

EXECUTIVE SUMMARY

1. Analysis of the situation of the City of Madrid

1.1. Economic environment and prospects

The crisis in the Middle East and North Africa, and the impact of the earthquake in Japan, have raised certain doubts about the scope for global growth in the short to medium term. Nonetheless, beyond the emergence of new factors in the international economy, the beginning of the year has been marked by the healthy global recovery in both emerging and advanced economies.

In the euro zone, after the disappointing growth data in the fourth quarter of 2010 in Germany (0.4% quarterly) and France (0.3%), a strong first quarter is forecast in terms of activity, with progress in industry and inventory rebuilding as potential growth engines in these two economies. However, in peripheral countries, potential growth is limited by the fiscal adjustment packages.

The Spanish economy managed to grow in the last quarter of 2010 (0.2% QoQ, 0.6% YoY), after a third quarter of stagnation, but with a domestic demand profile that was still significantly recessionary: low

Spanish macroeconomic variables (year-on-year rate)					
	4Q09	1Q10	2Q10	3Q10	4Q10
PIB	-3,0	-1,4	0,0	0,2	0,6
Consumption	-1,9	-0,5	1,5	0,9	0,9
Private	-2,6	-0,3	2,2	1,6	1,7
Public	0,2	-1,1	-0,1	-0,7	-0,9
GFCF	-14,0	-10,5	-6,7	-6,7	-6,1
Equipment	-16,9	-4,6	8,7	2,4	1,2
Construction	-11,9	-11,4	-11,3	-11,2	-10,6
Residential	-24,8	-20,9	-18,7	-15,1	-11,4
Other construction	-0,9	-4,1	-5,9	-8,7	-10,1
Other	-17,2	-15,8	-11	-3,0	-1,5
Domestic demand⁽¹⁾	-5,2	-3,1	-0,3	-0,7	-0,6
Exports	-2,1	9,4	11,9	9,4	10,5
Imports	-9,2	2,0	9,6	5,0	5,3
Foreign demand⁽¹⁾	2,2	1,7	0,3	0,9	1,2

(1) Contribution to GDP growth
Source: INE (National Statistics Office)

household consumption growth (0.3% QoQ), following the sharp correction in the third quarter of 2010, and a relatively worse performance in durable goods. The external sector has been the mainstay of GDP since the onset of the crisis, with growth of 10.5%.

In the Madrid Region, GDP growth in the fourth quarter of 2010 was 1.0% (after adjustment for seasonal and calendar effects). Though 0.2 percentage points less than the previous quarter, this was the third consecutive quarter of positive growth. The sectoral analysis shows that once again it was services, the core of the regional economy, which turned in the best performance, with a YoY rise of 1.7%, unlike construction and industry, which continue to record declines in GVA, with YoY falls of 4.8% and 3.5% respectively.

With regard to the Spanish economy, in November 2010 CEPREDE forecast GDP growth of 0.5% for 2011. The improvement in some leading indicators in April has caused these forecasts to be revised upwards. For the city of Madrid, the Instituto L.R. Klein-Centro Stone has maintained its forecasts, with growth rates of 1.2% in 2011 and 1.5% in 2012.

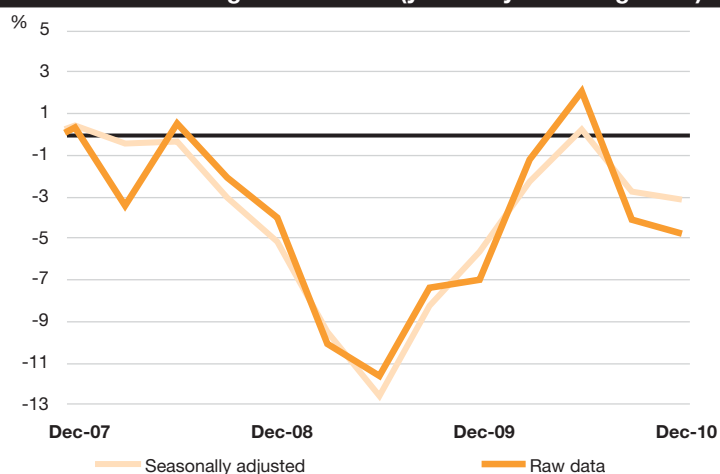
Macroeconomic variables for the City of Madrid (year-on-year rate)			
	2010	2011	2012
GDP_{supply}	0,0	1,2	1,5
GAV energy	3,7	3,6	3,6
GAV industry (other)	1,8	2,7	2,2
GAV construction	-5,9	-3,7	0,7
GAV services	0,3	1,2	1,2

Source: L.R.Klein Institute-Centro Stone, December 2010.

1.2. Production activities

INDUSTRY

Growth in Madrid Region's Industrial Production Index remained negative in January 2011 (-3.9%), although this was an improvement on previous months, when it had stabilized at around -6%. Capital goods, non-durable consumer goods and energy, with average annual rates of -0.4%, -3.4% and -3.0%, respectively, are the segments with the smallest decreases in early 2011. Industrial GVA recorded a further decline in the fourth quarter of 2010 (-4.8% before adjustment and -3.1% in seasonally adjusted terms). Reflecting this, Madrid industry saw further falls in Social Security enrolment, down 4.6% YoY. However, on a positive note, it rose 1.0% on a QoQ basis. The sectors creating jobs were “energy supply”, “manufacture of pharmaceutical products” and “repair and installation of machinery and equipment”.

Industrial GVA for the region of Madrid (year-on-year change rate)

Source: Madrid Statistics Office (Regional Quarterly Accounts)

CONSTRUCTION AND THE REAL ESTATE MARKET

The year 2010 ended with a further reduction in Social Security enrolment in the construction industry, with a QoQ fall of 4.9% and YoY decline of 7.6%. The largest losses were in civil engineering (14.5%), the result mainly of the government's budget cuts. These poor employment figures are but a reflection of the sector's continuing decline in activity, reflected in YoY decreases in the number of housing construction licenses of 36.0% at the end of 2010 and 35.5 % in February 2011. By type of housing, unsubsidised dwellings saw the worst decline.

Residential building permits (average annual rate)

Source: Town Planning and Housing Government Department Madrid City Council

Non-residential construction showed a slight improvement in 2010, with an annual decline in surface area of 16.9%; it started 2011 with a fall of 11.5% in February, due to the good performance in the surface area for tertiary use, with positive growth of 29.7% in December 2010 and 49.3% in February.

SERVICES

The Financial System

From the end 2010 data on the financial system, it is evident that the sector continues to suffer a severe adjustment in Spain, and particularly in Madrid, in terms of both the number of branches (which has fallen by 0.5% QoQ and 2.5% YoY), and the reduction of credit to the private sector (-0.8% YoY), the volume of deposits (-5.2% YoY) and the number and value of mortgages (-31.2% and -35.6% respectively).

The stock market provided a positive note in the first two months of 2011, with a slight increase in trading volume (1% YoY) and a yield of 10.4% on the Madrid General Index, higher than other exchanges.

Tourism

The INE's hotel occupancy survey still shows positive growth in tourism in the city of Madrid at the beginning of 2011, with a YoY increase of 4.4% in the number of overnight stays for the period December 2010 to February 2011. This growth was mainly due to foreign tourists, up 6.1% compared with 3.0% for Spanish residents; among the former, the growth of U.S. and Japanese tourism (up 15.9% and 5.7% respectively) was remarkable, though the latter was prior to the recent events in Japan.

