EXECUTIVE SUMMARY

1. Analysis of the situation of the City of Madrid

1.1. Economic environment and prospects

The change in direction of the ECB's monetary policies, with the first increase in interest rates, took place in a context of growing doubts about the cyclical situation of the world economy. The main international organisations are revising downward their growth forecasts and signs of deceleration are increasingly evident. Nevertheless, the growth figures for the first quarter were generally favourable, especially in the eurozone, supported by the strength of the two leading economies (Germany, with a QoQ rate of 1.5%, and France: 1.0%). The weakness of domestic demand has, nevertheless, been a drag on the GDP performance of the peripheral countries (Spain 0.3% QoQ, and Italy 0.1%).

Spain's GDP grew by 0.3% QoQ in the first quarter of 2011 (0.8% YoY). The external sector was again the main factor behind the improvement in activity. It contributed 1.5 percentage points to the YoY figure, spurred by the rise in exports in response to the dynamism of eurozone industrial activity and to the growth in tourism. Given the evident weakness of domestic demand, the risks to the growth outlook in the coming quarters are related not only to the financial risks arising from eventual episodes of stress on the periphery of the eurozone, but also to a possible loss of momentum in industry and the export sector and an acceleration of the fiscal adjustment process in the second half of the year.

GDP growth in the euro area (year-on-year rate)							
	1T10	2T10	3T10	4T10	1T11		
PIB	0,8%	2,0%	2,0%	1,9%	2,5%		
Consumption	0,6%	0,5%	0,7%	0,8%	1,1%		
Private	0,4%	0,6%	1,0%	1,1%	1,1%		
Public	1,1%	0,3%	0,1%	0,1%	1,1%		
GFCF	-4,6%	-0,6%	0,5%	1,3%	4,2%		
Stocks (1)	0,9	0,8	0,5	0,5	0,6		
Domestic demand (1)	-0,5	1,2	1,3	1,5	1,9		
Exports	6,5%	13,2%	12,2%	11,5%	9,7%		
Imports	3,3%	11,5%	10,8%	10,9%	8,7%		
Foreing demand (1)	1,3	0,8	0,7	0,4	0,6		

Source: INE

(1) Contribution to YoY GDP growth

The Madrid region's GDP recorded YoY growth of 2.6% during the first quarter of 2011, a noticeable increase of 1.6 percentage points over the previous quarter, and notching up the fourth consecutive quarter of positive growth. Turning to the economic sectors, services continue to lead the recovery with a YoY growth of 2.8%. Growth in industry is more modest at 1.1%, but represents a notable improvement over the sharp declines of the two previous quarters. Construction, however, continues to decline, with a fall of 1.4%, though this is an improvement of more than two percentage points over the previous quarter.

With respect to forecasts, the Economic Forecasting Centre (CEPREDE) expects GDP to grow by 0.8% in the current year, which would be almost a percentage point more than in 2010. Growth in 2012 is seen at barely 0.2%, meaning that the country would still be far from reaching the growth levels needed for a recovery in employment. For the city of Madrid, the Instituto L.R. Klein-Centro Stone forecasts YoY GDP growth of 1.1% for 2011, 0.3 percentage points better than the Spanish average. For the coming years, the forecasts point to continuing improvements in the city's GDP growth, although at a slower pace (down 0.2 percentage points in 2012 and 0.3 in 2013).

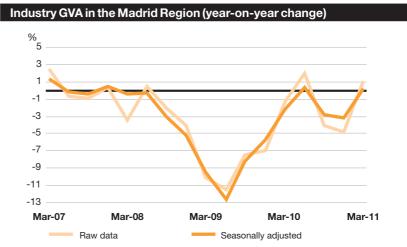
Macroeconomic variables for the City of Madrid (year-on-year rate)						
	2011	2012	2013			
GDP (supply)	1,1	1,3	1,6			
GAV energy	4,3	2,6	2,4			
GAV industry (ohter)	1,6	1,5	1,2			
GAV construction	-3,5	-0,9	0,7			
GAV servicies	1,2	1,4	1,7			

Source: Instituto L. R. Klein-Centro Stone, June 2011.

1.2. Production activities

INDUSTRY

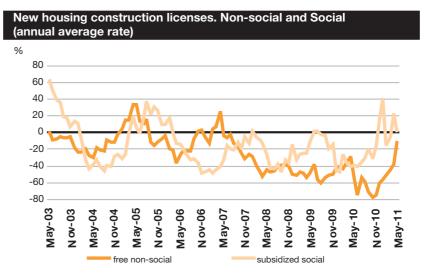
The Industrial Production Index (IPI) showed negative annual average growth of 1.8%; however, since December last year (when the decline reached 5.8%) there has been a clear trend towards recovery. This has reduced the difference with the Spanish average, from 5.6 percentage points in January to 2.9 in April. If this tendency continues, the regional IPI will probably move into positive territory in the coming months. Capital goods was the only sector which grew, by 2.6%; conversely, durable goods saw the greatest fall, of 10.2%. The year began with growth in industrial regional Gross Value Added (GVA) in the first quarter, particularly in the raw data (1.1%) and, to a lesser extent, in the seasonally adjusted data (0.2%). The coming months will confirm whether the industrial GVA can consolidate its growth. Nevertheless, the fall in Social Security enrolment in industry continues, with a YoY decline of 4.5% in the first quarter. The only sectors that grew in the quarter are those related to energy and the environment, and repairs and installation of machinery.



Source: Institute of Statistics of the Madrid Region (Quarterly Regional Accounts)

CONSTRUCTION AND THE REAL ESTATE MARKET

The year began with a further fall in Social Security enrolment in construction. The YoY decline is 7.9%, far higher than in the city of Madrid as a whole (1.6%). The biggest losses were in civil works, with a YoY decline of 15%, while the fall in building construction has moderated noticeably (down 496, compared to a fall of 2,472 in the last quarter of 2010). This relative improvement can be appreciated in housing construction licenses: the total number of licenses granted in the five first months of the year was 13.4% up on 2010, due to non-social housing. Although the growth rate in non-social housing remains negative, the trend in average growth rates reflects a sustained recovery (from -75.6% in November 2010 to -9.7% in 2011). Social housing, for its part, has recorded positive growth on several occasions since the end of 2010, although its performance varies significantly from one month to another.



