

# **Madrid Economía**

## **Economy 2005**



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## PRESENTATION

The purpose of this publication is to spread knowledge in a simple and yet increasingly complete manner on the reality of the economic and largely social situation of a major city that, in addition to being the capital of Spain, is its main economic centre. Madrid determines more and more the pace of the Spanish economy and is becoming, day after day, one of the reference cities on the European scale.

The City of Madrid is the principal centre of economic activity of Spain and one of the principal centres of Europe. The information included in this publication intends to highlight this. For this reason, the major dimensions of the City's economy are shown along with their interrelation both with the region, of which it is the central nucleus and with which it forms an inseparable economic and social area, and with Spain as a whole. The population, the structure of its job market, the composition of its production framework and the strong dynamism of these last years reflect an economic space in continuous growth and with positive expectations for the future.

Within an environment in which our country has consolidated a decentralised State and where administrative activity is distributed by the capitals of the Autonomous Regions, Madrid has been shedding its administrative role while turning itself into a place with the conditions necessary for the development of modern and highly specialised economic activities.

Madrid Economy shows us our City as a thriving economic space, significantly more dynamic than its surroundings and in the middle of a transformation process. We believe it is worth spreading this information so that a better understanding of our city will generate growing excitement to continue this improvement.

**Miguel Ángel Villanueva González**

*Concillor of Economy and Citizen Involvement*

28 July 2005

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## INTRODUCTION

The City of Madrid, administratively organised into 21 districts, consists of an area of 607.1 square kilometres, in which important communication infrastructures are distributed that make it the principal logistical centre of Spain and of Southern Europe. Through it runs a large network of circular and bypass motorways, and it is the centre of the national railroad system, which permits an effective connection with other points in the region, as well as with the rest of Spain and Europe. The most important airport in Spain is also within its territory, Barajas. Once the expansion works in progress are finalised, Barajas airport will have the capacity to transport 70 million passengers each year.

With a population exceeding three million inhabitants, the second most populated city of the European Union after Berlin, Madrid contributes in creating the third largest agglomeration after île-de-France and Greater London. In the past year the capacity to attract foreigners has increased to such an extent that this population is now 15 percent of the total.

Madrid's economic activity, in constant growth in past years, is characterised by its great specialisation in service activities, where services directed at companies, financial intermediation, logistics and communications play a dominant role. Tourism, which implies activities from all branches of production, has special relevance in the City and has been recording significant increases in the past years, especially growth connected to businesses and fair activities.

Madrid also stands out in innovation and technology. It is not in vain that it is the area of Spain that invests most in research and development, exceeding the Community average in percent GDP. It also has important university centres, including more technologically focused and research-based centres, both public and private.

These factors inevitably create a very dynamic employment market, not only capable of providing work to the majority of its population, but also to a good portion of the population of the surrounding metropolitan area, and even outside this area. Employment is growing and the forecasts are that it will continue to do so. For this reason, unemployment has decreased and currently unemployment is at noticeably lower rates than those of our regional, national and European surrounding areas.

Despite this, labour costs show evolution similar to inflation without excessive tension; inflation remains relatively stable and lower than the national average. This occurs in a European financial context in which we share a common currency, low interest rates and exchange rates.

These aspects will be reflected throughout this document, attempting to spread knowledge, in a summarised form, on some of the essential aspects of the economy of our City and its evolution, in order to continue generating more and improved knowledge of this economy.

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## POPULATION

The population of Madrid in 2004 was 3,099,834 inhabitants, double the population of Barcelona and four times that of Valencia, the next two largest Spanish cities. This makes Madrid the second largest city in the European Union, only smaller than Berlin. With 7.2 percent of the Spanish population, it is the highest population concentration as compared with the whole of its respective country.

The City of Madrid is home to 53.4 percent of the population of the Region of Madrid, reaching 5.8 million and which is, at the same time, the third highest metropolitan concentration in Europe, after île-de-France and Greater London.

### European cities

City	Population	Percent of country
Berlin	3,388,434	4.1
<b>Madrid</b>	<b>3,099,834</b>	<b>7.2</b>
London*	2,766,065	4.6
Rome	2,655,970	4.6
Paris	2,125,246	3.6

\*Inner London.

Source: Eurostat (Urban Audit, 1999-2003) and the National Statistics Institute.

### Spanish cities

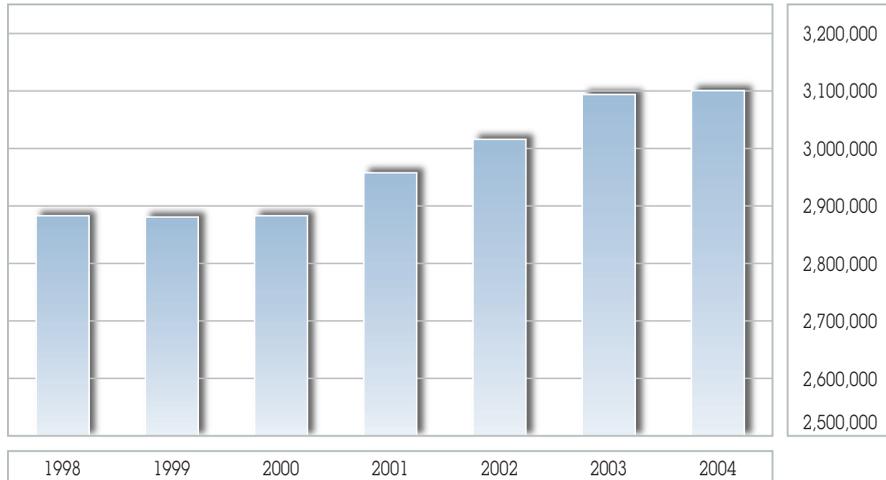
City	Population	Percent of country
<b>Madrid</b>	<b>3,099,834</b>	<b>7.2</b>
Barcelona	1,578,546	3.7
Valencia	785,732	1.8
Seville	704,203	1.6
Zaragoza	638,799	1.5

Population as of 1 January 2004.

Source: Nacional Statistics Institute.

Perhaps what stands out most, however, is not its dimensions, but its development: in the past five years the population dynamic has been driven by a significant influx of immigrants. This has caused a change in trend: demographic growth higher than one percent annually, which raises the population to 3.2 million according to the pattern of January 2005.

