provide enormous opportunities for the Barcelona area to differentiate itself from competing metropolitan areas in attracting foreign investments in innovative activities.

8. Investing in Barcelona, a reliable engagement

According to the surveyed experts, political uncertainty along with the economic unpredictability due to the frequent changes of taxes and rules constitute the strongest barriers for FDI in the Barcelona area. Consequently, to establish a clear reform agenda and assure that legislative and political action will not have retroactive or unpredicted effects will certainly help safeguarding future FDI flows in the region.

9. Further develop the ICT sector

To consolidate its position as a benchmark of ICT cities, the Barcelona area could focus on automating all kinds of administrative processes for citizens and business, thereby decreasing FDI barriers and strengthening its reputation as an innovative business region. Leading ICT best practices attract ICT investments. To maximize this potential, the city should (some of these recommendations are also valid for other sectors) do the following:

- The ICT ecosystem should focus on the creation of synergies and detection of foreign direct investment opportunities with a global scope. Especially, the Barcelona area should establish a systematic monitoring programme to detect competitive opportunities and leverage the growing network of native managers, experts and researchers in major centres of global ICT companies.
- Stop the progressive disappearance of the ICT industrial base, given that industry is the main generator of productivity gains for the whole economy and its connection with the rest of the production ecosystem. Consequently, strengthening the ecosystem of innovation (i.e., efficiently transferring technology, aligning public and private agents, improving access to venture capital and European funds for SMEs) are key challenges.

- Strengthen R&D and technology transfer from research to new or established companies and create a local base of firms with global vocation as is being created in the ICT services sector. This includes strengthening entrepreneurial skills and developing a global business vision in the technological profiles. The public sector in Barcelona should increase efforts in innovative procurement, particularly for large deployments (for example introducing state-of-the-art technologies in the largest public contracts). This effort should be extended and coordinated with the entire metropolitan region.
- There are plenty of opportunities to attract more FDI projects from the US, Europe's leading ICT investor, as well as India and China. Barcelona has, in general, a lower presence of U.S. investment projects than its main competitors (London and Dublin). The effort should focus on attracting projects depending on origin. A focus, for example, should be placed on California, given that 40% of U.S. projects in Europe come from this state. Barcelona is one of the preferred destinations from Europe and Japan, and it has the potential to attract more investments from other emerging FDI worldwide players as China or India. Political and commercial efforts should be done to achieve this.

10. Fostering Barcelona's global brand

Barcelona should enhance the communication of its strengths, in particular:

- The availability of qualified personnel, competitive labour costs and associated taxes compared to most competing regions. An advantageous taxation for high-income foreign expatriates.
- Recent shortening of the time to obtain residence permits.
- Competitive costs in offices and telecommunications, and good connectivity with the rest of Europe.
- A large and diverse university and industrial base, combined with a city that has the aim of leading the Smart and Innovative City movement.
- Powerful global city-brand: *Designed, Made or Succeed in Barcelona* can be an asset for advanced ICT products or services associated with quality of life, culture or modern cosmopolitanism.

5. APPENDIX

TECHNICAL NOTES

Statistical analysis

The United Nations Conference on Trade and Development (UNCTAD) database and the World Investment Report 2014 provide information about worldwide and national evolution and composition of FDI flows. Datalnvex (Spanish Ministry of Economy and Competitiveness) provides regional data within Spain and a breakdown by sectors, type of investment and country of origin.

Invest in Catalonia-ACCIÓ (Catalonia Government Agency) data are used to estimate the number of companies established in Catalonia and the SABI- Bureau van Dijk (Analysis System of Iberian balances) database is used to estimate the number of foreign headquarters in Catalonia and Spain. The FDI-MARKETS database (Financial Times) provides detailed information about projects located in Barcelona (we explored the last 10 years, from 2003 to 2013) and in Europe (we analyzed FDI projects in the 39 main EU metropolitan areas between 2011 and October 2013). We have harmonized different sector definitions with the European Statistical classification of economic activities (NACE) and according to Barcelona City Council's strategic sectors. The specialized company *Gesdocument* provides the data about the requirements and time periods to obtain residence and working permits.



