

# **EXECUTIVE SUMMARY**



# 1. Current situation of the City of Madrid

## 1.1. Economic environment and outlook

The second quarter ended with a widespread deterioration of the macroeconomic picture. In the eurozone, GDP declined by 0.5% YoY and investment fell heavily (2.2% YoY). The only positive note was found in exports, whose growth rate accelerated to 3.4% YoY. In the case of Spain, GDP fell by 1.3% and there were significant declines in private consumption and investment (2.2% and 9.4% respectively). The Madrid Region continues to avoid recession but it has seen a slowdown in growth with YoY growth falling to zero. The fall in construction and industry steepened, with YoY declines of 6.2% and 4.3% respectively, while services sector growth also diminished, to 1.1%.

The deterioration of private consumption accelerated, due to the expected declines in wage incomes and increases in taxes, the reduced contribution of external demand as a result of the worsening economic performance foreseen in the Euro zone, and the cutbacks in government consumption and investment to achieve the deficit targets. This has led to a generalized downward revision of the economic outlook. In the case of the Spanish economy, forecasts for the decline in GDP have increased from 1.1% to 1.6% for 2012 and from 0.5% to 1.2% for 2013. Similar figures are expected for the City of Madrid, with downward revisions to all economic sectors.

## 1.2. Production activities

### INDUSTRY

The deterioration in Madrid's industrial sector is accelerating. Thus, the Madrid Region's Industrial Production Index (IPI) declined at an average annual rate of 10.1% in July, three percentage points worse than the April figure and five below the national average (5.1%). The contraction is mainly due to the sharp decline in the production of durable consumer goods (with an average annual decline of 21.7% versus 11.7% for Spain as a whole), and the interruption of the relative good performance of capital goods, whose decline accelerated from an average annual of 2.7% in April to 8.7% in July. Industrial gross value added (GVA) also accelerated its fall in the second quarter of 2012, with a YoY decline of 6.5% (6.2% seasonally adjusted) compared to 5.9% (5.3%) in the first quarter of the year.

In terms of Social Security enrolment, Madrid's industry saw a 6.2% fall in the second quarter. As in previous quarters, the greatest declines continue to be recorded in the subsectors of clothing (16.7%), pharmaceuticals (12.9%) and manufacturing of other non-metallic mineral products (10.5%).

### CONSTRUCTION AND REAL ESTATE MARKET

Job losses accelerated in the construction sector in the second quarter, with a YoY contraction of Social Security enrolment of 12.4%, 2.3 percentage points higher than in the second quarter of 2011.

This loss of employment contrasts with the dynamism in terms of building permits for housing, with an average YoY growth of 67% until August, led by social housing, which accounted for 56% of the total number of licenses granted so far this year; these were concentrated in the districts of Hortaleza and Puente de Vallecas. There was also notable growth in completion of construction certificates, both for new construction and renovations, with growth rates of 120.2% and 73.6% respectively, so far this year. With respect to non-residential construction, it consolidated its recovery, thanks to car parks and buildings for tertiary activities, which accounted respectively for 70.8% and 16.5% of the total surface area; these were the only categories to show positive growth rates: 120.1% and 38.4% so far this year, compared to the contraction of 99.5% and 24.9% experienced by industrial and civic facilities.

### SERVICES

#### Financial system

The deteriorating position of household savings, the possible effect of bringing forward purchases ahead of the announced rise in VAT, along with the fall in companies' results and their increasing difficulties in accessing credit, have led to a drop in bank deposits over the past year. This accelerated in the second quarter of 2012,

with an average annual decline of 3.1%, 2.5 percentage points more than in the first quarter. This pattern is very similar to that experienced in Spain as a whole, where the average annual fall was 3.5%, 1.9 percentage points worse than the decline in the first quarter.

On the other hand, the closure of wholesale markets, increased solvency demands and the ongoing bank recapitalization process, continue to hamper the granting of loans and mortgages, which continue to fall in YoY terms, with total lending down 0.3% (somewhat less negative than the national figure of 1.5%), while mortgage lending has fallen 24% by number of loans and 19% by total amount.

The only positive note comes from the Madrid Stock Exchange, whose general index ended September with a rise of 8.2% in the third quarter, allowing it to recover part of the losses accumulated in the first half, although for the year as a whole it is still in negative territory, down 9.4%, while other leading international exchanges have seen gains.