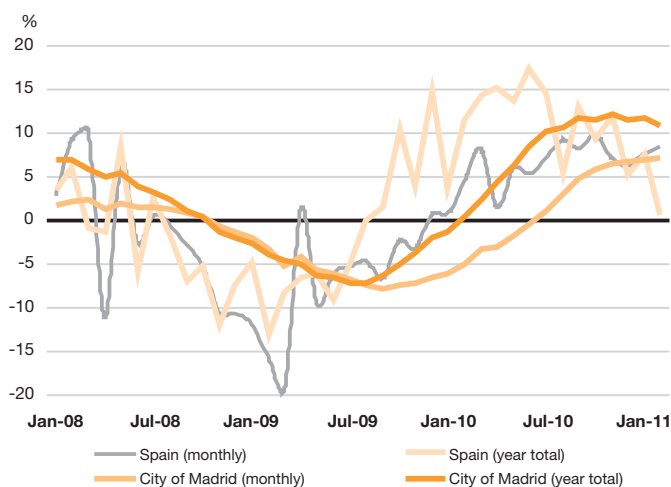
Main tourism indicators for the City of Madrid					
	2010	2010	2011		Change %
		Dic	Jan	Feb	11*/10*
Tourists	7.859.378	663.700	558.626	581.567	4,3
domestic	4.019.583	393.100	318.570	334.813	2,3
foreign	3.839.796	270.600	240.056	246.754	7,2
Overnight stays	15.219.129	1.243.017	1.085.133	1.099.042	4,4
domestic	6.941.609	691.631	564.544	583.042	3,0
foreign	8.277.520	551.386	520.589	516.000	6,1
Average stay	1,94	1,87	1,94	1,89	0,1
domestic	1,73	1,76	1,77	1,74	0,7
foreign	2,16	2,04	2,17	2,09	-1,0
Occupancy rate per place available	54,4	52,3	44,8	50,0	1,8

* Accumulated December-February 2011

Source: Hotel Occupancy Survey (EOH) INE

Comparison with nationwide figures shows that the growth differential of the city in 2010 has reversed in these first months of 2011, with monthly growth rates of 0.6% in overnight stays in February, compared with 8.5% for the whole of Spain. Indeed, it is likely that during 2011 figures for Spain will show higher growth than for Madrid, as a result of its slower growth in 2010 and a greater impact of geopolitical conditions in northern Africa. On the supply side, February ended with a new historical record in the number of hotel beds, more than 78 thousand, representing YoY growth of 2.8%.

Overnight stays in hotel accommodation (year-on-year rate of the monthly and year figures)



Source: Hotel Occupancy Survey (EOH) - INE

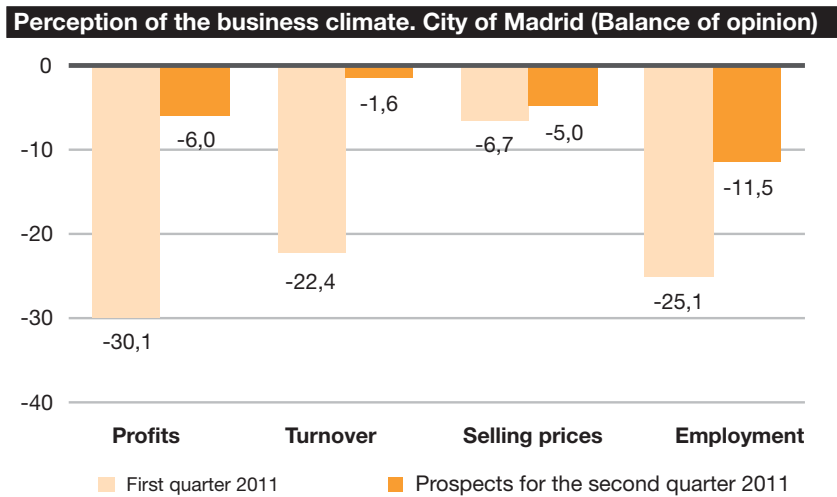
Transport

Airport traffic data for 2010 and the first two months of 2011 continue to reflect a trend of recovery and growth, in the movement of both passengers and freight. With regard to passengers, 2010 ended with annual growth of 3.1%, slowing to 1% in February 2011. For freight, the growth rates were 23.3% and 15.8% respectively. In both cases, growth was concentrated in international traffic, offsetting the decline in domestic traffic. Urban transport ended 2010 with a decrease of 0.9% driven by the decline in underground railway passengers, which was not offset by the growth in bus travel. Local train services recovered with a growth of 1.2%. In terms of employment, the sector continued to decline, though more slowly, with Social Security enrolment falling at a YoY rate of 2.8% at the end of 2010.

1.3. Business dynamic

Recent months' data have not produced significant changes in the average annual number of company start-ups and closures documented in the city of Madrid; in the fourth quarter, levels were similar to those of the third. Social Security contributions continue to show signs of stability, with rates of change very close to 0% throughout the second half of 2010, though still negative, with a decline of 0.2% in the fourth quarter.

The Business Confidence Indicator has improved slightly since the third quarter of 2010, recovering 4.6 points to stand at -10.6 in the first quarter of 2011. However, this was less than the first quarter of 2010, when it stood at -9.8 points. By sector, industry is showing the highest confidence level (-3.5), followed by services (-9.6). The construction sector remains very weak (-29.4), reflecting the severity and duration of the crisis in this sector.

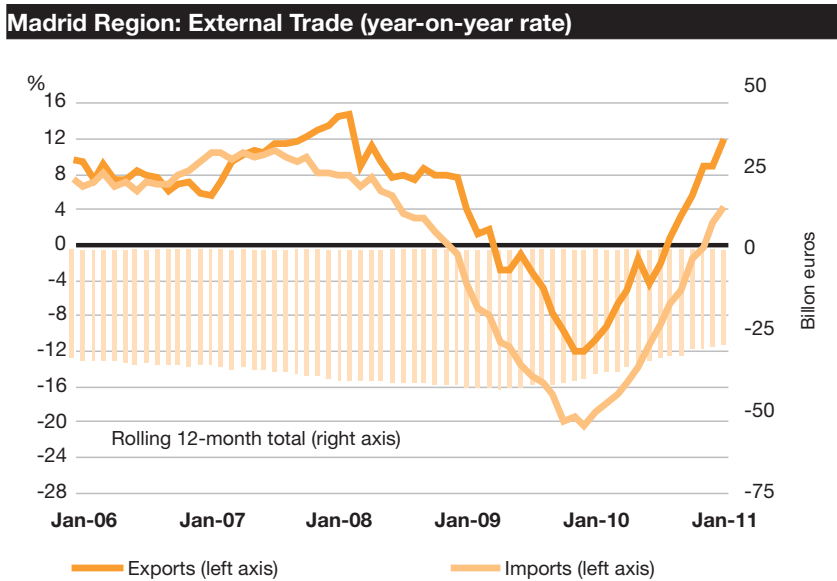


Source: Business Climate Survey -produced by the Economic Observatory of the Employment and Economics Government Department Madrid City Council

1.4. Demand

Despite the gradual improvement of recent months, Madrid's upturn in consumer spending remains hesitant, though it is performing better than Spain as a whole. Thus the Retail Trade Index for Madrid in January fell by an annual average of 0.7% compared with 1.8% in Spain. The fragility of the recovery in retail is reflected in the behaviour of employment in the sector, which fell back in the Community of Madrid in January, with a YoY decline of 1.5%.

Investment, unlike consumption, maintains the recovery trend seen since early last year. In January 2011 there was a further moderation in the fall of the Industrial Production Index (IPI) for capital goods, with an average annual decline of 0.4%, well below the 12.6% fall in



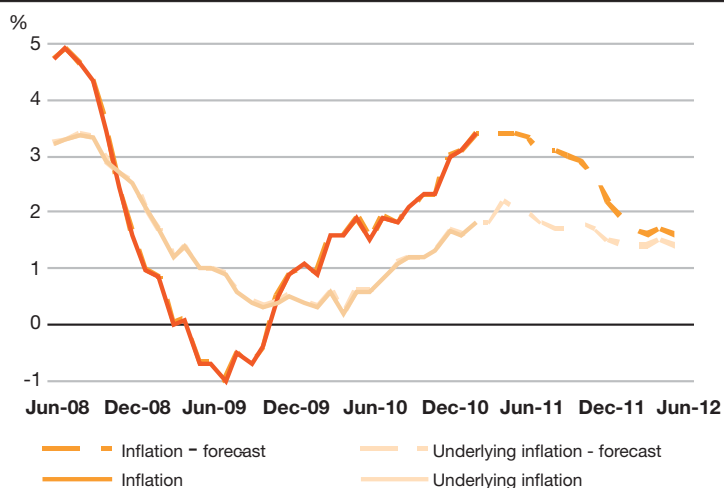
Source: ICEX

the same month of 2010. Equally positive is the performance of the external sector, where the pace of export growth accelerated to 11.9% in the 12 months to January, holding down the regional trade deficit, which stood at €29.58 billion in January, 0.5% below the January 2010 level.