Source: Town planning and Housing Department Madrid City Council

SERVICES

The Financial System

Economic instability and the financial system's difficulties are reflected in the YoY changes in the first quarter of 2011, both the decline in deposits (3.2%), and the stagnation of credit (0%) and, particularly, the restrictions on mortgage lending (down 17.9%). On the other hand, the restructuring of the financial system -still to be completed- is reflected in increased closures of bank branches (with a YoY fall of 4.8% in the city of Madrid). In all these variables, Madrid's situation is no different to that of the rest of the country, and the outlook for the coming months does not yet point to a recovery in the financial climate.

In the first five months of the year, the General Index of the Madrid stock market (IGBM in Spanish) has accumulated a rise of 6.2%, more than other leading stock market indices. However, the growth was concentrated in the two first months of the year, with a rise of 10.7%, while from February the index lost 4.4%.

Tourism

The expectations of tourist growth in the city of Madrid have been fulfilled in the first months of 2011. From March to May, the numbers of visitors and overnight stays experienced YoY growth of 4.4% and 6.9%, respectively. The larger increase in overnight stays as opposed to the number of visitors reflects an increase in the average stay, of 2.4% YoY. For all variables, the main driver of growth was the increase in foreign tourists.

Main tourism indicators for the City of Madrid								
	2010		2011	Change %				
_	2010	Mar	Apr	May	10/09	11*/10		
Tourists	7.859.378	684.279	725.984	744.152	9,7	4,4		
domestic	4.019.583	353.601	344.444	337.425	5,8	1,3		
foreign	3.839.796	330.678	381.539	406.727	14,1	7,3		
Overnignt stays	15.219.129	1.343.303	1.507.743	1.484.316	11,5	6,9		
domestic	6.941.609	620.970	633.361	565.554	7,6	1,7		
foreing	8.277.520	722.333	874.382	918.762	14,9	11,0		
Average stay	1,94	1,96	2,08	1,99	1,6	2,4		
domestic	1,73	1,76	1,84	1,68	1,7	0,3		
foreign	2,16	2,18	2,29	2,26	0,7	3,2		
Occupancy rate per place available	54,4	55,1	62,9	60,0	8,3	2,8		

^{*} Accumulated March-May 2011 Source: Hotel Occupancy Survey (EOH). INE

With respect to the overnight stays of foreign tourists, the largest increases were in tourists from the US and, even more so, from countries in the rest of the Americas, which together recorded 146,000 more overnight stays than in the same period in 2010 (59% of the total increase in foreign tourist nights). In relative terms, the largest increases were in two non-EU European countries, Russia and Switzerland, up 74.1% and 27.5%, respectively. On the other

hand, the traditional EU source countries in general recorded discreet or even negative increases. Looking beyond the American and European markets, overnight stays from African countries continue to rise (11.7%), but above all what stands out is the growth in visitors from the rest of the world (42%), particularly China and other Asian countries, resulting in a diversification of Madrid's tourism markets.



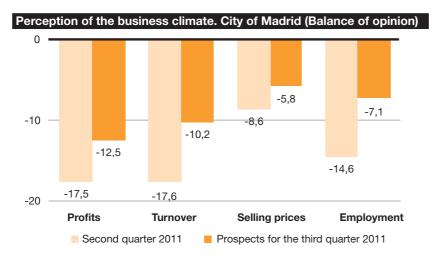
Source: Hotel Occupancy Survey (EOH). INE

Transport

In the January-May period of 2011, passenger traffic in the Madrid-Barajas airport increased by 1.2% compared to the same period of 2010. This trend is due to the growth in international traffic (6.3%), while domestic traffic again declined, by 7%, and now represents only 35.5% of total passengers. With regard to freight, the YoY growth was even higher, at 8.2%, a new record for Barajas. This rise is due particularly to non-EU international traffic. An increase in urban transport in Madrid is also apparent; after the YoY decline in 2010 (0.5%), the number of passengers on buses, Metro and local train services recorded a YoY rise of 3.8% during the first quarter of 2011. On the other hand, Social Security enrolment in the city's transport sector continued to fall, though less sharply than in the previous quarter (2.3%, compared with 4.5%).

1.3. Business dynamic

The Business Confidence Indicator for the second quarter of 2011 continues to be markedly negative, at -10.6, the same as the previous quarter, denoting the poor outlook for Madrid's entrepreneurs. By sector, the deterioration is concentrated in industry and construction, with second quarter figures more negative than the previous quarter by 5.5 and 6.6 points respectively, while services registered a slight improvement, reducing its negative score by two points. In general terms, economic indicators have not fulfilled the expectations of improvement for the second quarter flagged in the previous issue of the Barometer, particularly with regard to company profits, turnover and selling prices. Though still negative, businessmen's expectations for the third quarter indicate, as is customary for this part of the year, an improvement in all aspects, particularly turnover and employment.



Source: Business Climate Survey prepared by the Economic Observatory, Economy and Employment Department. Madrid City Council

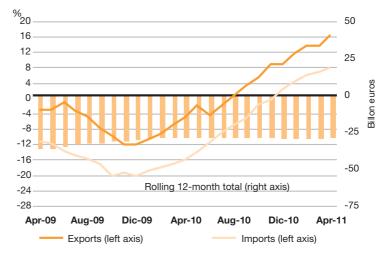
1.4. Demand

Between January and May, the fall in retail sales has steepened. In May 2011, the 12-month rolling average monthly decline stood at 2.4%, slipping back from the recovery experienced in the final months of last year (when it came close to 0%). The trend was practically identical to the Spanish average, although a small differential of almost a point in the region's favour persists. The poor outlook for the retail trade is reflected in the sector's falling employment; in May, it fell back further, with the YoY decline rising by 0.7 percentage points over the previous month, to 1.4%.

On the other hand, there has been an appreciable continuous improvement in investment in recent months. The annual average increase in capital goods investment reached 2.6% in May, the third month of positive growth. Moreover, the recovery seen in the Madrid region is noticeably stronger than that in the country as a whole, where the growth rate in May was still negative.