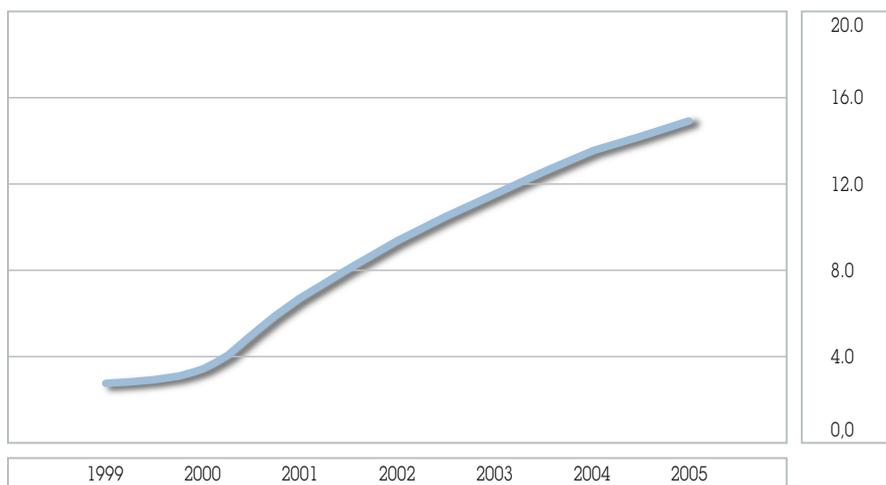
### Evolution of Madrid's population



Source: Nacional Statistics Institute.

The significant influx of foreign immigrants in the past years means that they now represent 15 percent of the total population, even amounting to more than 480,000 currently, which shows a contrast with the 2.8 percent of only six years ago. More than 40,000 new foreigners choose Madrid as their residence each year, in a process that, although appearing to ease up, still maintains its drive.

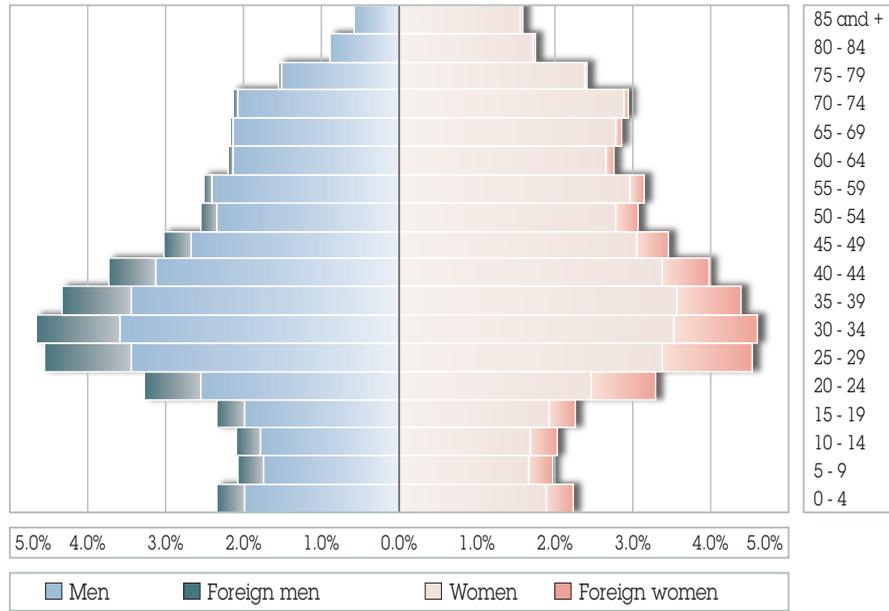
### Percent of foreign population



Source: Directorate General of Statistics of the Municipal Government of Madrid.

This process is very positively affecting the demographic structure of the city, since it allows for a higher number of workers to be included in production activities, at the same time as it begins to widen the base of the population pyramid in a necessary rejuvenation process.

City of Madrid. Population pyramid

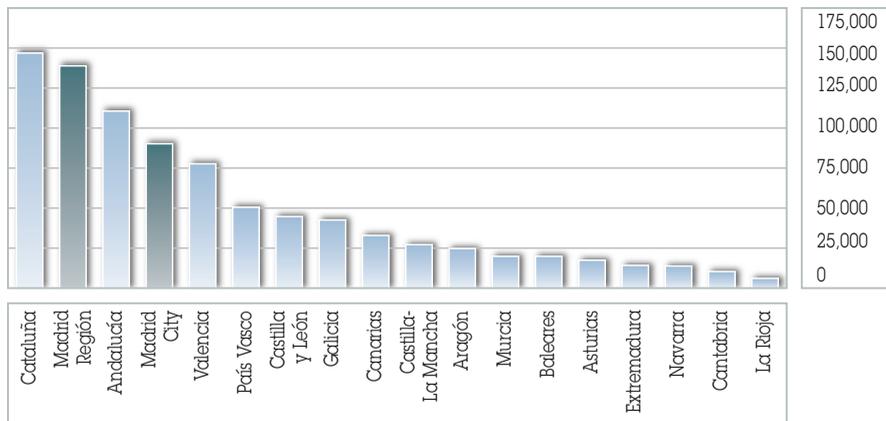


Source: Directorate General of Statistics of the Municipal Government of Madrid.

## ECONOMIC ACTIVITY

The Gross Domestic Product (GDP) of the City of Madrid in 2003 was approximately 84,000 million euros, representing no less than 64.7 percent of the whole of the Region of Madrid and 11.3 percent of Spain, eleven and four percentage points, respectively, above what its population represents in each of the two territories. The City's production exceeds that of all Autonomous Regions except Catalonia and Andalusia, and that of nine of the ten countries (all except Poland) of the last enlargement of the European Union.

### The GDP of Madrid and spanish regions

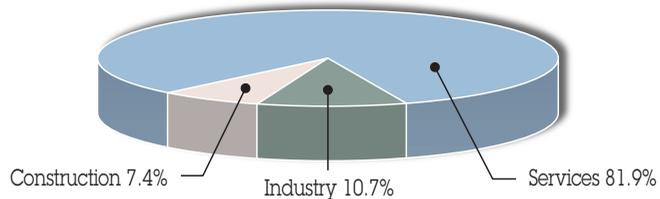


Source: National Statistics Institute; for Madrid, GDP estimated by the Municipal Government of Madrid.