### **Tourism**

The summer months were not positive for the City of Madrid in terms of tourist activity, with a further deterioration following that recorded between the months of March and May this year, although the effect of the World Youth Day (WYD), held in August 2011, must be taken into account. The number of visitors from June to August experienced a year-on-year decline of 6.9%, which reduces to 3.0% after correcting for the "WYD effect" (3.9% in the case of Spanish visitors and 2.3% for foreigners). The overnight stays, similarly corrected, fell 3.2% (0.1% for domestic tourism and 5.2% in the case of foreign visitors). The positive note is provided by domestic tourism, which saw the average stay increase by 3.7% over the same period of 2011, almost offsetting the decline of 3% in the average stay of foreigners.

In response to the contraction of tourism demand in recent months, the supply is gradually stabilizing, with the number of beds seeing YoY growth of 0.3%, 1.7% and 0.7% in June, July and August, respectively. In spite of this, occupancy rates continue to fall, down by 8.3% in the June-August period (or 4.2% correcting for the "WYD effect"). The fall in demand, coupled with the reduction in supply, translates into a decline in employment, with a cumulative YoY fall in January-August of 0.6% compared to a rise of 1.8% in the same period of 2011.

### **Transport**

Activity at the Madrid Barajas airport continues to decline, although at a slightly slower pace than in the first five months of the year, with international traffic less affected. In the case of passenger traffic, the YoY fall accumulated from January to August stood at 7.6% versus 7.7% in May (14.1% for domestic passengers and 4.2% for international movements). In the case of freight, the YoY January-

August accumulated fall in domestic cargo was 10.9% versus 11.3% until May, while international transport was down 7.9% in August compared to 8.8% in May.

The fall in passengers in all forms of urban transport, already anticipated by the first quarter data, has been confirmed. In the January-June period, there was a YoY decline of 3.4%, with the largest falls seen in the case of bus services (4.4%) compared with 2.6% on the Metro. In turn, local train services, while still maintaining positive growth rates (0.9% in June), saw them slow sharply compared with the 3.2% rise of the first quarter.

### 1.3. Business dynamic

The second quarter of 2012 confirmed the contraction in company start-ups, which fell by 2.4% compared with the start of the year. In turn, the average monthly closures were down by 0.9%, leaving a net monthly start-up balance (start-ups less closures) of 673 companies, 2.9% less than the annual average in January.

This was the third consecutive quarter of QoQ improvement in the City of Madrid's business confidence indicator; though still in negative territory (-24.7) and 8.5 points down on the third quarter of 2011, it was up 1.9 points with respect to the second quarter of this year. By sector, construction has reversed the negative trend of previous quarters, gaining 11.4 points with respect to the third quarter of 2011 and 22.4 compared to the second quarter of 2012; meanwhile, the services sector, with a balance of -23,1 deteriorated in YoY terms, but was up 1.7 points in relation to the previous quarter. Industry was the sector with the lowest level of confidence (-33.9), losing 4.5 points with respect to twelve months ago and 13.2 with respect to the index of confidence of the second quarter.

All the business variables, except employment, recorded lower levels of deterioration than those of the second quarter, while exceeding the expectations that entrepreneurs held three months ago, with the exception of prices, which have surprised favourably, 16.7 points better than expected. Madrid's entrepreneurs are relatively optimistic about the fourth quarter of the year, especially in the case of profits, where negative expectations are down by 22.2 points, followed by turnover, where they are down by 18.3 points, and employment (down 8.3 points). By contrast, after the surprisingly positive behaviour of sales prices in the third quarter, a deterioration of 15.4 points is expected by the end of the year.

## 1.4. Demand

The fall in retail sales in the Madrid Region has stabilized, with an average annual decline of 5.3% in August, less negative than the national average (5.7%) and similar to the level observed since May of this year, but higher than the previous year (down 3.9% in August 2011). Similarly, the retail employment index, although in negative territory, has also consolidated the slowdown in its fall with an YoY decline of 0.6% in August, lower than the average for Spain (1.2%).

Capital goods investment continues to deteriorate, accumulating an average annual fall of 8.7%, due to the strong contractions in March, April, May and June (20.7%, 22.0%, 15.9% to -16.2%, respectively); this was a consequence of the surge in investment in the same months of 2011.

The external sector continues to act as a driving force for the economy, with average annual export growth of 11.1% in July, with "equipment" and "intermediate goods" (the largest components of foreign trade) growing by 9.9% and 7.7% respectively.