The strength of the Madrid region's export sector was also confirmed. The stronger growth in exports has contributed to improve the foreign trade balance. In April 2011, the YoY growth in the rolling 12-month total of exports reached a new record, with growth of 16.7%, significantly higher than the rise of 7.9% in imports.



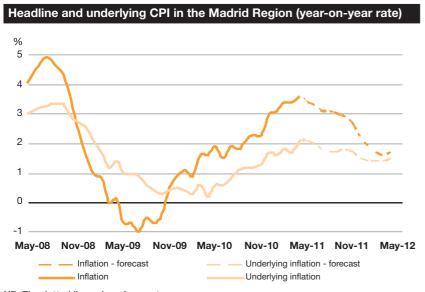


Source: ICEX

1.5. Prices and salaries

The behaviour of the Madrid region's CPI in the first months of the year reflected the inflationary tensions in the country as a whole. From January to April the rate rose by 0.6 percentage points, to 3.6%. This increase was due to a large extent to the high prices reached by some commodities, such as oil. Nevertheless, the May CPI fell by 0.3 percentage points which had not occurred since August 2010 - to 3.3%. The coming months are likely to see further declines in inflation, fulfilling the forecasts of the Instituto Flores de Lemus, which puts the rise in the Madrid region's CPI for the end of the year at 2%. The products with the greatest YoY price rises in May were "alcoholic beverages and tobacco" and "transportation" (15.6% and 7.6%, respectively); however, these two groups have moderated their increases in recent months.

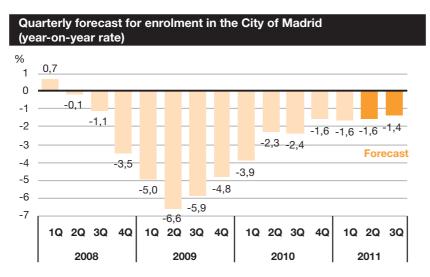
The Industrial Price Index (IPRI) of the Madrid Region has seen significant increases in the first months of 2011, reaching 4.7% in April, 2.4 points more than at the close of 2010. As for the prices per square meter of new housing, the data provided by TINSA (a real estate valuation company) for the first quarter of 2011 show much sharper falls in the in the city of Madrid (10.8%, or 5.7 points more than the Spanish average), while used housing recorded a smaller fall of 7.1%, similar to the national average. Meanwhile, labour costs experienced a slight increase in the first quarter of 2011, after several quarters of decline. Thus in March the YoY change in the Madrid Region reached 0.1%. Nevertheless, with respect to the previous quarter, the labour cost per worker declined by €94.20, to €2,896 (still €410 above the Spanish average).



NB: The dotted lines show forecasts Source: INE and IFL

1.6. Labour market

At the present moment, well into the year 2011, many uncertainties surround the outlook for the city of Madrid's labour market. The fall in employment is less fierce than in recent years, but it is still not seen to have reached its floor and a recovery in employment looks unlikely for now. According to the EPA labour force survey data, between June 2010 and March 2011 the city of Madrid lost 67,000 jobs, with employment falling further below the 1.7 million mark. In March, the YoY change was again negative, down 2.3%, something which has not occurred since the fourth quarter of 2009. By age groups, the declines are especially sharp in the lower cohorts, of 16-19 and 20-24 years, with YoY falls of 5.8 and 5.0 percentage points, respectively. The employment data for the first quarter of the year were also



Forecast: 2Q and 3Q 2011 Source: Statistics Dept., Madrid city Council Social Security Treasury and Afi unfavourable, with a YoY fall of 1.2% in March, interrupting the recovery trend of the previous two quarters. By economic sectors, job losses particularly affected industry, with a YoY fall of 9.1%, compared with 2.7% in services.

With regard to the Social Security enrolment data for the city of Madrid, May marked a new low, with a YoY fall of 2.6%, a percentage point more than the decline at the end of the first quarter. For the coming periods, enrolment forecasts do not point to a recovery. Thus, in June enrolment is estimated to have fallen by 1.6% on a YoY basis, while the forecast for September is only 0.2 percentage points better, at 1.4%.

Monthly forecast of registered unemployment in the City of Madrid (year-on-year rate) % 55,0 54 1 60 52,750,3 53.0 48.3 45,5 44,1 39,3 40 30.7 26,5 30 23.3 19,1 16,2 20 14.2 13.0 11.7 10.7 9.9 7,0 10 2,2 1.4 0.5 0.0 -0.9 -0,6 -0,6 -1,0 -1.30,0 **Fore** -10 Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec 2009 2010 2011

Forecast: July-September 2011 Source: Statistics Dept., Madrid city Council State Employment Service and Afi

On the other hand, the first quarter's fall in unemployment, according to the EPA labour force survey, is the most encouraging figure (down 9,300 compared with the previous quarter and a further YoY fall in unemployment, of 1%). Nevertheless, this decline does not affect all demographic groups equally. Unemployment among women rose by 1.2% YoY in the first quarter of 2011, compared with a fall of 3% for males. With regard to age groups, the 25-54s were the only group which saw their unemployment rate reduced in YoY terms, to 12.7%, 1.5 points less than in the first quarter of 2010. In contrast, the lower age groups saw their situation get worse, with an increase of 3.2% in the 20-24 band and 26.2% for the 16-19s. The State Employment Service puts the city of Madrid's unemployment at 217,968 in June, down 2,058 since January; June and April are the two only months since June 2008 in which there has been a YoY decline (0.6% in June and 0.9% in April). The forecasts for unemployment are more optimistic: from June, YoY declines are expected, with falls consolidating in the summer months (from the 0.6% decline in June to 1.3% in September).