1.5. Prices and salaries

Energy price increases have caused consumer inflation to rise, with the February rate reaching 3.4% in Madrid, while core inflation stood at 1.8%. The forecasts of the Instituto Flores de Lemus point to inflation remaining at these levels in the first half of 2011 and falling in the second half, with the headline rate ending the year at around 2.2% and underlying inflation at 1.5%; these rates will experience further falls, ending 2012 at 1.5% and 1.4% respectively. The most inflationary categories were “alcohol and tobacco”, “transport” and “housing”, while prices declined for “medicine”, “leisure and culture” and “communications”.

CPI and core inflation in the region of Madrid (year-on-year rate)



NB: The dotted lines show forecasts
Source: INE (National Statistics Office) and IFL

Industrial prices accelerated their upward trend with a rise of 4.4% in February, softer than in Spain as a whole (7.6%). With respect to housing prices, TINSA data for the fourth quarter of 2010 show a further fall, in both new and second hand housing, more pronounced in the case of Madrid (11.4% and 6.7% YoY) than in Spain as a whole (6.9% and 5.3%).

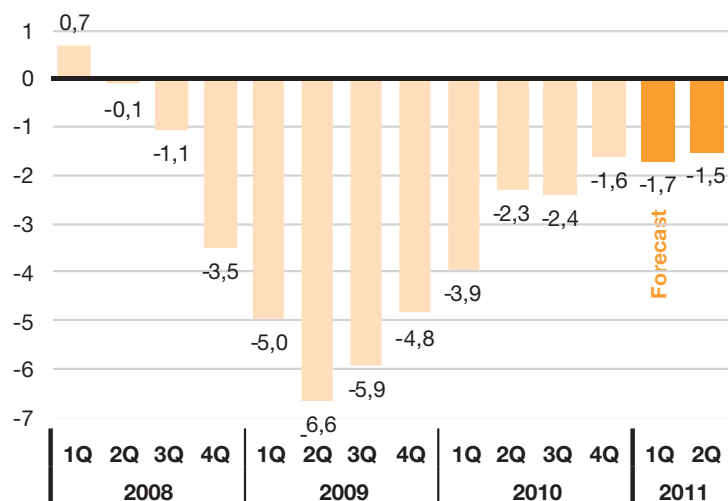
Labour costs in the Madrid Region also declined more rapidly in the last quarter of 2010, down 1.2% YoY; for the first time, this was due to declining wage costs (-1.0%). The fall is greater than for Spain as a whole (where growth was zero), but Madrid still maintains a positive wage differential, with a monthly labour cost per worker of €2,990.45, €348.28 more than the Spanish average (€2,642.17).

1.6. Labour market

The trend in the number of employed in the city of Madrid continues to improve slowly, a new and positive signal confirming the signs of improvement already shown in the third quarter. In this case, the difference lies in the creation of 8,900 jobs rather than the loss of 7,200. At the end of the year, the total in employment was 1,450,100, 0.4% higher than in the fourth quarter of 2009. By groups, there was growth in both the self-employed (0.9%) and wage workers (0.3%); among the latter, there was a decline in temporary workers and an increase in permanent contracts, leading to a reduction of 3 percentage points in the incidence of temporary employment, to 16.9%.

Social Security enrolment figures for the city of Madrid also reflect a slowdown in the pace of job losses in recent months, although the trend is still negative. In February 2011, enrolment totalled 1.73 million, a decrease of 2.2% over the same month in 2010. According to Afi's projections, positive rates are not expected in the next two quarters. March will end with a YoY fall of around 1.7% and June with a decline of 1.5%.

Social Security enrolment forecast for the City of Madrid (year-on-year rate)



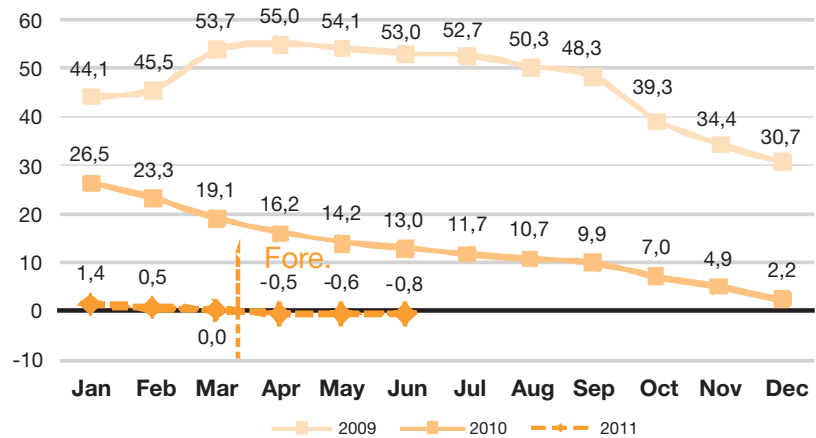
Previsión: ITR y IITR de 2011

Fuente: D. G. de Estadística del Ayto. de Madrid T. Gral. de la Seg. Social y Afi

With regard to unemployment figures, the rate of decline from previous quarters has been reduced to levels that could signal a reversal of the trend. The unemployment rate in the fourth quarter of 2010 stood at a similar level to the same quarter of 2009. The rate of increase in registered unemployment has been decreasing, falling to 0% in March. All this has occurred in an environment of strong

growth in the labour force in the city of Madrid (2.3% YoY in 2010 as a whole, although it declined by 0.3% in the fourth quarter), adding to the difficulty of reducing the unemployment figures from current levels; this leads to the expectation that from April unemployment will start to decline, with a YoY fall in June of around 0.8%.

Registered unemployment monthly forecast for the City of Madrid (year-on-year rate)



Forecast: April - June 2010

Source: Madrid Council Statistics Office SPEE (Regional Employment Service) and Afi

2. Business attraction pole

ESTIMATING GVA CREATED BY COMPANY HEAD OFFICES SERVICES IN MADRID*

It is important for a city like Madrid to be able to attract company head offices. This is highlighted by the internationalization and increasing integration of economies today, together with the widespread diffusion of information and communication technologies and the current economic crisis, which proclaims the need for economic recovery and growth.

In recent decades, Madrid's dynamism has positioned it in third place, after London and Paris, in the ranking of European cities. This cannot be understood without bearing in mind that it is a major centre of economic attraction, where companies locate their domestic and foreign headquarters. Previous studies have estimated that around a third of the Madrid region's gross value added (GVA) and a quarter of its employment could be linked to the provision of headquarter services, and regional activity could have been underestimated by around 7% in 2001.¹ Since then, not only has the establishment of new head offices in Madrid not stopped, but it has actually intensified. The aim of this article is twofold: on the one hand, to provide an updated quantification of the economic impact of head offices in the city of Madrid's economy and, secondly, to analyse the factors attracting companies.

Impact of head offices undervalued by accounting

National, regional and municipal accounts underestimate the VAB in locations where head office activity is concentrated

The importance of head offices as business units generating income and wealth in the areas where they are established is undervalued in the respective national, regional or municipal accounts. This is because the business departments providing head office services are considered to make no contribution to the surplus generated by head office activities²; they are viewed as mere costs, being services provided by one part of the company to the whole. This implies that GVA is underestimated in the region where headquarters activity is concentrated and overestimated on the company's remaining production sites.

This work is based on an alternative methodology for solving this problem, which assumes that wage differentials between the different departments of a company reflect differences in

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¹ Ayet, C. and Sanz, B. (2004): «Las sedes centrales en la economía madrileña». Comunidad de Madrid.