Of this production, industry (mainly pharmaceutical, graphic and electronic) contributes almost 11 percent, remaining relatively stable, and construction, with great change in the past years, more than 7 percent. It is service activities, however, with 81.9 percent of the total activity, and with a slight tendency upward in the last years, that most contribute to the definition the production structure of the City of Madrid.

### Gross added value for sectors (2004)

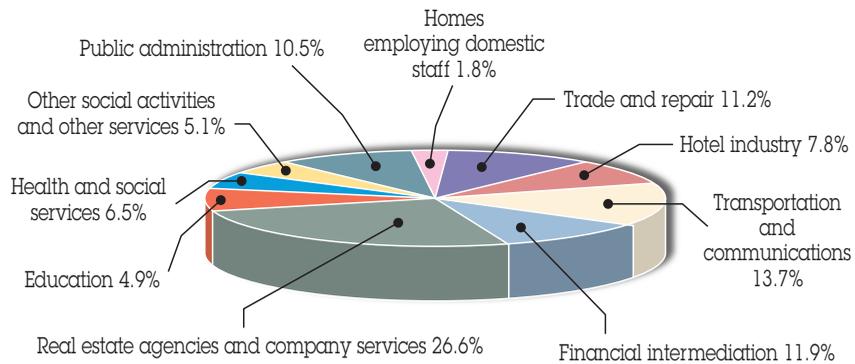
Industry	8,034,591
Construction	5,583,793
Services	61,800,743
<b>Total</b>	<b>75,419,127</b>



GAV estimated for ordinary prices, in thousand euros.  
Source: Municipal Government of Madrid.

Of all services, the most significant are those directed toward companies, which along with real estate activities, make up a fourth of all services. Then come transport, logistical and communications activities, followed by financial activities; it is no coincidence that Madrid is the fourth largest financial marketplace in Europe. Only these three groups generate more than half of the added value corresponding to this branch of activities.

**Services in Madrid (percent)**

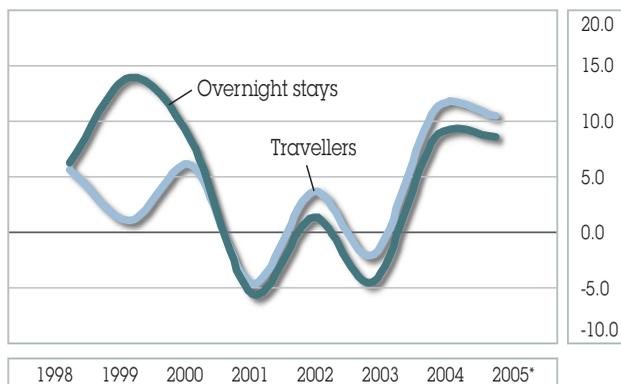


Source: Municipal Government of Madrid.

Another very important activity in the City is tourism, where its population is largely occupied by trade and the hotel industry. Hotel industry activity has notably increased in the past years, after overcoming a slow start to the millennium. The figures for the last twelve months show a historic high with more than 11.5 million overnight stays, and the figure for travellers is well above five million annually.

**Tourism in the city (thousands and percent annual change)**

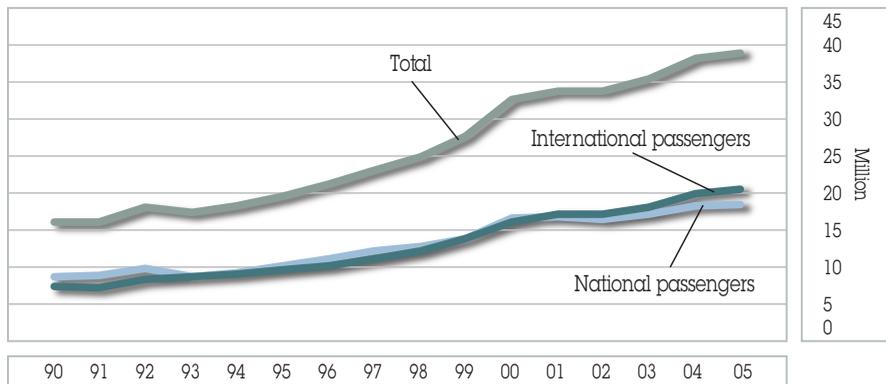
Year	Travellers	Overnight stays
1998	4,601.4	9,190.1
1999	4,652.5	10,476.9
2000	4,936.3	11,331.1
2001	4,707.2	10,710.3
2002	4,882.3	10,862.3
2003	4,786.1	10,379.6
2004	5,320.1	11,276.7
2005*	5,488.4	11,583.6



\*Last twelve months.  
Source: National Statistics Institute (Survey of Hotel Occupation).

Closely related to tourism in its forms, and thus with diverse sectors of activities, the constant increases in traffic of airline passengers in Barajas are worth noting: currently 39 million travellers pass through the Madrid airport each year, which is double what it was ten years before —this is no more than a reflection of the city’s dynamic economic activity. The expansion works in progress will soon allow for 70 million passengers per year.

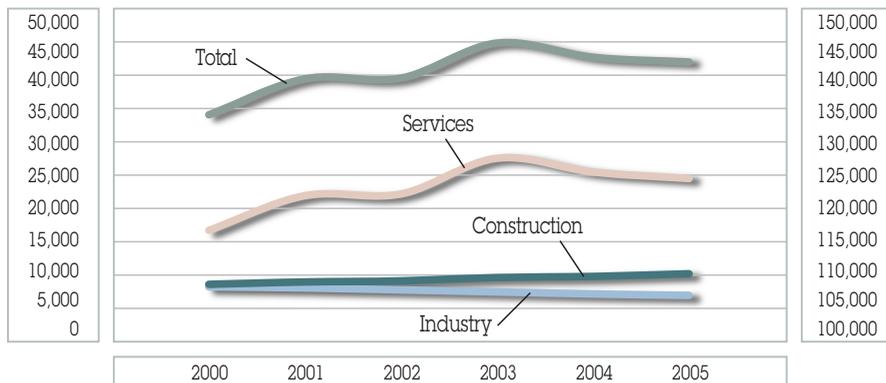
**Traffic of passengers in the Madrid airport by type of flight**



Source: Ministry of Development.