2. Business attraction pole

FOREIGN DIRECT INVESTMENT IN MADRID

Much of Spain's international prominence derives from Madrid's capacity to channel foreign investment flows into its businesses Foreign direct investment (hereafter FDI) has played a crucial role in linking Madrid to the global economy. Its importance lies not only in the capitalization of the corporate sector, but also in the fact that it promotes competitiveness, provides access to technology and encourages Spanish companies based in Madrid to strive for international standards of efficiency. At the same time, FDI has been a vehicle for multinationals to enter the Spanish market. This article in the 'Centre of attraction' series is divided into three sections. The first addresses some of the major pull factors that account for Madrid's importance in international investment flows. The second section examines investment trends, taking into account Madrid's importance in Spain as a whole, and also its international importance; similarly, it examines the sectoral distribution and country of origin of investment in order to investigate its characteristics, the degree of relationship with Madrid's business sector and the trends of a changing global scenario. The last section is devoted to foreign multinationals located in Madrid, the main recipients of investment.

Madrid's advantages

Madrid is an attractive city for FDI flows

Along with contextual factors such as the Madrid economy's strong growth in recent decades and the attraction of foreign investment through the restructuring and opening up to foreign markets of the large companies located in the region, the combination of classical structural advantages favour Madrid as an international centre for investment and business. Key factors include world-class transport infrastructure and facilities, its role as headquarters and decision centre for national and multinational companies located in the country, the size of the market (the third largest metropolitan area in the European Union with high levels of purchasing power, human resources and professional qualifications), its status as an international financial centre and a concentration of advanced business services and economic and cultural ties that make Madrid a strategic platform from which to enter the Latin American market.

International investment flows are subject to large variations

In a context of intense globalization, Madrid has taken advantage of these benefits to become a leading magnet for international investment in the last decade. In this regard, during the period 1996-2010, the region accounted for 1.7% of total world FDI flows, a percentage equal to developed countries such as Italy and Japan (1.7% and 0.9% respectively), or emerging markets of the stature of Mexico and India (1.9% and 1.2% respectively).

The figures available on FDI, despite their methodological limitations, remain the main indicator for evaluating the ability to attract capital from abroad

However, these factors are not static but vary over time. The recent international crisis reduced the capital available to multinational corporations for new foreign investments or mergers and acquisitions. In addition, the current deterioration in the external image of the Spanish economy, with an increase in country risk, has had a negative effect on Madrid's international standing. Moreover,

in recent years a new world order has emerged, in which the developed countries' hegemonic position in international investment flows is giving way to new players from emerging economies and developing countries. In 2010, the developing economies grew by 9.7% and accounted for almost 50% of global FDI inflows.

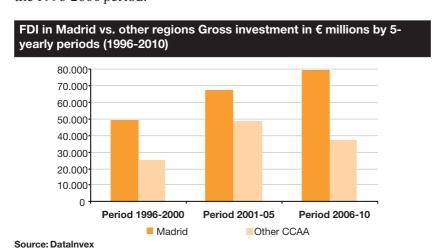
FDI trends

The importance of Madrid's FDI

According to data provided by the Ministry of Industry, Tourism and Trade (DataInvex), gross foreign direct investment received by the Madrid region between 1996 and 2010 amounted to €195.9 billion, representing 59% of total FDI in Spain, far ahead of the second region, Catalonia (13.9%). The bulk of this investment - €122.6 billion (62.6% of FDI in Madrid) - was in non-holding companies (non-ETVEs in Spanish). This represented 58.6% of the investment in non-ETVEs in Spain as a whole. FDI in holding companies (hereafter ETVEs) totalled €73.4 billion, 59.8% of total investment in Spain.

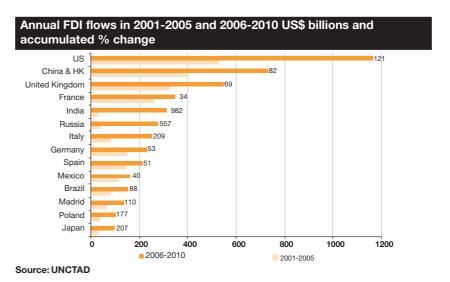
Several periods can be distinguished in annual investment inflows. From 1996 to 2000, investment in Madrid experienced remarkable growth, particularly in non-ETVEs, which reached a record high at the time (close to €20 billion). Meanwhile ETVE investment became significant after 1999, peaking above €15 billion for two years in a row in 2001 and 2002; however, once the tax advantage "call effect" ended, ETVE investment gradually declined. FDI reduced considerably in the first six years of this century, due to falling flows after the 2001 global economic crisis, later reaching the highest levels to date in 2007 and 2008 (at almost €25 billion annually). The global economic expansion, and particularly the interest of foreign investors in mergers and acquisitions in the Spanish market, were responsible for this boom in inward investment in Madrid. The deep global economic crisis abruptly interrupted this trend, with strong declines in 2009 and 2010 compared to previous years. The analysis of FDI inflows over longer periods (five years) reduces the effect of annual fluctuations caused by mergers and acquisition. Madrid's prominence has not fallen over time. In the 2006-2010 period, it cornered 61.1% of investment, only one percentage point less than in the 1996-2000 period.

FDI in Madrid reached a record high in 2007-2008, of close to euros25 billion annually



Globally, Madrid has played a very important role in investment flows, receiving about 2% of global FDI in the last five year period

Madrid is an international magnet for investment. In the last 5-year period, 2006-2010, Madrid received the equivalent to 1.8% of global flows, which in a ranking of countries would put it in twelfth position, ahead of countries like Poland and Japan, and close to Brazil and Mexico. However, it would have slipped down the ranking in the last year, 2010, falling nine places (overtaken by emerging economies in Latin America, Chile and Colombia, Asian countries such as Indonesia and Singapore, and also by developed European countries: Belgium, Austria, Luxembourg, Sweden and Poland). However, the decline of recent years must be viewed in context. Firstly, the record levels of investment captured in 2007 and 2008 make the decline in the following years appear sharper. It should also be borne in mind that Madrid follows the pattern of developed economies, where investment outflows are more important than inflows. Nevertheless, Madrid continues to attract important foreign investment flows (approximately €5 billion of non-ETVE investment in 2010).