² Based on the definitions used by Ayet and Sanz (2004) and a pilot study conducted among several companies with headquarters in Madrid, the definition of head office services has been divided into two aspects: head office services narrowly and broadly defined. The former include the areas of Management (institutional relations, corporate social responsibility) and Administration (accounting, finance, legal affairs, human resources). Head office services broadly defined include, besides the above, Technical Services (engineering and architecture, IT, R & D) and the Commercial area (business management, advertising, marketing, purchasing). The other activities (the company's production and core activities, ancillary production services and others) appear under the label of Productive Activities.

productivity and, therefore, their different contribution to company GVA. Estimates have been based on GVA and employment data published by the INE, the city of Madrid, Social Security Contribution Accounts, the Economic Units Directory, and on a survey of wage levels and the spatial and functional distribution of employment carried out during 2009 on 457 companies with over 40 employees in the city of Madrid.³

Remuneration, productivity and employment in head office services

According to the survey, workers in the city of Madrid enjoy average pay around 20% higher than the country as a whole, a difference attributable to the wage gap in the categories of Management, Business Services, Manufacturing and Other Activities. According to economic logic, this would be the result of differences in productivity, implying that labour productivity is higher in Madrid than in the rest of Spain (by almost 40%). The most striking differences are found in the activities in which the capital is specialized: the tertiary sector, particularly Financial Services. Head office services as strictly defined (i.e. Management and Administration) are those with the highest wages (26.9% above average) and therefore the highest productivity.

The city of Madrid is particularly specialized in head office services, compared with the rest of the region and Spain as a whole. Thus, 10% of the city's total employment is in head office services narrowly defined and 20.8% in headquarters broadly defined, compared with 6.3% and 11.3% in Spain as a whole and 6.3% and 13.7% in the rest of the Madrid region. This shows that companies with a presence in the capital tend to concentrate employment in head office activities (with higher productivity) there, while sites in the rest of the Madrid region and elsewhere in the country are more focused on production.

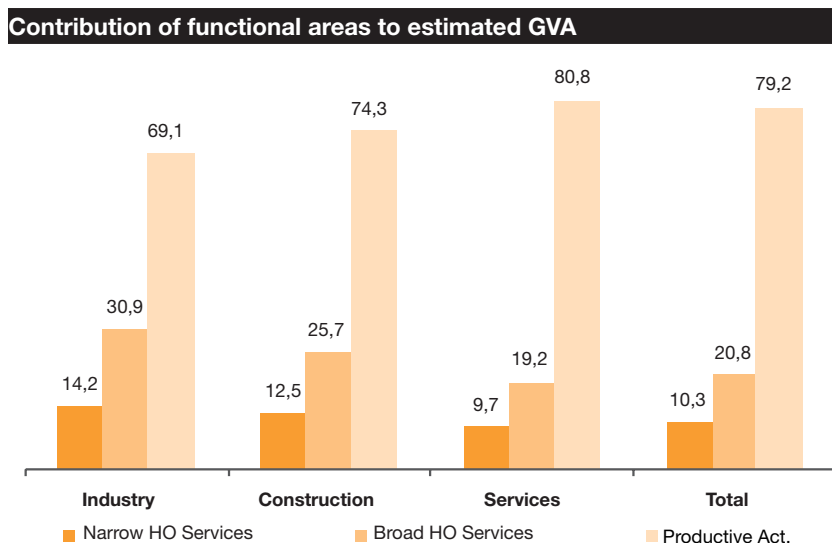
Head office GVA in Madrid

In 2008, companies with a presence in Madrid generated slightly more than €298 billion in the whole country, of which approximately 40% was generated in the capital, 5% in the rest of the Madrid region and 55% in the rest of Spain. Of those €298 billion, more than 24% arose from head office services in a broad sense (i.e. Management, Administration, and Technical and Commercial Services), the capital being the location where the activity of these departments is most concentrated. Thus, central services' contribution to the city of Madrid's estimated GVA represents a significant percentage, whether they are defined narrowly (16.4%) and broadly (31.6%), higher than in the rest of the Madrid region (6.7 and 17.2% respectively), and the rest of Spain (12.8 and 19.8% respectively).

The GVA generated by head office services represents 31.6% of the city of Madrid's GVA, a much higher percentage than the 19.8% of the rest of Spain

The central departments making the largest contribution to Madrid's GVA are Administration, followed by Commercial, Technical

³ It was assumed that companies with fewer than 40 workers have a single establishment either in Madrid or outside the capital, for which reason they were not surveyed.



Source: Authors' research

Services and Management, although it should be noted that the differences are not important. Similarly, there are no major differences by sector although, in the city of Madrid, industry and services are those which present higher rates of specialization in their GVA associated with central services, compared to the rest of Spain. Thus, in the city of Madrid, the GVA provided by narrowly defined head office services in industry is 2.06 times that of the rest of Spain, and 1.73 times in the case of central services broadly defined. In services, the figures are 1.13 and 1.32 respectively.

A new approximation to Madrid's GVA

The city's GVA as reflected in the municipal accounting may be understated by 18%

These estimates indicate that the city of Madrid's GVA may be underestimated by nearly 18% (€17.4 billion) due to the underestimation of the GVA of head office services, particularly in the services sector. Moreover, this new estimate of GVA involves changes in the sectoral distribution of GVA compared to that indicated by the municipal accounts. The contribution of activities such as Business Services, Financial Services, Retail Trade and Other Services would increase by 10%, while that of activities such as Construction and certain branches of manufacturing would diminish, as reflected in the table below.

The estimates and analysis above lead to the key conclusion that steps should be taken to correct the understatement of GVA that occurs in those economies where the headquarters of companies with multiple establishments are concentrated. The estimates confirm the city of Madrid's leading role in attracting head offices in the general context of Spain, in particular in relation to Management activities, although the fact that administrative services' contribution to the capital's GVA is the most substantial cannot be ignored.

GVA estimated for city of Madrid and GVA omitted from accounts (€ millions)

Sector	GVA in Municipal Accounts	Total estimated GVA for Madrid	GVA omitted from accounts*
Energy and Mining	2.168,7	2.444, 0	275, 3
Metals and Metal Products	254,4	164,6	-89,8
Industrial Machinery	444,5	471,9	27,5
Transport Material	780,3	854,7	74,4
Foodstuffs	532,1	463,9	-68,1
Paper and Graphic Arts	2.276,5	2.449,6	173,1
Chemicals	608,9	472,6	-136,2
Non-metallic Industries	274,8	266,8	-8,1
Other Manufactures	1.269,1	846,9	-422,2
Construction	10.012,0	9.800,8	-211,3
Retail Trade	12.697,0	14.414,0	1.717,1
Hotels and Catering	2.572,0	2.705,1	133,1
Transp. & Communic.	13.874,0	14.179,3	305,3
Business Services	26.492,0	37.110,4	10.618,4
Education	3.293,6	3.610,3	316,7
Health	3.529,4	2.973,1	-556,3
Financial Services	10.724,0	14.974,5	4.250,5
Other Services	6.527,9	7.601,8	1.073,9
Total	98.331,0	115.804,3	17.473,3

*Difference between estimated GVA and that of Municipal accounts.

Source: Authors' research

Exchange of head office services

Establishments with head office services, in both the strict and broad senses, tend to provide their services to other economic units of the same company, which may be located in the same city or elsewhere. Hence, it can be said that there are export and import flows between the company's establishments and, therefore, between the cities where head office services are concentrated and the rest of the country. There are two ways to measure these flows: in terms of employment and in terms of GVA.

The city of Madrid is a net exporter of head office services to the rest of Spain

In the case of the city of Madrid, the analysis of employment in head office activities broadly defined (46% of the total) shows that more than 54% is dedicated to meeting the needs of establishments located outside the capital. In contrast, employment in central services broadly defined located outside Madrid also provides services consumed mostly (62%) outside the capital, i.e. companies with head office services in the capital export these services to the rest of the country to a greater extent than they import them from other Spanish locations. This results in an average employment coverage ratio of head office services broadly defined of 121%. The department with the highest coverage ratio is Technical Services (154%), followed by

⁴ Ratio between the employment of companies with a presence in Madrid providing head office services to the rest of Spain and employment in these services in the rest of Spain which are consumed by the establishments in Madrid.

the Commercial and Management departments, with values slightly above the average for central services. In contrast, the Administration department's coverage ratio is less than 100%.