Focus Groups and interviews

After analyzing the data and reviewing previous reports about investment in the Barcelona area, we conducted four focus group meetings of two hours duration each, with a total of 15 FDI experts as participants and three researchers from the Public-Private Sector Research Centre at IESE Business School (PPSRC-IESE), as well as 10 individual interviews. Both focus groups and interviews were conducted using five predefined questions.

The focus group meetings took place at IESE Business School in Barcelona in February and March 2014. The aim of the focus group discussions was to establish an open dialogue about the strengths and weaknesses of the Barcelona area in attracting FDI.

Survey

Based on the insights gained in the focus group discussions, we developed a survey questionnaire with several multiple-choice and open questions. The survey was sent to three main groups: Spanish IESE alumni working abroad, foreign IESE MBA (Master in Business Administration) alumni abroad and foreign alumni living in Catalonia.

Overall, 187 experts answered the survey between March and April 2014. Almost two-thirds of the experts who participated in the survey work at the senior management level and about one fourth at the middle management level. Accordingly, more than half of the surveyed experts work in areas such as management, strategy and finance. Two-thirds of the experts live and work outside of Spain, whereas one-third is located in Spain. Moreover, 44% of the participating experts had been previously involved in an FDI project and almost one-fourth was previously involved in an FDI project in the Barcelona area. Regarding countries of origin, 18% of the sampled firms were from the United States, 9% from Germany, 8% from the United Kingdom. Of the sampled firms' industry sectors, 18% have their main business in consulting, 15% in banking and finance, 14% in technology, internet or telecommunication.

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Questionnaire Respondents: 187 IESE alumni living abroad or foreigners living in Barcelona