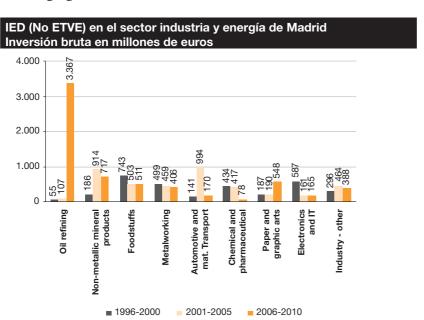


Sectoral distribution of FDI

FDI destined for Madrid was channelled mainly towards the energy sector, some specific branches of the services sector (such as retail, hotels and catering, and tourism) and industry, as in the case of oil refining

The following detailed analysis of investment by sectors and source countries excludes that in ETVEs, mainly because their investments are restricted to the transfer of financial assets and hence their direct effect on Madrid's economy is limited. If we compare the change between the last two periods of five years (2001-2005 and 2006-2010) with the average of other regions, significant differences are apparent. Thus, while in Madrid FDI related to electric power grew by 2803%, in the rest of regions it decreased by 35%. Even more significantly, because of its importance in the Madrid economy, was the growth of 45.7% of services as opposed to stagnation (0.5%) in the rest of Spain. The better performance of services was due particularly to certain branches, especially retail trade (which increased by 414.6% compared to a 33% decline in the rest of Spain). In contrast, growth in other regions was significantly higher in industry (145%, compared with 50.8% in Madrid) and construction (68.1%, compared with 31.9%).

Considering Madrid's importance over the period for which data are available (1996 to 2010), its share is particularly high in energy and services, with 85.3% and 61.5% respectively of the total for Spain. Together they accounted for 85.8% of FDI during the period. Madrid's share in other sectors was smaller: 30.2% in agriculture, 33.9% in industry and 37% in construction. A more detailed analysis by subsector reveals that the growth of industrial investment in the last five years was due to the oil refining industry, which recorded an increase of 3046%. If this sector is excluded, FDI in other industrial activities decreased by 27.3% in the last five year period. This decline is related to the offshoring process and the preference for investment in emerging economies.



Source: DataInvex

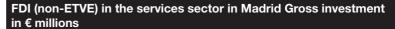
In services, the successive falls of the telecommunications sector can be seen: whereas in the 1996-2000 period it accounted for 56.0% of the investment received in the service sector, its weight in the 2006-2010 period fell to 4 2%. Quite the opposite has happened in retail, which in the first five years represented only 9% of investment in the services sector, but ended up with 49.7% in the 2006-2010 period. This dynamism was due to foreign investor interest in brand positioning, large retail chains and the establishment of foreign franchises.

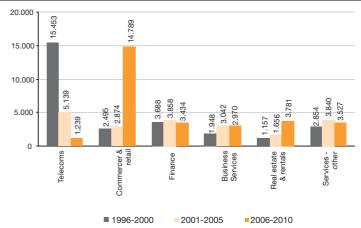
Of the FDI received by Madrid, 94.4% originates in only fifteen countries

Origin of FDI

With regard to the origin, the bulk of foreign investment is concentrated in a few countries. The chart below includes the top 15 source countries, which together accounted for no less than 93.4% of FDI in Madrid during the 1996-2010 period. Of note are the top two, the UK and Italy, in that order, representing almost half total investment (48.5%). At some distance behind the leaders come Germany, France, the Netherlands and the United States. The EU is clearly the dominant geopolitical region of origin, with 80.5% of

The relative importance of countries has varied over time, in function of the sectoral profile of investment, global trends in FDI flows and the acquisition of large local companies

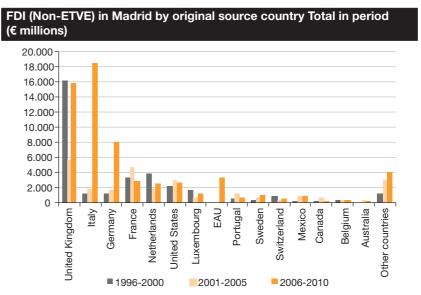




Source: DataInvex

investment. The importance of countries varies significantly over time. Whereas the UK led the ranking in the first five-year period, with 48.9% of total investment, in the last period it drops to second place behind Italy, although it is still very important, with a quarter of the investment. The rise of Italy is very significant, considering that in the first period it occupied the sixth position. German investment has also grown significantly, rising from seventh place in the first period to third in the latest.

The concentration of foreign multinationals in Madrid has contributed strongly in attracting FDI, and has led to the globalization of the Madrid economy in terms of trade and finance Looking in greater detail at the investment trends by country in recent years, in addition to the marked geographic concentration, a leading factor is major acquisitions of all or part of companies by foreign multinationals, which occurred between 2006 and 2009 (Endesa acquired by Italy's Enel, Altadis by Imperial Tobacco of Britain, and CEPSA by IPIC of the United Arab Emirates).

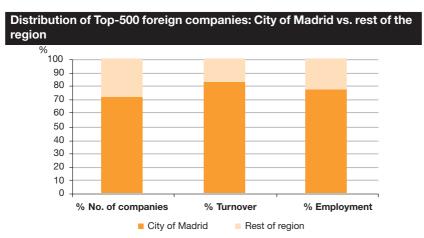


Source: DataInvex

The role of foreign multinationals in Madrid

Much of Madrid's economic strength and international prominence lies in the high density of foreign firms located there, which in turn is a decisive factor in attracting FDI. Evidence of the size it has reached is that nearly half (49.4%) of the 500 companies with the highest turnover in Madrid are foreign (in the sense that their share capital is controlled over by a foreign parent). The relevance of foreign companies is slightly smaller in the top 500 of the Madrid region in terms of turnover (41%) and particularly in employment (34.4%). On the other hand, of the top 500 foreign companies by turnover in the country, Madrid accounts for 56% (281) and an even larger share of the turnover and employment generated by these companies (59% and 57.2%, respectively). Within the region, the largest foreign companies are concentrated in the City of Madrid, which accounts for 71%, and even higher percentages in terms of turnover and employment (82.7% and 77.6%, respectively).

The bulk of the top 500 foreign companies in the Madrid region are located in the city



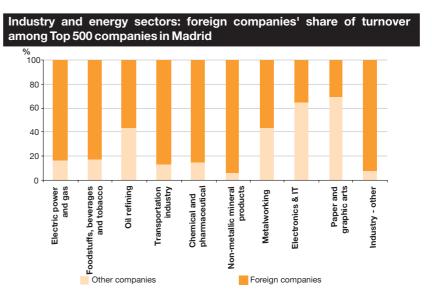
Source: SABI

By sector, foreign companies represent a large proportion of industry and energy, accounting for 79% and 71.3% respectively of the turnover of the top 500 in these sectors. This contribution declines to 37% in services and a negligible 2.9% in construction. Next, an analysis was made of the main industries. In most of the industry and energy subsectors in which they are present, foreign firms represent the bulk of the top 500 turnover.