## 1.5. Prices and salaries

The easing trend in prices observed until May this year has been reversed, due to high fuel prices and the increased cost of some unprocessed foodstuffs and tobacco, combined with the impact on the price of medicines of the new co-payment system and the rise in public transport fares; hence the general inflation rate rose from 2% to 2.5% in August, while core inflation remained at 1.3%. September's rise in VAT threatens to take inflation above the 3% mark in the final quarter of the year, with the underlying rate rising to levels close to 2%.

The moderation of industrial prices that started at the beginning of the year has continued, with a 4.0% YoY rise in the industrial price index (PPI) in July compared to 4.1% in April and 6.6% in August and September 2011 (the highest level seen). The correction in housing prices also continues, with YoY falls in the second quarter of 3% in the case of new housing (0.6 points more than the fall for Madrid Region as a whole but 4.7 points less than the average for Spain) and 11.6% for second-hand housing (a fall 0.3 points higher than that of the Region and 2.1 above the Spanish average).

With regard to labour costs, after a strong YoY increase in the first quarter (3.5%), in the second they returned to more moderate rates (1.5%), that were nevertheless in marked contrast to the 0.3% fall in

## 1.6. Labour market

The labour force survey (EPA) data for the second quarter point to continuing deterioration in the labour market, with a 4.4% fall in employment, centred on wage earners (down 6.2%), especially those with temporary contracts (down 21.4%). By sector, job losses continued to be centred on construction (down 25.7%) and to a lesser extent on services (3.7%). Industry remains the only sector to see an increase in employment with YoY growth of 5.8% although this is slower than in the first quarter (11.1%). The unemployment rate rose by 3.3 percentage points to 18.1%, despite a 0.6% fall in the labour force.

Although the process of regularising domestic workers had a positive effect on Social Security enrolment, neither the data for this nor those for registered unemployment in the third quarter leave room for optimism, with a fall in enrolment of 1% and a 10.4% increase in unemployment. These data, together with the poor economic outlook, suggest a certain deterioration in this trend, with falls of 1.8% in enrolment and growth of 11.1% in unemployment forecast for December 2012.



## 2. Monographic report

### INTRA-URBAN IMBALANCES AND REBALANCING IN MADRID: 2012 DIAGNOSIS

Intra-urban imbalances are an expression of malfunctions, misalignments, inequalities, injustices, segregations, etc., between the parts of the city and its inhabitants, and are considered undesirable. They manifest themselves in several aspects with consequences that vary in severity, and hence it is useful to investigate and evaluate them, with a view to eliminating or mitigating them through urban policies.

Continuing the series of studies of Madrid previously carried out with that perspective and purpose, we have investigated potential imbalances in the City and evaluated them in the light of such relevant principles as socio-spatial cohesion and integration, territorial efficiency and competitiveness, environmental sustainability, quality of life and well-being, socio-spatial equity and environmental justice.

For these purposes we selected a total of 19 indicators by districts, relating to essential components and activities of the City, such as population, economic activity, housing, transport and the environment, relating mostly to 2011-2012. The degree of incidence of the indicators on the principles listed above was established by ranking them, in order to better support the judgments made.

We developed an individualized study for each of these indicators, considering the current differences between districts and the changes from the previous year. For that we used various statistical techniques (univariate and bivariate), graphical, mapping and spatial analysis.

As a synthesis of the findings, we would highlight the following:

1. Nine indicators currently show low intra-urban differences (coefficient of variation or  $CV < 0.2$ ) and another seven are in the 0.2-0.4 range, which can be classed as medium-low. Of the remainder, two are very slightly above 0.4 (average degree) and only one is significantly higher than the others (the proportion earning the minimum wage), although this should not be necessarily be valued negatively.

2. In comparison with the previous diagnosis in 2011, it has been noted that, of the eighteen comparable indicators, in eleven there has been little YoY variation in the CV ( $< |0.01|$ ), in three indicators the internal differences had increased by more than one hundredth, implying less desirable situations. There was only a slight change in the spatial distribution of general unemployment (0.01); it rose

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somewhat more (0.02) in ozone and a little more in used housing prices (0.03), which is attributable to the property crisis. On the other hand, of the seven indicators in which the imbalances reduced, in four of them the change exceeds a hundredth: the population earning the minimum wage (-0.01), the adult population with higher education (-0.02) and especially sulphur dioxide pollution (-0.04) and access to metro and local railway networks (-0.06).