This brief review of the productive structure of Madrid ends with a comment on the dynamism that a series of activities is experiencing, such as health care, education and social services, both through public and private initiatives, and that, with growing demand, already amount to almost 17 percent of the services in the City.

**Accounts registered with Social Security**

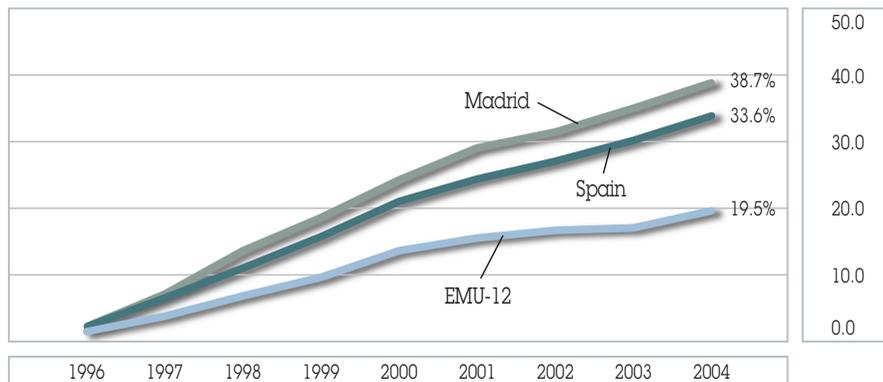


Source: Directorate General of Statistics of the Municipal Government of Madrid.

The dynamism of business activities can also be seen through the creation of companies. More companies are created in Madrid than in any other part of Spain, and with an average size that doubles the companies in the national as a whole. In this production activity there are providers, clients and competitors.

In addition, Madrid companies look optimistically toward the future, as reflected in the last report of the European Chambers of Commerce and Industry Association (Eurochambres) for 2005, where Madrid stands out for the expectations for net turnover and job creation, not only as compared with Spain but also with the majority of countries and regions in the European Union, especially as compared with those most developed.

### Accumulated growth of real GDP



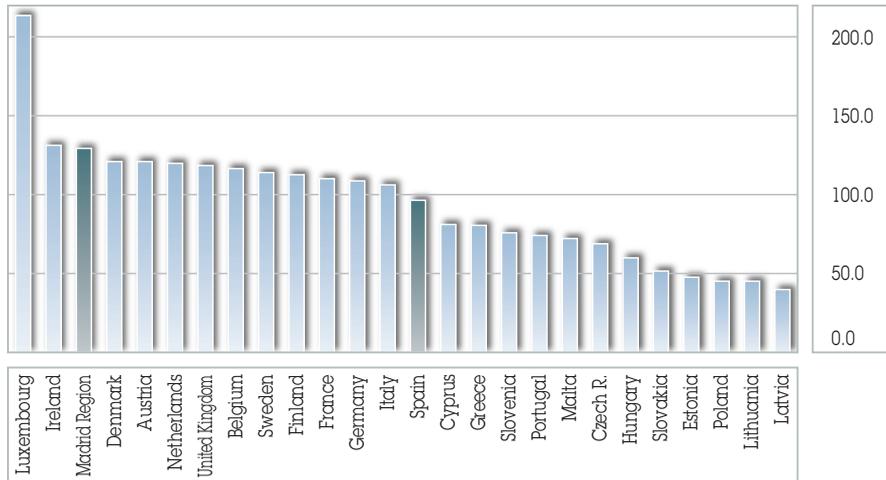
Source: National Statistics Institute and Eurostat.

These production factors evidently cause a dynamism different from its surroundings. Growth of the metropolitan area in 2004 is located between 2.9 and 3.3 percent according to various institutes (between two and five tenths above the national percentage). This would imply accumulated growth between 1996 and 2004 of at least 38.7 percent, almost five points higher than the Spanish economy and double the Monetary Union.

The largest growth in Madrid in 2004 took place in construction, with a rate of 3.6 percent, exceeding services, which were heading up growth in past years.

For 2005, 3.5 percent growth is predicted (with new accounting rules it could be several tenths higher), again above Spain as a whole, and significantly above the 1.6 percent foreseen for the euro zone by the European Commission in its spring report, which raises it to 2.0 percent for the enlarged European Union.

GDP per capita



Source: Eurostat and National Statistics Institute.

As a consequence of the foregoing, the GDP per capita of Madrid is the highest in Spain, exceeding the average by 34 percent. Since its incorporation in the European Union in 1986, it eliminated a negative gap, with the EU-15, of 13 points in the first ten years, and in the following seven years it overcame said gap by another 14 points, reaching 30 if compared with the EU-25.

## RESEARCH AND EDUCATION

This dynamism would not be possible without a fundamental factor in the production capacity of the City: a high level of research and education. Madrid has a high number of university students in relation to its population. In the City's university centres and its metropolitan area there are more than 260,000 students enrolled, 38.2 percent of the population between 18 and 25 years, 6.6 points higher than Spain as a whole.

### Students enrolled in universities (school year 2002-03)

	Madrid Región			Spain		
	Students	Population 18-25 years	Percent	Students	Population 18-25 years	Percent
Men	123,933	345,027	35.9	734,959	2,550,635	28.8
Women	137,087	337,602	40.6	837,088	2,420,344	34.6
<b>Total</b>	<b>261,020</b>	<b>682,629</b>	<b>38.2</b>	<b>1,572,047</b>	<b>4,970,979</b>	<b>31.6</b>

Cycles 1 to 3. Population as of 1 January 2003.  
Source: Statistics Institute of the Region of Madrid and National Statistics Institute.

And it is not only the proportion of students in Madrid that is higher than the national average, it is the ample selection of metropolitan universities (no fewer than fifteen universities, seven public and eight private), attracting a high number of non-resident students the majority of whom, upon finalising their studies, become part of the city's production system.