The overwhelming predominance achieved by foreign firms in the electric power and gas subsector is a direct result of the multinational Enel's acquisition of Endesa (Endesa accounts for 83.1% of top 500 companies' turnover in this subsector in Madrid). Also, the importance of foreign companies in the oil refining industry reflects the purchase of CEPSA by IPIC (United Arab Emirates). Foreign companies account for seven of the thirteen food, beverage and tobacco companies in the top 500, and for as much as 82% of the overall turnover of this subsector. Much of this is due to the dominance of the tobacco company Altadis, now integrated into the multinational Imperial Tobacco. The presence of foreign firms is also very significant in the transportation materials industry, representing

The majority of the industrial and energy companies in the top 500 in Madrid by turnover are foreign

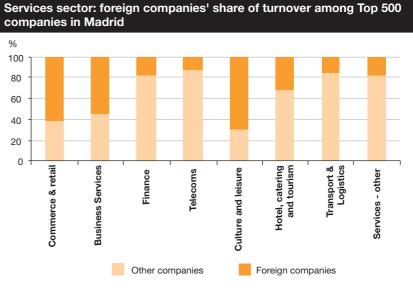
eight of this subsector's twelve top 500 companies and 86.7% of their turnover. Among the various activities, motor vehicles and components stand out, accounting for 68.7% of the turnover of foreign firms in this field, mainly due to the presence in Madrid of the Ford and Iveco headquarters. In turn, aerospace companies (linked to international giant EADS) and railway equipment manufacturing (Alstom) are among the most advanced industries in the region. In the chemical and pharmaceutical industries, the dominance of foreign companies is extreme, with thirteen of the fifteen top 500 firms, accounting for 85.4% of turnover.



Source: SABI

29 of the 50 largest exporting companies in the Madrid region are foreign

Foreign firms' share of top 500 companies in the service industries is significantly lower than in the industry and energy sectors. Commerce stands out among services, as foreign companies account for 32.2% of turnover and 34.5% of employment. Much of this strength comes from their position in activities related to the sale of



Source: SABI

automobiles and other motor vehicles, which alone accounts for 41.9% of turnover in commerce. Large foreign food retail chains also have an important share, particularly with regard to employment (34.5%, with 10.8% of turnover). Business services are the second most important tertiary subsector for top 500 foreign companies, particularly in terms of employment (25.1%) and to a lesser extent in turnover (13.8%). The most important activity is 'consultancy and business management', which accounts for almost 40% of turnover.

The finance industry accounts for 8.3% of foreign companies' turnover and 7.4% of their employment. The vast majority of these companies are included under heading 6420 of the National Classification of Economic Activities (CNAE in Spanish), which refers to holding companies. Another outstanding service industry is telecommunications, with 3.5% of turnover and 2.8% of total employment by foreign firms.

As with inward FDI, the presence of multinationals in Madrid affects trade relations, although it is important to clarify that this contribution is limited, because often multinational companies establish only their corporate headquarters functions in Madrid, with no direct effects on trade flows. However, 29 of the 50 largest exporting companies in Madrid region are foreign. In terms of turnover and employment, foreign firms account for 52.7% and 47.3% respectively of the top 50 exporting companies in Madrid.

29 of the 50 largest exporting companies in the Madrid region are foreign

3. Monografic report

MOBILITY AS A KEY ELEMENT OF URBAN SUSTAINABILITY AND COMPETITIVENESS

The competitiveness of expanding urban areas with growing mobility needs requires efficient and sustainable transport systems

The growth of cities and the expansion of their metropolitan areas have resulted in an increased need for mobility, in both number and length of journeys. The challenge for cities is to respond to these needs through efficient and sustainable transport systems as a key element of urban competitiveness and the ability to attract talent and investment. Madrid is no stranger to this challenge.

The aim of this article is to provide an introduction to the main features of mobility in Madrid and its development over the past fifteen years, the economic and environmental costs associated with it, together with the strategies employed.

A brief description of mobility in Madrid

Between 1996 and 2004, there has been a 39% increase in the number of trips to or from Madrid, especially between the city and the metropolitan area

In the 1996-2010 period, Madrid experienced a significant process of urban expansion. Thus, while the population living in the central districts grew by 11%, population growth in outlying districts was 16% and in the metropolitan area it was 48%. Alongside this urban expansion, there was a process of relocation of economic activities, also to the metropolitan area. This led to a substantial increase in the flow of people between the city of Madrid and its metropolitan area. Hence, travel to and from the city of Madrid grew by 39% between 1996 and 2004, from 6.9 million to 9.5 million. The highest increases were experienced in movements within the central districts of Madrid (51%), followed by flows between central districts and the metropolitan area (44%)¹. While there is no information subsequent to the 2004 Home Mobility Survey (EDM), it is reasonable to assume that this growth has been maintained, albeit at a slower pace.

Until 2004, private vehicle travel was increasing, especially between the city and the metropolitan ring. Since 2005 there has been a change in the pattern of mobility towards a greater use of public transport

As regards the modal split, although there are no consistent data from which to analyze the changes from 1996 to the present, combining the results of the EDM in 1996 and 2004 with the city of Madrid's Consumer Survey² suggests a change in mobility patterns from 2004, which is confirmed by average daily traffic data. Thus, while between 1996 and 2004 trips in private vehicles experienced growth of 9% in their share of travel within Madrid (from 31% in 1996 to 34% in 2004) and 6% in travel between Madrid and the metropolitan area (49 to 52%) to the detriment of public transport, between 2004 and 2009 the public transport's share of motorised trips within the city by residents grew by 3% from 61% to 63%.

¹Consorcio Regional de Transportes. Encuesta de Movilidad Domiciliaria (Home Mobility Survey) 1996 y 2004.

