

# Real Estate Watch Spain

Economic Research Department  
July 2006



The adjustment in real estate prices is delayed  
Prices accelerate in some regions  
Households adapt to the new financing conditions  
Complementary factors boost mortgage financing

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## The following have contributed to this publication:

Editor: Ignacio San Martín	34 91 537 48 90	jisanmartin@grupobbva.com
Julián Cubero	34 91 537 36 72	jcubero@grupobbva.com
Carmen Hernansanz	34 91 374 61 22	carmen.hernan@grupobbva.com
Elena Nieto	34 91 537 37 76	enieto@grupobbva.com
José Ramón Perea	34 91 374 72 56	jramon.perea@grupobbva.com
Tomás Riestra	34 91 537 35 88	riestra.giner@grupobbva.com
Gerardo Villoslado	34 91 537 66 83	jose.villoslado@grupobbva.com

## Editorial Committee:

Carlos Deprit, José Luis Escrivá, Carmen Hernansanz, Jesús del Pino, Tomás Riestra, Ignacio San Martín

## Available on the website:

<http://serviciodeestudios.bbva.com>

## Editorial

The performance of the Spanish economy's most structural data in recent years paints a scenario of soft landing in the residential market in the short and medium term: slower housing demand, stemming from higher prices and slightly more restrictive financial conditions, will lead to real estate appreciation to slow significantly and all of this will bring a gradual downturn in residential building.

However, the most recent figures for the sector, corresponding to the early months of 2006, indicate that this gradual adjustment is coming to a halt increasing uncertainty about the pace and intensity of the future correction. In this context, there is a greater probability of a scenario which would lead to a hard landing in prices and quantities.

In the field of real estate development, since September 2005, there has been an increase in the number of projects to be developed and, in April 2006, the cumulative figure for the previous twelve months contemplated the start of more than 800,000 houses. A considerable increase in supply at a time when demand could fall would lead to surplus housing on the market and a slowdown in residential development in the medium term. In any event, current forecasts are pointing to gentle slowing to the 750,000 houses projected in 2006.

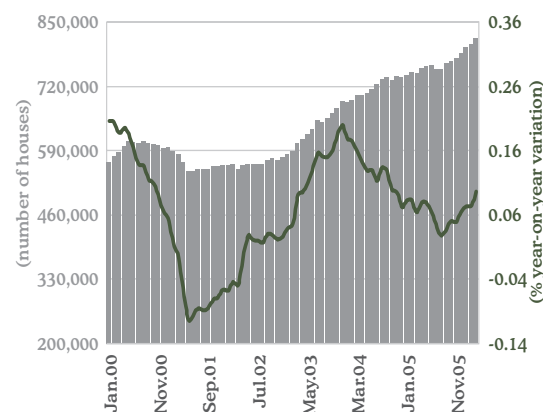
The figures for housing prices in the early months of the year show that their trend has also stopped slowing. The new figures question the slowdown in the market which started at the end of 2003: although prices presented a slightly slower increase in the first quarter of 2006 than in the preceding quarter, the analysis of the trend shows that this slowdown has come to a halt in the main self-governing regions. The continuation of the appreciation process in 2006 would increase the probability of a price correction occurring in the medium term, as is concluded in the box dealing with the real estate crisis indicator.

In this context, in the early months of 2006 credit granted for house purchase continued to grow at a rate of nearly 24%, in line with the performance this variable has been presenting since 2004. The buoyancy of financing was due to both the increase in the number of transactions and the increase in the amount of the average mortgage granted, and contrasts with the higher expense of mortgage financing. This shows that the change in the cycle of European monetary policy is being offset by other factors such as the following: the fact that monetary conditions in Spain are still a long way from being neutral, a macroeconomic environment which continues to be very favourable, the time lag existing between the decision to buy a home and taking possession of it in the case of new houses, and an extremely competitive financial market.

Lastly, this issue presents a set of reflections about the improvement in the efficiency of housing production in Spain in recent years and the conditions in which residential development has taken place, with a view to detecting its strengths in an international environment. The conclusion is that real estate expansion in other markets requires a certain command of more elements than those strictly related to the real estate development industry.