### Madrid universities

Public	Private
Universidad de Alcalá	Universidad Alfonso X El Sabio
Universidad Autónoma de Madrid	Universidad Antonio de Nebrija
Universidad Carlos III de Madrid	Universidad Camilo José Cela
Universidad Complutense de Madrid	Universidad Europea de Madrid
Universidad Politécnica de Madrid	Universidad Francisco de Vitoria
Universidad Rey Juan Carlos	Universidad Pontificia de Comillas de Madrid
Universidad Nacional de Educación a Distancia (UNED)	Universidad Pontificia de Salamanca, Campus de Madrid
	Universidad San Pablo Ceu

Source: Directorate General for Universities and Research of the Madrid Region.

Along with these university centres, the high number of research institutes is also a determining factor. Such research institutes, covering all subject areas, located in Madrid, and among which the Centro Superior de Investigaciones Científicas (CSIC), dedicated above all to scientific and technological matters, is especially notable.

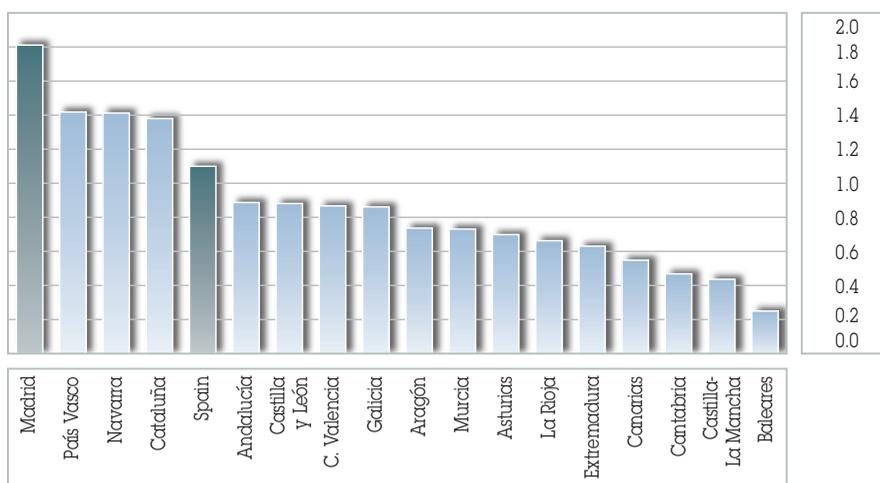
### State-run research centres and institutes with head office in the Madrid Region

Centro de Investigaciones Energéticas, Medioambientales y Tecnológicas (CIEMAT)	Consejo Superior de Investigaciones Científicas (CSIC): 46 centres and institutes
Instituto Español de Oceanografía (IEO)	Instituto Nacional de Investigación de Tecnología Agraria y Alimentaria (INIA)
Instituto Tecnológico Geominero de España (IGME)	Instituto Nacional de Técnica Aeroespacial (INTA)
Canal de Experiencias Hidrodinámicas del Pardo (CEHIPAR)	Laboratorios Ingenieros del Ejército (LIE)
Centro de Investigación y desarrollo de la Armada (CIDA)	Instituto para la Diversificación y Ahorro de Energía (IDEA)
Centro de Investigación y Documentación Educativa (CIDE)	Centro Español de Metrología (CEM)
Centro de Estudios y Experimentación de Obras Públicas (CEDEX)	Instituto Geográfico Nacional (IGN)
Instituto de Estudios Fiscales (IEF)	Centro de Estudios Jurídicos (CEJ)
Instituto Nacional de Meteorología (INM)	Centro de Estudios Políticos y Constitucionales (CEPCO)
Centro de Investigaciones Sociológicas (CIS)	Centro Nacional de Investigaciones Oncológicas (CNIO)
Centro Nacional de Investigación Cardiovascular (CNIC)	Instituto de Salud Carlos III (ISCIII)
Instituto Nacional de Seguridad e Higiene en el Trabajo (INSHT)	

Source: Ministerial Office of Education of the Madrid Region.

Madrid is by far the area where the most is invested in R+D in all of Spain in relation to its production: 1.8 percent of its GDP as compared with 1.1 in Spain. Madrid's investment effort, 2,346 million euros in 2003, is equivalent to 28.6 percent of the national total. Of this, 57 is carried out by companies, while just above 25 percent corresponds to public administration.

### R+D in percent of GDP



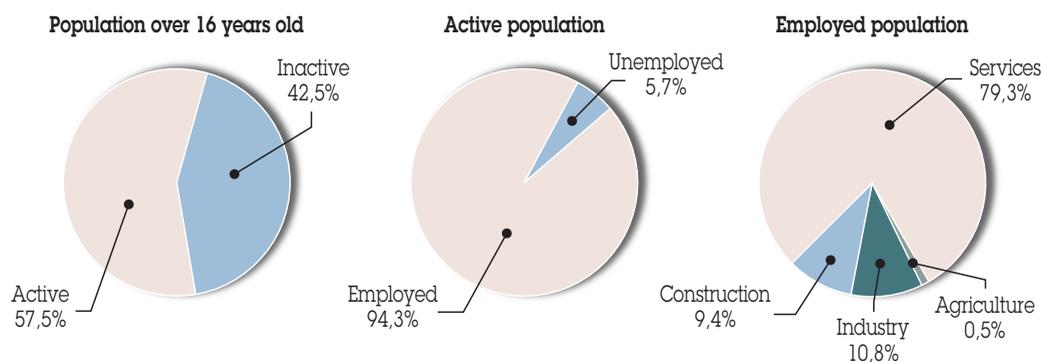
Source: National Statistics Institute.

## EMPLOYMENT

These demographic, production-related and innovative peculiarities of the City of Madrid entail significant labour singularities with respect to its surroundings. As such, its activity rate is higher than both the national and European averages but, on the contrary, its unemployment rate is much lower.

This situation, reinforced by spectacular development in past years, with rates for creation of employment and reduction of unemployment incomparable in all of Europe, is not without connection to the incorporation of women in the employment market. Currently there are more women than men working of the population between 16 and 24 years old and the number is practically the same up until 29 years.