The results in terms of GVA exchanged between the broadly defined headquarters facilities in the capital and the rest of Spain point in the same direction as the employment data. 44% of broadly defined head office GVA of companies with establishments in the capital is consumed in the same city, while the remaining 56% is used in locations outside Madrid. In contrast, of the broadly defined head office GVA generated by these same companies outside the capital, only 36% is destined for facilities in Madrid. The coverage ratio in terms of GVA is 163%, significantly higher than for employment⁴ (121%) due to differences in GVA per employee in each of the departments analyzed. It should be noted that the coverage ratio is over 100% in all areas of activity that comprise broadly defined head office services, with the highest values found in Administration.

GVA balance in head offices services by area, Madrid (€ millions)

Area	Exported from Madrid	Imported by Madrid	Balance	Coverage (%)	Exports/ Estimated GVA (%)
Management	3.412,9	2.531,4	881,5	135,0	40,7
Administration	6.208,8	2.528,0	3.680,7	246,0	58,2
Tech. Services	5.636,8	3.919,4	1.717,4	144,0	64,5
Commercial	5.305,1	3.666,8	1.638,3	145,0	59,9
Total	20.563,5	12.645,6	7.917,9	163,0	56,1

Source: Authors' research

By sector, the coverage ratio of the exchange of head office services broadly defined of industrial companies located in Madrid is about 300%, almost equal to the city average, while that of construction companies does not reach 100%. A further sectoral figure highlights the importance of broadly defined head office services which Madrid establishments provide to the rest of the country, particularly in the chemical and energy industries. In both cases, over 80% of head office services broadly defined are consumed outside the capital. The same situation occurs in certain of Madrid's tertiary sector activities and particularly in financial services, where more than 80% of head office services are similarly exported to the rest of the country.

The 'head office effect' is equivalent to 7.1% of GVA in the city and the 'head office phenomenon' to 30%

It can be said, therefore, that in Madrid there is a clear and positive 'head office effect' that can be measured by the balance of exchanges of such services between the capital and the rest of the country. Our calculations allow us to quantify this effect at around 7.1% of Madrid's estimated 2008 GVA. The former effect is different from the so-called 'head office phenomenon'. This concept refers to the size of exchanges of head office services between the capital and the rest of Spain. Hence, it is measured as the sum of export and import flows of head office services between Madrid and the rest of Spain. The work done estimates this phenomenon at just over €33 billion, equivalent to almost 30% of the capital's estimated 2008 GVA, a figure that undoubtedly reflects the economic importance of these activities in the city where they are located.

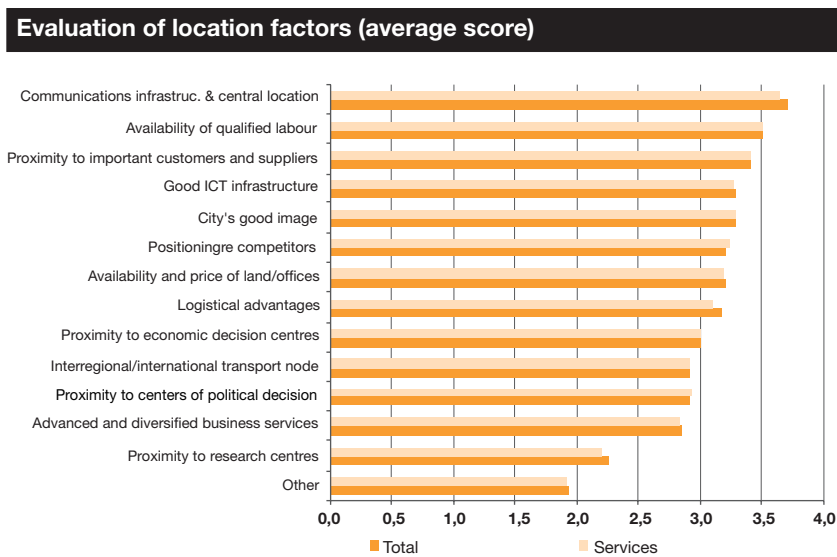
Location factors

The confirmation of the importance of head offices for the generation of GVA and employment puts the onus on national, regional and / or local authorities to focus on those initiatives that can strengthen their own economies' factors of attraction. In the case of Madrid, identifying the location factors that have made the city a magnet for the establishment of the headquarters of all types of businesses is undoubtedly critical to ensuring that the capital can continue to provide local and international business with the best environment for the development of their activities.

Transport infrastructure, qualified labour, ICT infrastructure and the good image of the city are the key factors of attraction

In this sense, analysis of the location factors highlighted by the companies interviewed clearly identifies the importance of communication infrastructure and Madrid's central location as elements of attraction. The networks of roads and high speed rail, together with the airport, are indisputable advantages for Madrid, as are its IT and communications infrastructure. The availability of qualified human resources is another factor highly valued by companies in Madrid; in fact, after infrastructure this is the factor with the best score. The proximity to major economic and political decision centres, important customers and suppliers are much appreciated by businesses. The high density of economic and social actors in the capital has positive effects on its ability to attract businesses and head offices in particular.

The city of Madrid's good image featured as the fifth most important location factor for firms located in the capital. Without doubt, traditional factors remain important determinants in location and they are, in addition to the aforementioned infrastructure, Madrid's logistical advantages, the availability and price of offices and the positioning versus competitors.



The range of scores is from 0 (irrelevant) to 4 (very important)
Source: Authors' research

Although there are some differences in the surveyed companies' assessments according to their sector of activity, in general the differences are minimal. Somewhat larger variations are observed in relation to the size of firms analysed. The larger companies place more value than small ones on proximity to political and economic decision centres, Madrid's central location and the availability of advanced and diversified business services. In contrast, smaller firms especially value infrastructure, proximity to major customers and suppliers, and the abundance and qualification of human resources.

Conclusions

It follows from the above analysis that head office services play an important role as generators of GVA and employment in those economies, such as the city of Madrid, that are poles of attraction for the headquarters of national and foreign companies as a result of the advantages they offer in terms of infrastructure, skilled labour and proximity to decision centres. Thus, head offices narrowly defined represent 10% of city employment, rising to 20.8% if we include all corporate services, compared to 6.3% and 11.3% respectively for Spain as a whole and 6.3% and 13.7% for the rest of the Madrid region. In terms of GVA, the estimated contribution of head office services is 16.4% when narrowly defined and 31.6% using the broad definition. This contribution is much higher than the rest of the Madrid region (6.7% and 17.2% respectively) and the rest of Spain (12.8% and 19.8% respectively), and confirms the city of Madrid's relative specialization in head office services. By sector, it is in industry and services where the city of Madrid presents the highest proportion of GVA linked to central services. Thus, the GVA contributed by head office services narrowly defined in industry in the city of Madrid is 2.06 times that of the rest of Spain, and 1.73 times taking into account all head office services. In the services sector, the figures are 1.13 and 1.32 respectively. Many of these services are provided from Madrid to the rest of Spain, resulting in a 'head office effect' (measured as the net balance of such exchanges in services between the capital and the rest of the country) which is clearly positive and in 2008 amounted to 7.1% of GVA in Madrid.

Two effects result from the relatively high presence of head office services in the city, together with the fact that the national, regional and municipal accounts ignore the net operating surplus generated by head office services, considering them as mere costs since they are services which one part of the company provides to the rest. First, the underestimation of the Madrid's GVA by about 18% (€17.4 billion), which figures as VAB in other Spanish locations. Secondly, changes to the sectoral distribution of GVA compared to that indicated by the municipal accounts, with a 10% increase in the share of activities such as Business Services, Financial Services, Retail Trade and Other Services, and a concomitant decrease in the contribution of activities such as construction and certain manufacturing sectors.

The significance of head office services for the city of Madrid makes it very important to recognize and reinforce the key factors behind their location. According to the survey data analysed, the provision of transport infrastructure, qualified labour and technology infrastructure, the geographical concentration of political and economic power, together with international connections, are key factors explaining the decision to locate headquarters in the city.

3. Monographic report

MADRID: 450 YEARS AS THE CAPITAL

Introduction: the history of Madrid as the capital

The designation of Madrid as the permanent seat of the Court changed the course of the city's history

In 2011, the city of Madrid celebrates its four hundred and fiftieth anniversary as capital of Spain, as Philip II designated the town of Madrid as the permanent seat of the Court in 1561. The impact of this decision proved a determining factor for the city, as the inherent functions of the capital determined its socio-economic characteristics. Its status as the political capital was the turning point that initially led to the city's takeoff, but over the centuries, the acquisition of new economic functions brought it a broader role as an engine of development.