Broken down by urban facets, it can be seen that:

- With regard to demographic aspects, the potentially more destabilising groups continue to show moderate or low misalignments and differ little with respect to 2011.
- The historical intra-urban differences in socio-economic status maintain medium-level contrasts in some indicators (e.g. higher education). Compared to 2011, these latter indicators point to some small declines in the differences, which would mean rebalancing, whereas in income, the changes appear to be moving in the opposite direction.
- In economic activity, the larger contrasts, always modest, show themselves in the locations of new permits for economic activities. The variations from the previous year are mixed: the unemployment figures point to an increase in disparity in the total, but not in long-term youth unemployment, nor in business services.
- Disparities in used housing prices are limited, but somewhat higher compared to the previous year, and in terms of property register values, they hardly change.
- In terms of access to public transport, the imbalances are minimal (for bus) or low (for metro and suburban trains), and show negligible changes with respect to 2011.
- Air quality maintains a very high degree of similarity between districts; with respect to changes from the previous year, minimal in all cases, the only aspect worthy of mention is that differences in ozone have increased and those in sulphur dioxide and particulates have decreased.

In summary, as found in the study conducted in the City the previous year, Madrid's current situation continues to show some disparities in its internal spatial structure. However, it is important to emphasize that the more important imbalances are not accentuated, as they only reach medium level at most. From a diachronic point of view, the overall direction of the city is not negative, but rather slightly positive.

## EUROPEAN SMART CITIES: THE CASE OF THE CITY OF MADRID

In the past few years, discussions on the future of cities in western countries have been very much influenced by the concept of "smart cities" (SC). Currently, a good number of Spanish cities - led by their city councils - have begun to identify and implement smart city strategies.

The main results of the analysis are in the fields of infrastructure, business, transportation, employment, urban morphology, competitiveness, social cohesion and the urban environment.

In the area of infrastructure, it can be seen that, given its level of GNP per capita, Madrid presents a relatively low percentage of households with internet access compared with other European cities. In other words, the use of these technologies could be increased, thus also increasing still more its GNP per capita levels, due to the consequent ICT investment.

In the sphere of business, the City of Madrid has a better business capacity than is implied by its GNP per capita in comparison with other European cities. However, Madrid's companies are not efficient enough.

Madrid also has considerably more company headquarters than would correspond to its GNP per capita; however, the productivity thereof, though certainly high, could still be improved compared to the rest of Europe.

The City of Madrid presents a lower multimodal accessibility than corresponds to its level of GNP per capita. However, thanks to its efforts in this field, the city presents a dense network of public transport, greater than corresponds to its level of production; nevertheless, the level of efficiency could clearly still be improved.

Madrid's development requires investment in human capital that prioritizes university studies and higher education in general; i.e. all those assets associated with high-level human capital.

The City's development is closely linked to all kinds of cultural activities and leisure occupations.

The empirical European evidence corroborates Madrid's comparative position, revealing two particularly interesting facts: firstly, its economic efficiency is relatively strong; secondly, the city could increase its density even more, given its GNP per capita, in line with European urban development patterns, counter the effects of the increasing urban diffusion experienced in recent times, compact the interstitial periurban spaces and raise its productive capacity with new productivity gains.

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In this sense, it should be noted that Madrid has a much higher unemployment rate than corresponds to its GNP per capita. Indeed, the trend of European cities shows that Madrid's productive levels (GNP per capita) can be achieved with much lower rates of unemployment. At the same time, it should be borne in mind that the evidence of other European cities (there is no data for Madrid) is that as income increases, distributional equity decreases, i.e. just because the SC are richer, that does not mean they are necessarily more equitable, but quite the contrary: increased wealth is associated with acute citizen polarization and large imbalances in the levels of social cohesion.

Analysis of the correlation between different types of crime and the productive capacity of European cities seems to show some evidence that higher levels of GNP per capita do not ensure better security indicators. In any case, with regard to car thefts and burglaries per 1,000 inhabitants, Madrid has a very much lower level of crime than comparable European cities in terms of GNP per capita.

Madrid presents a relatively high environmental efficiency, inasmuch as it generates less pollutants per unit of GNP per capita than other European cities.

The City of Madrid's strategies in the field of SC should be structured around a greater development of ICT, improvements in multimodal accessibility, greater efficiency of the public transport network, increased productivity and greater size of its companies, the prioritisation of investment in higher levels of education, emphasizing the projection of Madrid as a city of culture and leisure, strengthening its agglomeration economies, a determined struggle against its excessive unemployment, a clear commitment to advanced and employment-creating sectors, an ambition for a more cohesive society, and an improvement of environmental quality.