### Population and its relation whit the activity



Population / Status	Number
Over 16 years old	2,607,200
— <b>Active</b>	<b>1,497,900</b>
• Employed	1,412,000
– Agriculture	7,300
– Industry	152,600
– Construction	132,800
– Services	1,119,300
• Unemployed	86,000
— <b>Inactive</b>	<b>1,109,300</b>

Source: Directorate General for Statistics of the Municipal Government of Madrid.

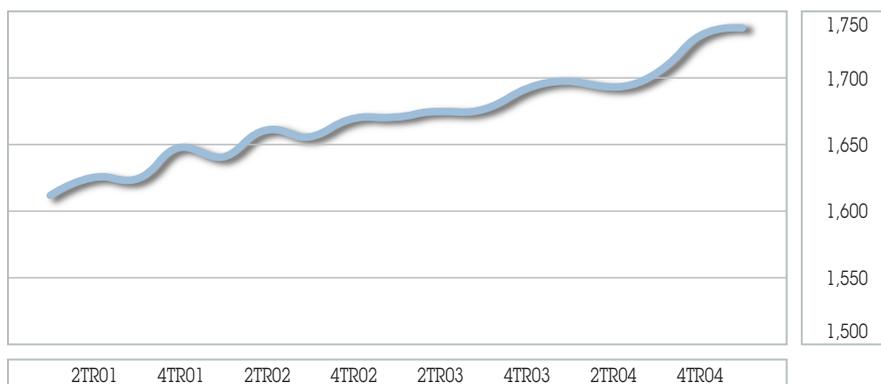
Active Population Survey (EPA) data available on the employment of Madrid citizens as per activity branch shows, in keeping with the production structure, a clear specialization in tertiary activities. The number of workers employed in the services sector amounts to 1,119,300, which represents 79.3 percent of the total. Madrid residents working in industry amount to 10.8 percent and 9.4 work in construction.

Of the 1,412,000 employed, 148,100 are entrepreneurs, 979,000 are salaried in the private sector and 275,500 salaried in the public sector. Of the total of salaried employees, 73.9 percent have indefinite contracts.

But it is important to remember that this data only refers to the population that resides in Madrid, and that a good number of people come to Madrid to work who reside in other municipal areas and autonomous regions. The number of work posts in the city of Madrid could be estimated from the figure of registered workers, the majority of which are affiliated with Social Security.

In the City of Madrid 1,737,441 people work who are affiliated with Social Security, independent of where they live. This means that more than 300,000 workers, at least, come to our city to work on a daily basis. The evolution of this indicator in the past years is a continual increase, so that in the first quarter of 2005 it reflected an interannual increase of 2.3 percent.

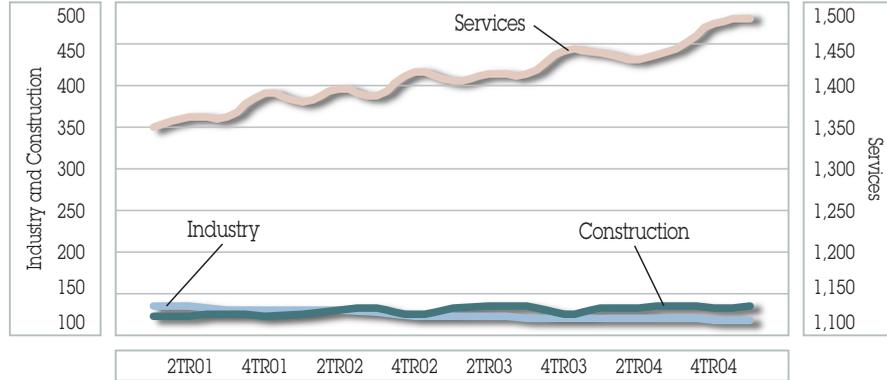
**Affiliation to Social Security (thousands)**



Source: Directorate General for Statistics of the Municipal Government of Madrid (data from the Ministry of Employment and Social Matters).

This data on affiliation corroborates that the majority of employment in Madrid is in the services sector, amounting to 85.4 percent of the total. This percentage exceeds that of Madrid residents employed in this branch, which reinforces the City as an economic area highly specialised in these types of activities.

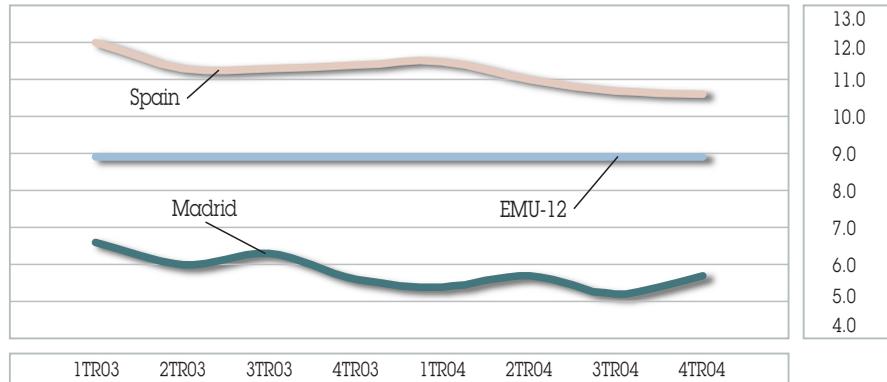
**Affiliation to Social Security by branches of activity (thousands)**



Source: Directorate General of Statistics of the Municipal Government of Madrid (data from the Ministry of Employment and Social Matters).

This dynamic in the creation of employment explains an unemployment rate of 5.7 percent at the end of 2004, nearly half of the national average and significantly below the 8.9 percent of the European Monetary Union. And although it is true that the situation is not the same in all districts of the city, it is also true that the highest unemployment rate does not exceed the national average.

**Unemployment rate (percent)**



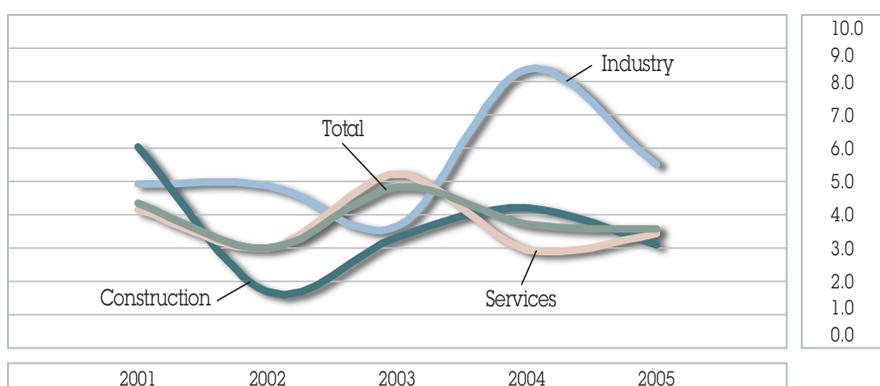
Source: National Statistics Institute.