The aim of this monograph is to analyze the effects of capital status on the Madrid's development, both its socio-geographical changes and its economic development.

Demographic and geographical influence

Below we consider the demographic and geographical fundamentals that made possible, and at the same time reflect, the city's socio-economic development over four hundred and fifty years as capital.

Population growth

Political capital status was the trigger for the city's population growth to take off

The establishment of the capital sparked a strong influx of population linked to the Court. Thus, the first half century as capital city resulted in rapid population growth, with a tenfold increase from just over 12,000 inhabitants in 1561 to approximately 130,000 in 1621. This growth was truncated in the seventeenth century (with a decrease of 7.2% between 1621 and the Ensenada Census of 1752). The city, affected by the widespread socio-economic decline suffered by the Spanish monarchy, would take a long time to recover, and it was not until the last third of the eighteenth century when it managed to exceed clearly the seventeenth century peak (with 164,000 inhabitants, according to the Floridablanca census).

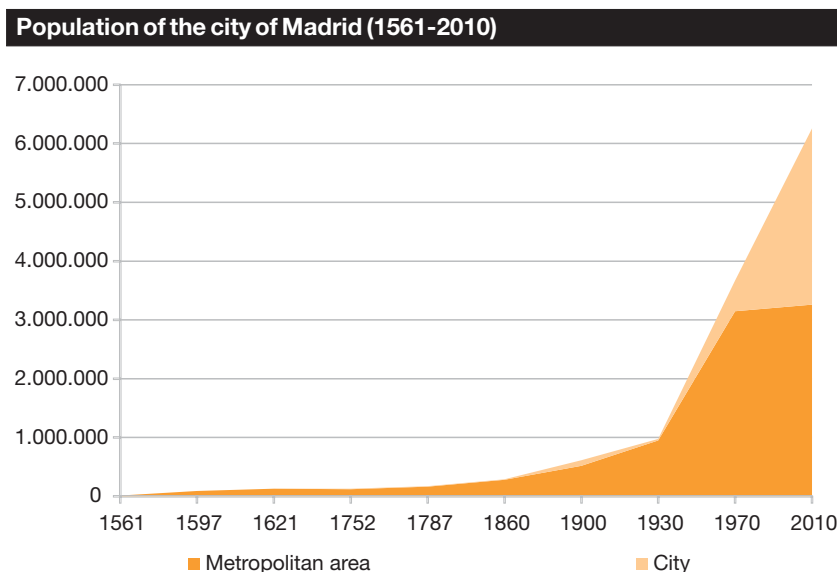
The city's population has risen from 2.8% of the country's total in 1900 to 7% in 2010; this share doubles if the metropolitan area is included.

Once the events of the first third of the nineteenth century had been overcome, the city embarked on a path of continuous growth. At the beginning of the twentieth century, Madrid reached half a million inhabitants. During the first third of the century, growth accelerated and the City reached the one million mark in 1930. The Civil War and its aftermath slowed this growth, but the annexation of the surrounding municipalities and their population, together with the beginning of the massive rural exodus, enabled Madrid to exceed two million inhabitants by the late 1950's.

The sixties were very important for the city's demographic growth, and it was at the end of this decade when the population passed the 3 million mark and almost reached the limits of its possibilities. The

figure stagnated in the seventies (with negligible growth of just over 40,000). The eighties and nineties saw continuing dispersal of population into the surrounding metropolitan area, and the city itself even experienced a decline.

In the twenty first century the city has regained momentum, largely due to the phenomenon of foreign immigration, with population reaching a historical high of more than 3,200,000 inhabitants in 2010.



Source: Afi

Madrid's geographical expansion

The demographic growth in the second half of the sixteenth century resulted in rapid expansion of the city's area, which doubled in size (from 134 hectares in 1565 to 282 by the end of the century). The city wall constructed in 1625 by Felipe IV, which followed roughly the boundaries of the modern Centre district, together with fiscal control motives, contained urban growth until the nineteenth century.

Until the mid-nineteenth century, the growth of the urban area was contained by the seventeenth century city wall

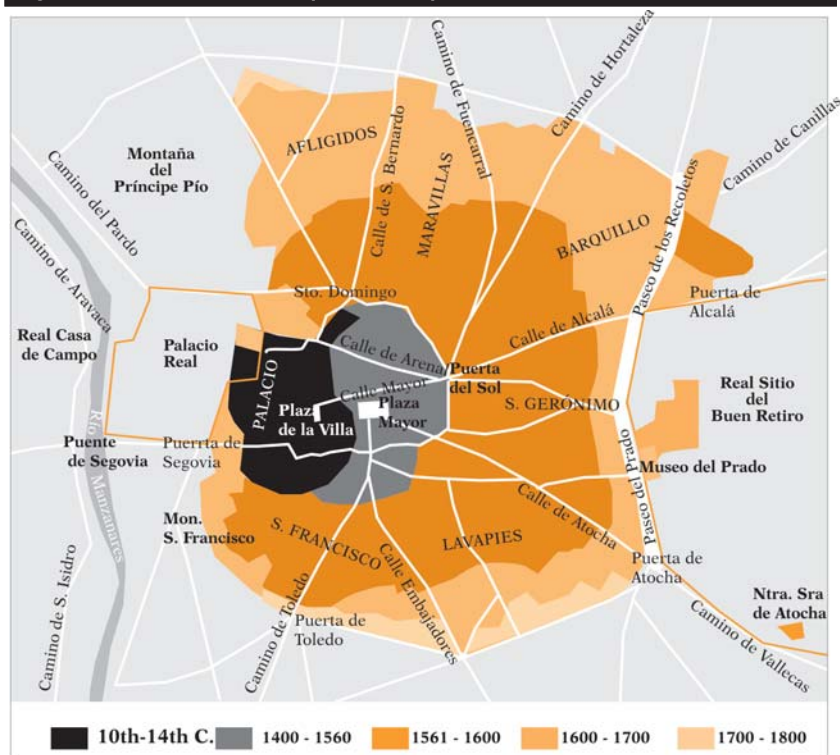
In the eighteenth century, the population and the city's economy began a gradual recovery. A series of prominent urban developments followed, especially in the reign of Carlos III, and were conceived as instruments of renewal to serve the dynasty's new ideas.

The new districts were established in the first third of the twentieth century

The city's demographic recovery, in the second half of the eighteenth century and in the nineteenth, was not matched by a parallel increase in the urban area, causing an increase in population density. However, even before the demolition of the city wall in 1868, pressure was relieved by the growth of population centres on the outskirts. The development of the nineteenth century expansion plans proceeded slowly (lasting until the 1930s). In fact, much of the population, lacking adequate income, continued to be crowded into the old town, or swelled under-provided areas of the suburbs. On the other hand,

Substandard housing became widespread due to economic hardship and the massive rural exodus

City of Madrid boundaries (1000-1800)



Source: Afi from Atlas Histórico de Madrid

new rail lines encouraged the location of manufacturing activities outside the urban centre, and social and spatial segregation between middle class and workers' neighbourhoods.

During the post-war years, the city had to cope with the ravages of wartime and accommodate new demographic flows. Economic hardship and town planning inadequacies meant that the city was unable to assimilate the population inflows from the rural exodus in a controlled manner. As a result, substandard housing became widespread. From 1948 to 1954, the annexation of the neighbouring municipalities formally integrated much of the population of the suburbs, and the total exceeded two million at the end of the decade, while the municipal area multiplied by almost nine.

The 1960s saw important economic and demographic growth, which in geographic terms was most clearly seen in the urban expansion on the city's outskirts and, gradually, in the successive metropolitan growth rings, initially based on the General Plan for the Metropolitan Area of Madrid, approved in 1963. The city grew from 353,000 dwellings in 1955 to 902,000 in 1970. Similarly, the 1963 General Plan encouraged the development of new industrial areas on the outskirts of the city, laying out the map of the city's industrial land, which has largely endured until the present.