RESEARCH TEAM

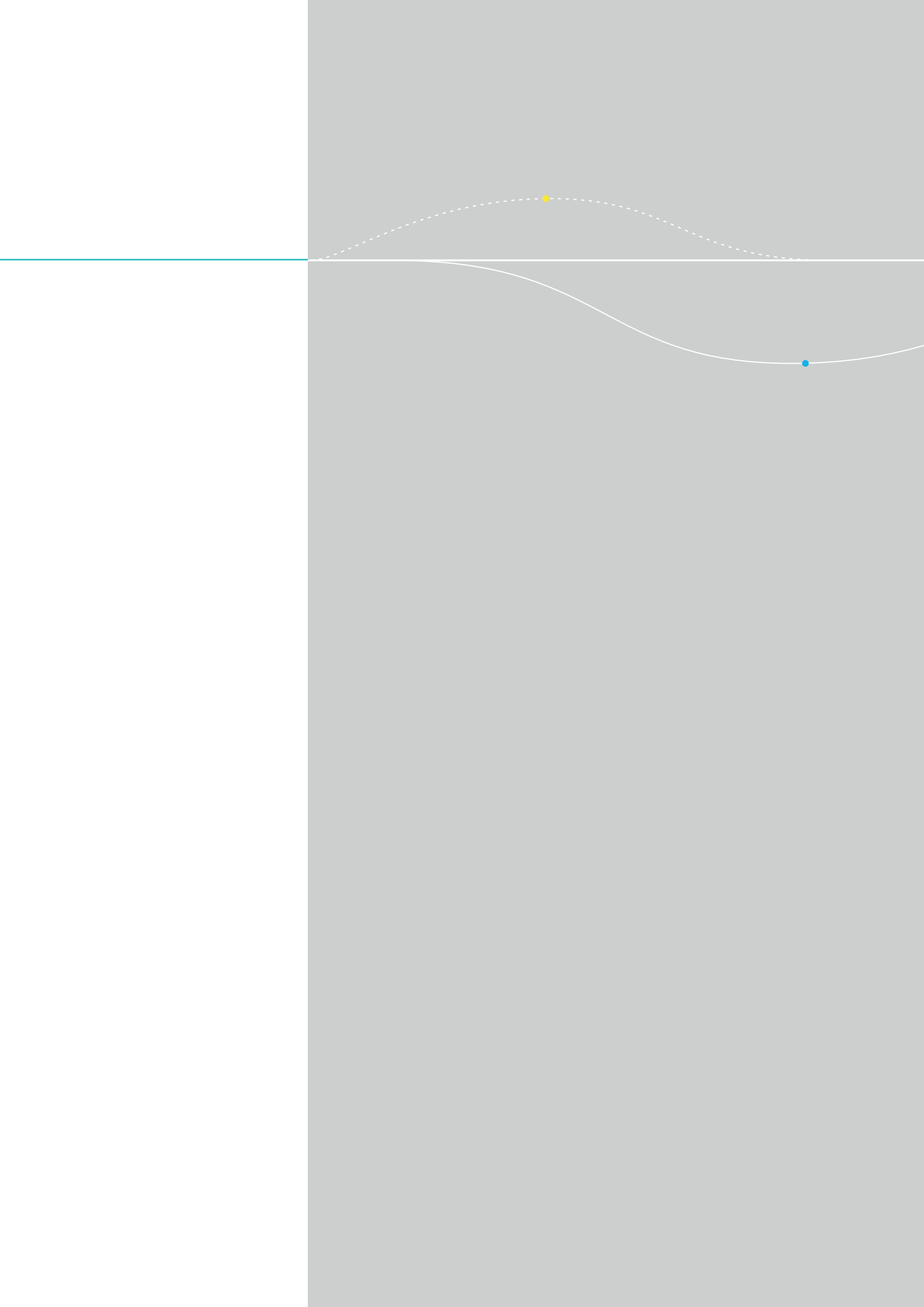
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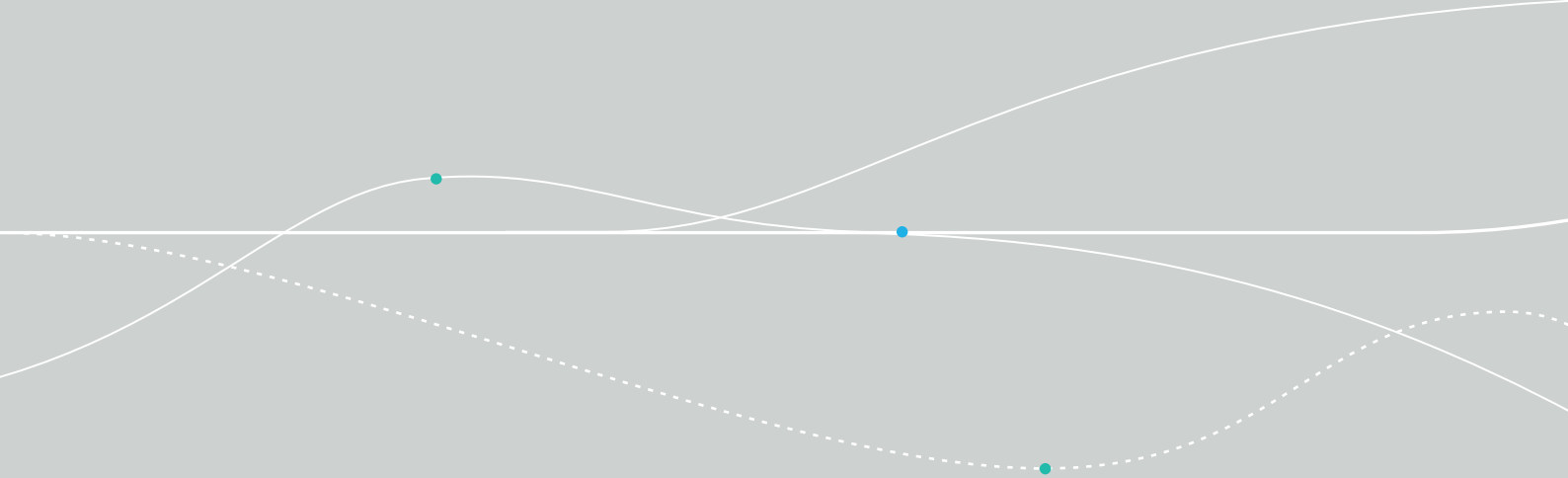
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