It seems that the decrease in past years will continue this year, in 2005.

## PRICES AND WAGES

This positive dynamic in the employment market is occurring without excessive tension on labour costs, since although it is true that these expenses are higher in the Madrid metropolitan area than in Spain as a whole, it is just as true that their development is within fluctuation bands similar to those of inflation.

**Labour cost per worker interannual variability rate (percent) (first quarter of each year)**



Source: National Statistics Institute.

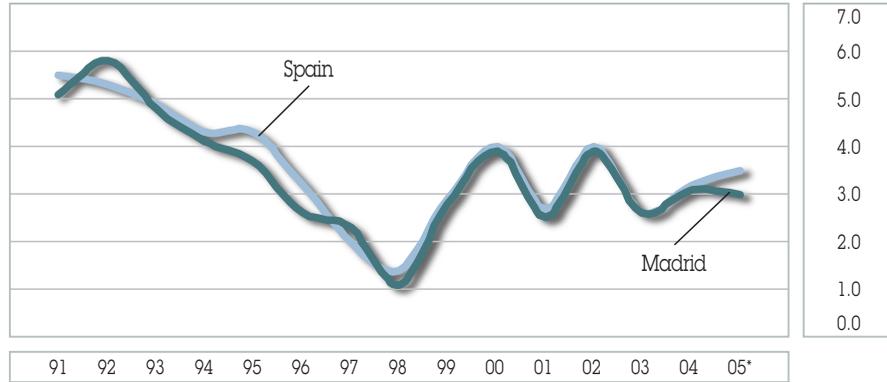
In relation to the development of these expenses in past years, we can observe the immediately relevant behaviour of construction and, in lesser measure, of industry, as compared with the most stable behaviour, that of services, a branch that, due to its majority weight, determines the behaviour of the group as a whole. This last value has had a tendency to decrease in 2004, in such a way that in the last quarter the interannual rate was situated at 2.6 percent, five tenths below the variability in consumption prices.

Prices also do not seem to reflect more tension than that derived from certain raw materials such as petroleum, tempered or exacerbated by changes in the exchange rate between the euro and the dollar.

The change in inflation in Madrid and in Spain has been generally similar. Once past the elevated growth rates from years before, these rates seem to have broken the fluctuation range in which they moved, between 3 and 4 percent, clearly falling below this in Madrid.

The latest data available from May 2005 registers an annual rate of 2.6 percent, five tenths below the Spanish rate, and which makes Madrid into one of the economic spaces in which the change in prices is most favourable.

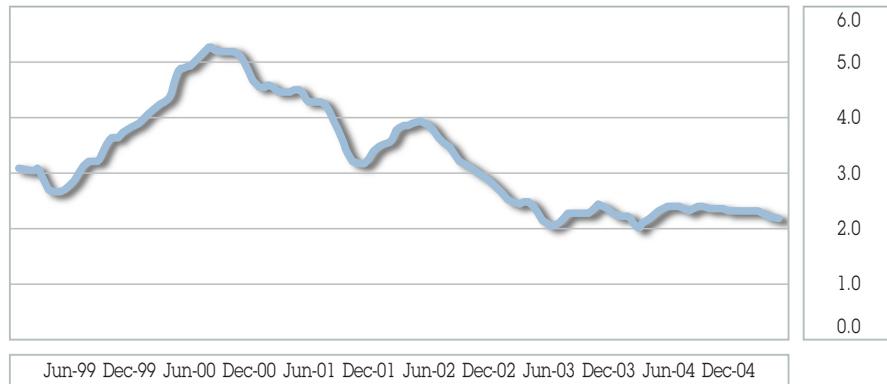
**Consumer price index (interannual variability rates)**



Source: National Statistics Institute.

This change in prices is even more significant when contrasted with the change in interest rates in the interbank market. Its tendency in past years has been toward a certain stability, but always with levels clearly below the inflation rate. Its average value in May 2005 was 2.19 percent at twelve months. This implies negative effective prices of money.

**Euribor at 12 months**



Source: Bank of Spain.

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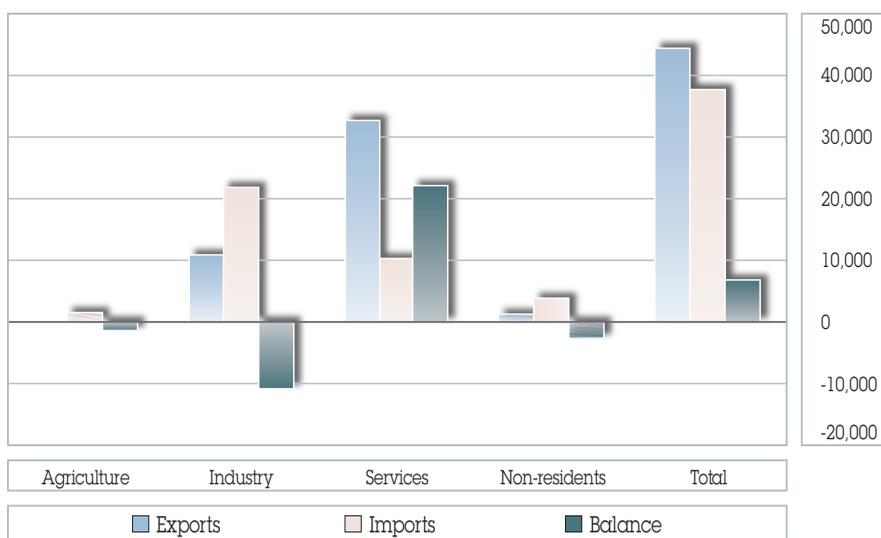
## FOREIGN SECTOR

With this situation, commercial relations of the City of Madrid with other economies shows a very positive balance. These exchanges take place, as to be expected, with the closest surrounding areas. The estimated balance between City exports and imports, both in assets and in services, with markets outside the Region of Madrid, both with the rest of Spain and abroad, shows a positive figure of 7,043 million euros.