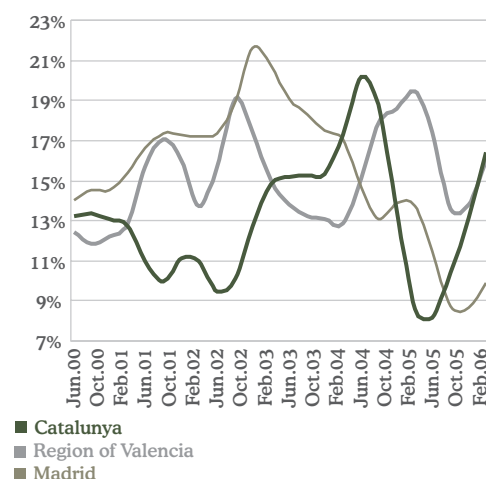
## Housing starts

(sum of 12-month moving average and rates of variation)



Source: Colegios de Aparejadores

## Housing prices: Trend



Source: BBVA Economic Research Department



# 1. Economic environment

## International

### World activity: more leading players

The first half of 2006 ended with global economic growth rates that continued to outstrip even the most optimistic expectations. In developed countries, the US has registered an average annual growth rate of 3.5% in the last year. Both Japan and the euro zone have shown signs of rising growth rates. The main emerging economies continue to present high growth rates.

This international context continues to be marked by moderate inflation, despite economic growth and the hike in commodities prices. However, there is increasing concern about the possibility of inflationary pressure from inputs eventually being passed through to the rest of the economy. This has produced greater uncertainty about monetary policy, especially in the US. When the interest rates discounted by the markets in May are compared with current rates, a clear increase can be seen. An economic scenario characterized by less global liquidity has meant that volatility is no longer at minimum levels and the appetite for risk has diminished.

In any event, the forecasts suggest that relatively generalized growth will continue. Although some economic indicators in the US have recently shown more moderate activity, the growth rates observed and foreseen are relatively high. The industrial sector and its investment levels continue to be favoured by corporate profits, although the rising interest rate path could lead to a moderation of this trend. On the other hand, the increase in consumption is tending towards a degree of stability. Despite the performance of energy prices and real estate assets, the consumer confidence indices are supported by the financial wealth accumulated in the stock markets and by low unemployment levels. These factors could counterbalance the slowdown in the real estate sector, which will lead to slight moderation in private consumption in the second half of 2006. In our central scenario, we expect the US to register growth of 3.3% in 2006 and of 3.2% next year.

In the EMU the first signs of a recovery in household spending are at last being seen. In Germany, one of the economies that is most behind in this expansion, the indicators continue to be positive and optimism has become more generalized. Lastly, Japan continues to move towards average growth of 3%. At the end of the first quarter of this year, its output gap moved onto positive ground for the first time in over eight years. The outlook is still optimistic, and sustained throughout 2006 and 2007.

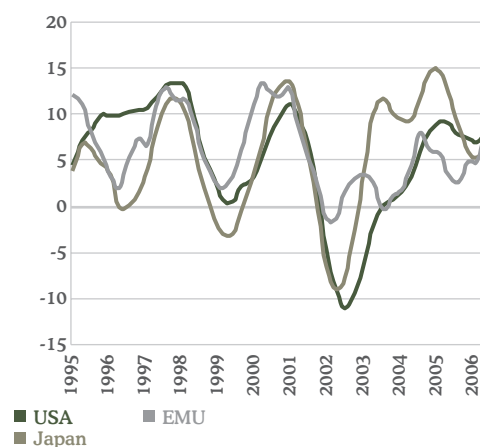
This whole new global balance, with a stronger domestic demand in Europe and Japan, paves the way for a world economy less dependent on the U.S. and China. Moreover, this would be a helpful factor levelling off global imbalances. This positive international context will keep supporting world trade and export-oriented industrial sectors.

Given the stable growth and the relatively contained inflation, is that interest rates in the United States will remain on 5.25% during 2006 and 2007.

Chart 1.1.

### Real exports: USA, EMU and Japan

Year-on-year rate

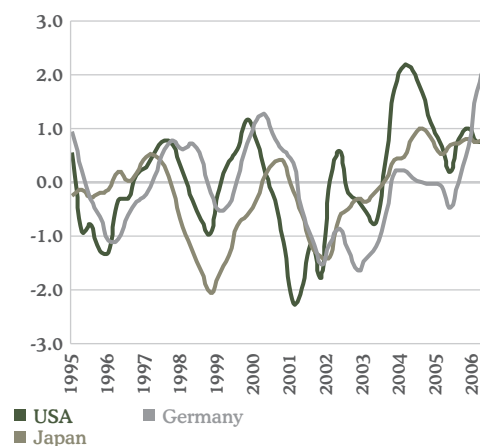


Source: BBVA and National Statistics

Chart 1.2.