The crisis of the mid-seventies particularly affected the more industrialised areas of the southern districts and the adjoining metropolitan municipalities, in contrast to the areas north of the city,

which benefited from the growth of the tertiary sector. However, the efforts of local authorities in the democratic period, and the economic recovery since the mid-eighties, have brought about an improvement of economic and social cohesion, reducing the historical centre-periphery and north-south gaps.

In recent decades, the city has seen intense activity in new infrastructure and the growth of new residential areas and zones for economic activity, under the aegis of the 1997 General Urban Development Plan. On the other hand, economic growth has accelerated the increase in the metropolitan population and in economic activity which, coupled with the inauguration of new transport infrastructure, extends beyond the region's boundaries. In the twenty first century, Madrid has emerged as the EU's third largest metropolitan area.

The role of infrastructure in Madrid's development

Much of what the city of Madrid now represents is due to its transport links, both in terms of urban and economic development and of geographical influence.

Political decisions boosted the radial communications system centred on Madrid

The choice of Madrid for the Court reflected Philip II's intention of consolidating the monarchy's territorial control. Madrid's role as a communications hub was promoted by two crucial initiatives: the Regulation of Posts of 1720 and the Highways Instruction in 1761. These helped to establish a radial network, which formed the basis for the subsequent development of the stagecoach highways, the rail and telegraph network, the national highways, air navigation, and even the recent high-speed rail network.

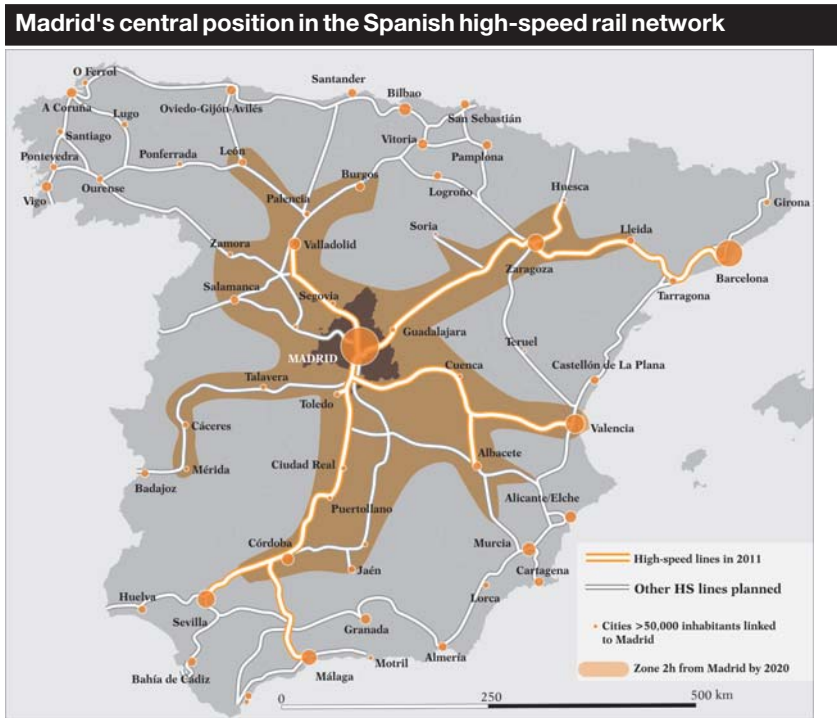
Among the various transport systems, the railway has played a particularly crucial role in the capital's contemporary social and economic history. In addition to strengthening the city's administrative, financial and business systems, it laid the foundations for its future industrial development, and its spatial organisation.

The recent development of high-speed rail has boosted Madrid's central role and expanded its area of influence

In recent decades, the high speed network has brought the resurgence of rail as an attractive mode of transport, and it has again emphasised Madrid's role as the central hub of the network. High speed rail is revolutionizing the communications system by drastically reducing travel times and significantly expanding Madrid's area of influence.

Another crucial consequence of being Spain's capital has been the development of the country's main airport in Madrid. The history of Barajas begins in the thirties, but expansion did not come until the sixties with the tourism boom and the appearance of large jet airliners. The importance of the airport for Madrid's economy is enormous: its contribution is estimated at around 12% of the city's GDP and it has played a key role in the location of large companies. The airport's recent expansion gives it scope for growth, such as is available to very few of the world's hub airports. Madrid's global reach depends on its international air links, which in turn influence its growing international prominence as a tourist destination.

The city's economic dynamism and international positioning is closely related to the Barajas airport

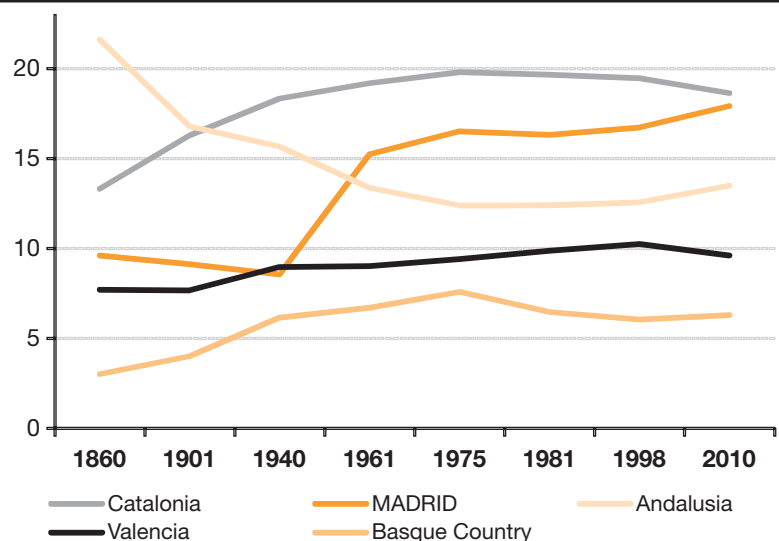


Source: Afi

The development of Madrid's economic role

In this section, we analyze the impact of capital status on the city of Madrid's economic structure. Given the length of the historical period under consideration, the economic analysis is divided into four major stages: *preindustrial Madrid* (from the fourteenth century to the nineteenth), *industrialisation and the beginnings of economic takeoff* (from the mid-nineteenth century to the first third of the twentieth century), *autarchy and developmentalism* (1940-1975) and, finally, *from the democratic transition to the present* (1975-2011).

Madrid economy's share of Spain GDP. Comparison with other regions (% of total)



Source: Afi from figures in *Estadísticas históricas de España, siglos XIX-XX*, Fundación BBVA, and INE

Preindustrial Madrid

The political decision to establish the seat of the Court permanently in Madrid gave an unexpected turn to economic activities and the town's demography. In a few decades, the relative predominance of artisanal and commercial activities in the economic structure gave way to a courtly, rentier and bureaucratic society. Ringrose's study illustrates this process of "courtisation" in the town: between 1600-30 and 1631-63, requests for neighbourhood registration by artisans and other skilled trades declined by 72.4%. By contrast, requests by government and Royal Family employees multiplied by 3.4.

Until well into the nineteenth century, Madrid's economic structure was dominated by its political and administrative functions as the state capital and by a courtly and pre-industrial economy

This picture was not altered in the eighteenth century, despite the improved economic situation. A comparison with the employment structure in Barcelona in 1787 (Otero Carvajal Bahamonde, 1989) shows the importance of public employment and the gentry in Madrid, representing 28.3% of the workforce, compared with only 3.4 % in Barcelona. Moreover, in the capital, artisan production was dominated by traditional workers in small units.

The economic recovery in the eighteenth century was especially notable in the rise in commercial activities, organised in corporate form in the Five Great Guilds of Madrid, an institution which in turn served to channel finance and industry initiatives. The renewed commercial impulse of the eighteenth century encouraged credit operations and relationships with other financial centres of the continent (London, Paris and Amsterdam), and all this favoured the association of traders and bankers to create insurance companies and commercial and deposit banks (Carreras, A., and Tafunell, X., 2004).

The financial centre has its origin in the development of commercial activities and the state's need for funding

The development of manufacturing activities was subject to state support initiatives, particularly through the Royal Factories, specializing in products required by the Court. However, these activities were characterised by poor management and market limitations, and had very limited repercussions.

Industrialisation and the beginning of economic takeoff

Among the more important economic developments of the nineteenth century is the development of the capitalist property market, made possible by successive confiscations of Church property, the regulation of public land and the investment of profits from colonial businesses, all crucial to the city's urban development.