² The EDM survey sample is drawn from the whole Madrid Region, the Consumer Survey cover only the inhabitants of the city.

The increase in the number of journeys and in the proportion made by private vehicle has led to a substantial increase of the average daily traffic in the city of Madrid, from 1.3 million vehicles in 1996 to 2.4 million today, but with what looks like a turning point in 2005. Between 1996 and 2004, the average traffic volume increased by 92%, from 1.3 to 2.6 million vehicles. Since 2005, there has been a continuous and gradual decrease, from 2.6 million vehicles to 2.4 million in 2009, with the largest declines in traffic occurring in the central districts, reflecting the reduction in private vehicle use and coinciding with investments deployed by the city Council and the Madrid Regional authority in public transport and sustainable mobility policies.

Daily traffic volumes (no. vehicles) 2.500.000 2.000.000 1.500.000 1.000.000 500.000 0 Between M-30 Outside M-40 **Central Districts** M-30 ring road and M-40 ring road 1996 2004 2005

Source: Statistics Dept., Madrid city Council

Madrid has a good performance in mobility compared to other major European cities and it has improved in recent years, reflecting the efforts made, and is one of the factors attracting investment and talent to the city. According to the European Cities Monitor, in 2010 Madrid occupied the fourth position in Europe in terms of urban mobility, behind only London, Paris and Berlin, gaining eight places from its 12th position in 2004.

Madrid occupies the fourth position in internal mobility in the European Cities Monitor ranking, climbing eight places since 2004

An estimation of mobility costs in Madrid

There are a number of studies, both in Spain and throughout Europe, which address the analysis and quantification in economic terms of costs related to transportation,³ including that carried out in 2008 by Andrés Monzón and other researchers of the TRANSyT-UPM group, which estimated the total costs of passenger transport in the Community of Madrid in 2004, and unit costs for different modes of motorised transport.⁴ According to these estimates, the total cost in

The total costs associated with mobility in the Madrid Region in 2004 were 13.3% of GDP, and the private car is the main source of cost

³ See, for example, Maibach, M. et al. (2000): "External Costs of Transport Accident, Environmental, and Congestion Costs in Western Europe". INFRAS-IWW.

⁴ Monzón, A. et al. "Cuenta socioambiental del transporte terrestre de viajeros en la Comunidad de Madrid, año 2004". VIII Transport Engineering Congress. A Coruña, 2-4 de julio de 2008. http://oa.upm.es/3169/1/INVE_MEM_2008_53459.pdf

2004 was €19.9 billion, 13.3% of GDP of the Community of Madrid, which highlights the importance of mobility as a factor in competitiveness.

By mode, the car is the main contributor with 59% of the total cost, followed by metro with 15%, city and intercity buses with 8% and 6% respectively, suburban rail with 6% and taxis 5%. By type of cost, 59% corresponds to the travel time ($\[\in \]$ 11.9 billion), 34% direct costs ($\[\in \]$ 6.7 billion) and 7% external costs ($\[\in \]$ 1.3 billion).

Total mobility costs by transport mode in the Madrid region in 2004 (€ million)								
	City bus	Metro	Metropolitan bus	Commuter train	Taxi	Car	Motor bike	Total
Operating and infrastructure	321,1	631,2	234,9	294,7	424,1	4.757,8	61,35	6.725,2
Time	1.155,3	2.242,0	916,0	956,3	479,7	5.961,5	107,0	11.817,9
Accidents	13,0	2,9	5,2	0,1	13,2	551,6	174,3	760,2
Noise	3,7	0,0	2,5	0,1	8,9	92,7	11,9	119,8
Contamination	14,9	1,8	9,5	1,2	21,0	188,7	20,8	258,0
Climate change	1,8	3,4	2,2	2,2	6,1	108,4	0,6	124,7
Land use	0,1	0,0	1,5	2,0	0,5	45,7	0,4	50,2
Total	1.509,9	2.881,4	1.171,8	1.256,5	953,6	11.706,4	376,4	19.855,9

Source: Monzón, A. et al (2008). "Cuenta socioambiental del transporte terrestre de viajeros en la Comunidad de Madrid, año 2004"

The car is the main source of cost due not only to its high share in the modal split, but also to the fact that it is the most inefficient per passenger-km, with total costs 66% higher than the average cost of public transport (€1.02/passenger-km compared to €0.61/passenger-km).

Public transportation, compared with the alternative of private vehicles, represented a saving equivalent to 4.6% of the city's GDP in 2009 Based on these data and the modal split between private car and public modes, it is possible to estimate the total savings, by type of cost, implied by the use of public transport services in Madrid. Thus, the fact that in 2009 the bus transported 1,650.2 million passenger-km, the metro 4,612.0 million, metropolitan buses 3,621.6 million and commuter trains 3,503.1 million passenger km, compared with the alternative of making these journeys in private vehicles, results in savings totalling $\ensuremath{\mathfrak{C}}5.7$ billion, 4.6% of the city of Madrid GDP and 3% of regional GDP.

Economic contribution of public transport compared with private vehicles in 2009 (€ million)								
	City bus	Metro	Metropolitan bus	Commuter train	Total			
Operating and infrastructure	625,9	1.971,2	1.667,4	1.610,0	5.874,5			
Time	-229,7	-67,8	-578,4	219,3	-656,6			
Accidents	6,6	45,7	37,7	37,5	127,4			
Noise	10,4	37,8	22,1	28,7	99,0			
Contamination	19,5	88,1	39,5	66,9	213,9			
Climate change	7,1	21,2	17,0	16,1	61,4			
Land use	0,2	0,5	0,4	-1,4	-0,4			
Total	439,9	2.096,6	1.205,6	1.977,1	5.719,3			

Source: Prepared by Afi using data from Monzón, A. et al (2008) and Ministry of Development and Ministry of the Environment and Rural and Marine Affairs: Observatorio de la Movilidad Metropolitana 2009

Travelling time, as evidenced by the above analysis, is an essential component of the costs associated with mobility. An important part of travel time is due to congestion. It is estimated that the time lost in traffic jams, both in Madrid and travelling into the city, amounts to 121.3 million hours per year, whose social costs in terms of lost productivity (estimated from the average gross hourly wage in the Madrid region) is $\[\in \]$ 1.7 billion per year, representing 1.4% of GDP in the city of Madrid and 0.9% of the total GDP of the region.