The City is, despite its location in the second most prominent industrial area of Spain, an importer of a good part of the goods it consumes; this balance is amply compensated with the positive result of trade in services, of which the amount produced is largely exported.

### Economic relations outside the region

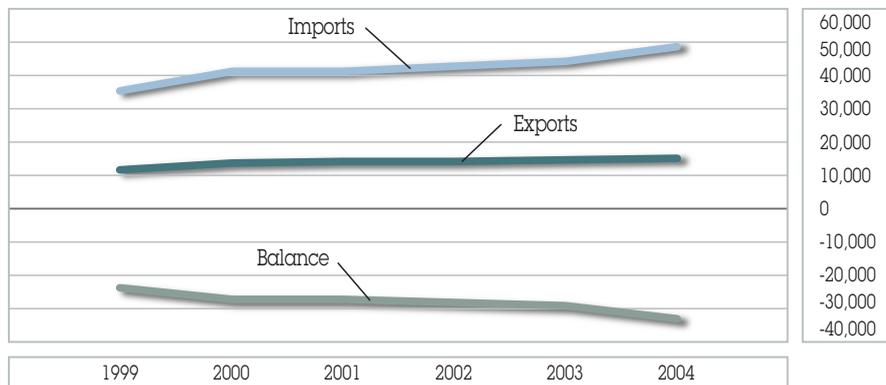
	Export	Import	Balance
Agriculture	17.0	1,602.7	-1,585.7
Industry	10,860.6	21,866.7	-11,006.1
Services	32,523.2	10,434.1	22,089.1
Non-residents	1,072.9	3,859.3	-2,786.4
<b>Total</b>	<b>44,473.7</b>	<b>37,762.8</b>	<b>6,710.9</b>



Source: Municipal Government of Madrid.

Only once the context is defined, that is, trade with third party countries, included in the ordinary statistics for foreign trade, can it serve as an indicator of its change throughout time. The Madrid region, in which the City of Madrid plays a principal role, is second in the level of imports, and third in exports, behind only Catalonia and Valencia. The change over time is positive in both imports and exports, where more oscillation is present in the case of imports given the change in listing prices of petroleum and the exchange rate between the euro and the dollar.

**Foreign trade of the region**

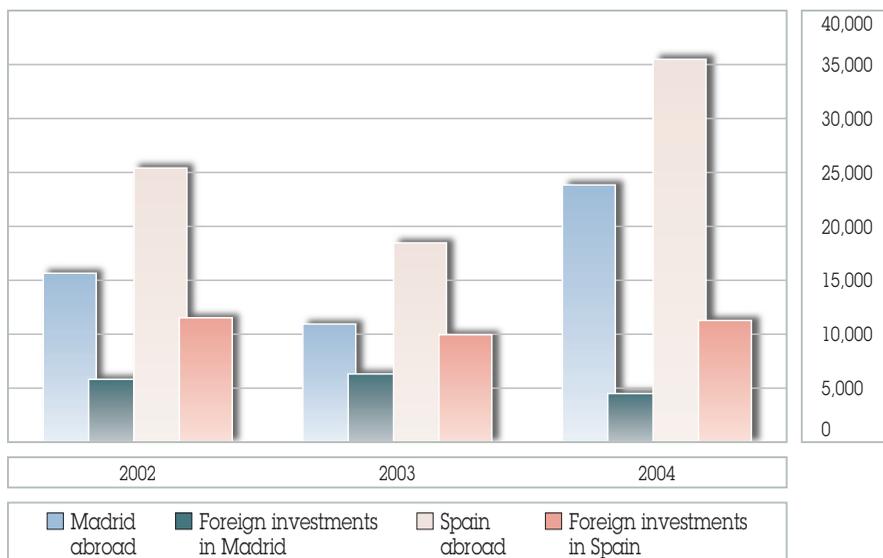


Source: State Department for Trade and Tourism.

The data from these last months shows an ever-accelerating increase in exports, where rates close to zero rose to 5.2 percent for the month of February 2005, while imports clearly decelerate from rates close to 14 percent to 0.9 percent in the month of February.

In the investment market Madrid's role is also crucial, where the largest part of the investment flow is concentrated that, originating abroad, is destined for Spain. Even in 2004, the least positive of the past three years, 40 percent of foreign investments were earmarked for Madrid. It may be even more relevant, however, that the metropolitan area was the origin of 67.0 percent of Spanish investments abroad, with a level in 2004 that doubled that of the previous financial year. Madrid's role is evident as the principal space in which investments originate and investments are received.

Foreign investments



Source: State Department for Trade and Tourism.

## CONCLUSIONS

The information presented in this brief report on this economic moment in the City of Madrid shows an economic space with a good number of factors generating growth. The first of these is the great dynamism of its population, where the capacity to attract workers from other countries is the key factor.

The second is its specialisation in sectors with the most potential for growth and greatest capacity to generate added value, both industrial and services. Among these, services intended for sale are notable, especially advanced services directed at companies, financial services, and logistics and telecommunications.

Together with this specialisation, there is another fundamental factor: the dynamism of Madrid companies, their size, the role they play in their respective sectors and the optimism with which they face the future. This is, without a doubt, what has contributed to Madrid becoming the city that has generated the most employment in past years, and that has most reduced its unemployment rate, employing a good part of the workers in its surrounding area. And it continues to generate employment.

Another important factor is the concentration of innovation centres and the efforts in matters of R+D made by all the economic agents participating in the city's economy, and especially its companies.

Despite this dynamic, the relative restraint in salaries and prices continues to be characteristic of its economy, which together with low interest rates continue to be a very relevant factor for growth and competition.

All of this contributes to creating the advantageous economic relationships that the City of Madrid has with foreign countries, both in trade and investment.

The expectations for the city's economy, both for 2005 and for the upcoming year 2006, continue to be of accelerating growth, contributing to the region as a whole maintaining its position at the forefront of national growth.