The socioeconomic structure of the ancien regime survived for much of the nineteenth century and Madrid, like most of Spain, came late to the modern industrial age. Liberal reforms benefited the accumulation of capital, but economic dynamism was limited to finance and construction, while the bulk of the socioeconomic fabric of the city remained anchored in the old relatively unproductive pre-industrial structures.

Many difficulties were overcome in the late nineteenth century, when the State undertook to develop vital infrastructure such as the Canal

Isabel II (water supply) and the development of rail freight. Equally important was the technological development fostered by the spread of hydroelectric power and the internal combustion engine.

During the first decades of the twentieth century, Madrid positioned itself as the country's business and economic capital

Capital status brought nineteenth-century institutions such as the Madrid stock exchange and the Bank of Spain, which strengthened the city as a financial centre. Once the crisis of 1998 was overcome, the stimulus from repatriated colonial capital and from the great expansion led by the commercial banks installed in the capital marked a new stage of growth (García Delgado, 2007). One sign of this was that the number of listed companies doubled between 1900 and 1920, due particularly to the growth of utilities and industrial companies.

Between 1940 and 1975, Madrid doubled its share of national GVA

In the new century, Madrid became the most dynamic region, doubling its contribution to the country's industrial GVA (to 8.8%) and significantly reducing the differences between it and the leading regions. Within the services sector, the boom in the finance industry and the renewal of traditional sectors such as commerce reduced, in part, the gap between the services related to the city's functions as capital and those provided to the population.

Madrid during the autarky and developmentalism phases

The period between 1940 and 1975 is when Madrid takes on greater economic importance. Between these dates, each characterised by crisis (the post-war and the industrial), Madrid's share of Spain's GDP rose by eight percentage points to reach 16.5%. The economic rise reflects Madrid's leadership of the economic recovery that began in the fifties and the subsequent growth during the developmentalist phase, as well as the development of a more diversified economic structure, less exposed to the crisis of the 1970s and 1980s.

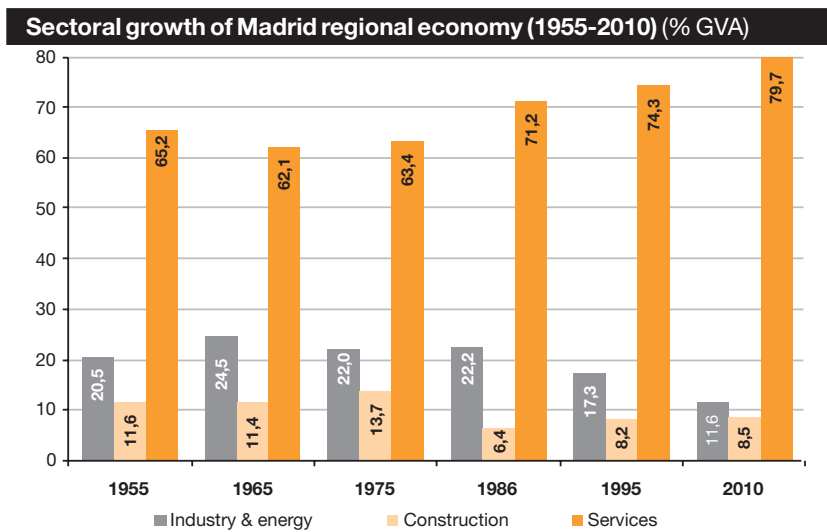
The strong growth of the 1960's and early seventies made Madrid into the country's second industrial region

However, the first part of the period was especially difficult. The economic crisis of the thirties, the Civil War and its aftermath truncated the city's socioeconomic and cultural development. The difficulties continued in the long post-war period and Madrid was unable to recover until well into the 1950's.

The strictures of the autarchic model, together with the increasing tendency of the regime to open up the economy and the need to address the threat of external bankruptcy, led in 1959 to the Stabilisation and Liberalisation Plan.

The accompanying chart shows the sectoral distribution of the Madrid region between 1955 and 1975. The dynamism of industrial sector stands out, reaching its peak in the mid-sixties (when it accounted for a quarter of regional GVA), making Madrid the second industrial centre of Spain. However, the economic structure was still characterised by the marked predominance of the tertiary sector.

This industrial development, together with new infrastructure and the concentration of financial and regulatory institutions, among other factors, favoured Madrid as the most suitable place for large



Source: Ministry of Economy, BBVA and INE

local and foreign companies to invest or establish their headquarters. It also generated an environment very conducive to the growth of service sector SMEs.

From the democratic transition to the present

The global crisis of 1973 and, in Spain's case, the added problem of the instability resulting of the change of regime and the difficult political transition, took Madrid into a new stage. The most negative effect of the years of economic crisis was the sharp increase in unemployment between 1975 and 1985, when it multiplied by four.

Madrid's diversified economic structure minimised the impact of the crisis of the 1970s and 1980s

However, the increased diversification of the economy and the dynamism of services (especially those geared to companies, providing part of the activities outsourced by industry) contributed to make the impact of the crisis less virulent in Madrid than in other cities severely affected by industrial restructuring.

The tertiary sector has been the main engine of the economic growth experienced by the city in recent decades

From the mid-eighties until the 2008 crisis, the course of the economy was characterised by intense social and economic development, which coincided in time with decentralisation and the establishment of the 'State of the Autonomies' (devolution of powers to the regions).

Economic development impacted on the metropolitan economy, defined by the rise of the services sector, which in 2010 accounted for 79.7% of regional GVA, 8.5 percentage points more than in 1986. This contrasted with a clear reduction in industry (10.6 points), associated with the process of offshoring and outsourcing of services and functions. The increasing dominance of services was based on higher value-added activities, linked to tangible and intangible flows of capital, information, goods and people.

As in the rest of the country, employment growth in Madrid was particularly strong in the most recent expansionary cycle. Thus, between 2000 and 2010, employment increased by 27.9% in the Madrid region (and by 18.1% in the city.)

The city of Madrid's economic dimensions position it among the continent's major economic capitals

The strong growth experienced by Madrid's economy in the last decade is reflected in its increased weight in the country as a whole, which reached 17.9% of GDP in 2010. This economic progress has resulted in a substantial improvement in Madrid's international standing. As an example, between 1990 and 2010 Madrid has climbed nine positions in the European Cities Monitor ranking, and is currently the eighth most advanced European city for business.

Conclusion

The capital's initial surge was essentially linked to the concentration of the kingdom's administrative apparatus and the proliferation of services and small-scale activities to meet the demands of a local market favoured by the accumulation of income.

Much more relevant for the future was the combination of the advantageous geographical position and the construction of transport networks radiating from Madrid that favoured the development of new economic activities.

Without ignoring the historical role of industry, the status of economic capital was achieved as the result of the development of advanced services. The service sector's dominance goes back to the conferring of political capital status, but until the twentieth century the bulk of the services took traditional, relatively unproductive, forms, very much tied to personal services to the population and the government. It was not until the second half of the twentieth century when the service sector experienced a qualitative leap: modernised across the board, it acted as the principal economic engine and contributed decisively to the internationalisation of the Madrid economy. It is evidence of the specialisation and scale achieved that the city of Madrid accounts for 14% of Spain's tertiary GVA (a figure that rises to 20% if we consider the whole Madrid region).

Capital status was instrumental in promoting the development of infrastructure and the concentration of governing institutions that make all major political and economic decisions. The accumulation of factors related to the capital and the interaction between them has encouraged the location of the country's corporate headquarters, both local - many of them globalised - and foreign. The mere fact of this concentration has made possible the proliferation of high value added activities related to management and specialised services and, consequently, they have attracted qualified professionals.

National capital status brings with it high costs. The services provided by the City serve a substantial floating population and it has no mechanisms for offsetting the costs of this heavy institutional presence. On the other hand, the Madrid City Council continues to take on new functions to provide welfare to its citizens and to meet its demographic challenges without a corresponding improvement in its ability to raise revenue or in its financial capacity. In other words, there is a clear mismatch between local functions assumed under the National Capital Act and the limited resources available, given the level of local responsibilities and, above all, the limited funds allocated to them.