In terms of lost productivity, the cost of congestion in Madrid represented 1.4% of the city's GDP in 2009

Strategies for a more efficient and sustainable mobility

The analysis of the costs associated with mobility reveals the need for the city of Madrid to implement effective strategies to promote sustainable and efficient mobility. These mobility policies must be accompanied by a strategy of urban development and management aimed at reducing urban spread and segregation of land uses, and employment policies that encourage telecommuting, all aimed at reducing travel. Without this combination of mobility, town planning and employment strategies, the success of efforts focused on mobility alone will be limited.

Promotion of public transport

The provision of public transport has undergone significant expansion in recent years. In 2009 the network length was 3,870 kilometres for city buses (20% more than in 2004), 20,192 km. in the case of metropolitan buses (with 1% growth over 2004), 279 km of metro network (23% more than in 2004) and 358 km in the case of commuter trains (6% more than in 2004)⁵. This effort in the expansion of networks has resulted in a high degree of coverage: 98% of the population has a bus stop within 300 meters from their home, and 90% has a metro station within 600 meters.

Additionally, there has been investment in transport exchanges, such as Sol or the Plaza de Castilla, which play an essential role in facilitating intermodal flows, especially in journeys between the city of Madrid and its metropolitan area, facilitating transfers and reducing waiting times. The expansion of bus lanes is another of the city Council's objectives, which plans to increase their total length by 50% as a means of increasing the commercial speed of buses, and thus encouraging the modal shift from private car to public transport.

The investment has enabled public transport to serve the increased volume of passenger km, which rose from 12,838 million in 2003 to 14,219 million in 2007 (an increase of 11%). The fact that this increased mobility has been served by public transport rather than the private car has generated savings of €770.9 million in the period 2003-2007, €703.5 million from the lower operating costs and infrastructure, and €67.4 million from the lower negative externalities.

The investment in public transport has enabled the increased demand to be absorbed, saving €770.9 million compared to the private vehicle alternative

⁵Ministry of the Environment and Rural and Marine Affairs: Metropolitan Mobility Observatory

Promotion of non-motorised mobility

The substitution of private cars by non-motorised transport saves €0.58 / passenger-km

The commitment to non-motorised transport (walking or cycling) is essential. The substitution of private cars by walking saves €0.58/passenger-km in terms of direct costs and negative externalities, in addition to reducing the costs of congestion.

With regard to the promotion of non-motorised mobility, the city Council has developed an active policy of increasing the space for pedestrians and bicycles. With respect to the pedestrian, three actions have been undertaken: (1) the creation of three Residential Priority Areas, (2) the total or partial pedestrianisation of some busy squares and shopping areas, and (3) pedestrian bridges to improve the geographical integration of the city and the periphery-centre pedestrian flows. In the area of cyclist mobility, the Madrid Master Plan for Cycling Mobility foresees the construction of a meshed network of 575 km of cycling lanes within the city by 2016, of which 263 km already exist, integrated with the Cycling Green Belt.

Rationalisation of the use of private vehicles

The most effective deterrent is parking restrictions (40% of city of Madrid residents surveyed who have a private vehicle do not use it daily because of the difficulties and/or cost of parking). To this end, Madrid has extended the regulated parking area (SER) to all districts inside the M-30 ring road.

The bus-HOV lane on the A-6 motorway, which has increased the average vehicle occupancy by 15%, is an example of the success of such initiatives, which could reduce current congestion levels by 25%

Rationalizing the use of private vehicles also involves an increase in the average occupancy rate (currently 1.34 occupants/vehicle for journeys within the M-30 and 1.29 on the roads entering Madrid)⁶. Establishing bus-HOV lanes on the roads entering the city and carpool initiatives are effective tools for increasing occupancy levels. An example of the success of these initiatives is the implementation of the bus-HOV lane on the A-6 motorway which has increased the average vehicle occupancy from 1.3 to 1.5. If this experience is extended to all accesses to Madrid, it could reduce current congestion levels by 25%⁷, which in terms of lost time alone would mean annual savings of around €113 million.

Finally, companies' mobility plans, provided for in the Law of Sustainable Economy, are another tool for reducing car use and complementing public transport.

Promotion of cleaner public and private vehicles

The key to reducing mobility-related contamination levels again requires, as a fundamental measure, the encouragement of a modal shift from private car to public and non-motorised transport, but also investment in public fleets and the promotion of less polluting private vehicles.

⁶ Fundación Movilidad (2009): "Primer del estado de la movilidad de la Ciudad de Madrid. 2006-2008"

 $^{^7}$ Fundación Movilidad: Workshop on mobility in areas of economic activity. 2nd session. 15th March 2011.

In this regard, the EMT bus company has undertaken a major renewal of its fleet, reducing the number of diesel-powered buses in favour of low emission vehicles, which in four years have risen from 10% to 84% of the total. For the next 4 years, the goal is to renew 100% of the fleet of articulated buses, replacing them with buses powered by compressed natural gas (CNG). In 2010, in fact, diesel-powered buses had already disappeared from EMT's fleet.

84% of the EMT bus fleet is low emission

At the same time, a major effort has been made, especially in 2010, to supply cleaner fuels by adapting existing service stations and adding new facilities, including electric charging stations for vehicles. In 2010, there were 96 public alternative fuels stations in Madrid, of which 81 were charging points for electric vehicles. To these we must add the network of stations supplying EMT buses and municipal vehicles.

In the field of private transport, the city of Madrid is committed to the gradual introduction of electric cars, Madrid being one of the three Spanish cities in which the MOVELE Project is being developed; this should provide support for further deployment, nationwide, of the Strategy and Action Plan for the Promotion of the Electric Vehicle. Achieving the National Strategy's objective (of replacing 1% of cars with electric vehicles) would prevent the emission of 30,000 tons of CO² per year, 0.8% of total CO² emissions from road transport in Madrid.

Replacing 1% of cars with electric vehicles would reduce CO² emissions by 30,000 tons annually