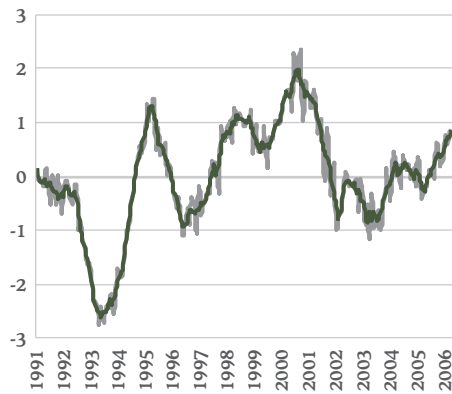
### Industrial confidence

(standardized indices)



Source: BBVA and National Statistics

Chart 1.3.  
IA BBVA- EMU



Source: BBVA

Meanwhile, the EU will end 2006 with a rate of 3.50%, and 4.00% in 2007. In this fashion, and assuming that the upward cycle in the United States ends, the 10-year rates would orbit between 5.1% and 5.2%, but keeping an upward bias in the event of unexpected movements in growth or inflation. For the Eurozone, the baseline forecast leaves these rates between 4.2% and 4.3%, so that the U.S. dollar will not be as favoured as in prior months. In addition, the growing consensus about the need for a more depreciated dollar, leads us to envision an American currency moving in the 1.25-1.30 range with the Euro.

However, there is still concern about the imbalances characterizing this expansionary cycle. In fact, although the world economy could live with these imbalances (large deficit on current account in the US, oil prices), there is growing consensus about the need for an adjustment in the medium term. In spite of everything and given the adjustment of some financial variables, optimism persists and the geographical redistribution of world growth makes the dynamism observed until today less vulnerable.

## EMU

### Europe: growth accelerates

The good performance of the economy in the euro zone has been consolidated in the last three months. After growing at a rate of 2.0% in the first quarter of the year, everything suggests that growth will speed up again in the second quarter, foreseeably towards rates of around 2.3%-2.4%. Unlike what is happening in the U.S., where there are increasing doubts about the possibility of sustaining such a strong growth rate, in Europe not only is activity accelerating, but the underlying dynamics are favourable for expecting it to continue in 2006 and 2007. Thus, the buoyancy of world trade is expected to continue to support European exports. Capital Investment will still be supported by large corporate profits and companies' high liquidity. The increase in lending to non-financial companies, which is growing at double-digit rates, illustrates companies' willingness to invest, with funds increasingly going to capital goods purchases and not to restructuring debt or financing mergers and acquisitions, as it did in previous years. There are also signs of reactivation in private consumption, the component that has been lagging behind the most in the recovery. The labour market has been improving across Europe, suggesting that private consumption will speed up over and above the one-off effects stemming from the World Cup and the anticipation effect of the increase in VAT in Germany. All in all, the EMU is expected to grow at 2.3% in 2006, the highest rate since 2000, and at 2.2% in 2007.

Undoubtedly, the risk factors stemming from higher oil prices or from an adjustment in world growth (largely with respect to the USA or China), bias the risk balance towards slower growth. But as the EMU increasingly bases expansion on domestic demand, the impact should be smaller. In any event, these are risk scenarios to which a low probability is assigned.

Although there are no alarming upward risks, inflation is not likely to fall below 2% in the next two years. In June, it overshoot the ECB's target for the twelfth month in succession, driven by the energy component.

Chart 1.4.  
EMU: Confidence indicators



Source: BBVA and National Statistics

In contrast, core inflation remains at around 1.5%, just slightly higher than at the beginning of the year (1.3%), which seems to indicate that energy prices have not yet been passed through to core inflation. Other price indicators (import and production prices, and players' inflation expectations) are showing rather more negative signs, although wages seem to be held in check. Current forecasts for 2006 and 2007 put annual average inflation at 2.2% and 2.1% respectively.

In this context, the ECB seems determined to speed up the rising interest rate cycle. The increases are mainly justified by the need to gradually reduce the high degree of monetary laxity, not so much because any strong inflationary pressures are perceived. Inflation expectations seem to be well-anchored and the upward deviations are basically attributed to energy. However, the pass-through risk persists, particularly in a context of faster growth. Thus, in the central scenario of growth of above 2% in 2006 and 2007, the ECB can be expected to raise interest rates to 3.5% in 2006 and by another 50 basis points at the beginning of 2007.

## Spain

### A gradual adjustment which is taking its time

Despite renewed dynamism in the first half of 2006, the current growth cycle, the longest and most intense of the last 35 years, will gradually become more moderate in the coming quarters in response to the weaker spirit of the factors supporting company and household spending. Although the increase in employment will continue to hold up real household income and wealth, there are factors pointing to their becoming more moderate. Firstly, although financial conditions will continue to be accommodating, they are gradually becoming tougher. Moreover, the economy's greater sensitivity to changes in interest rates in view of the higher level of indebtedness, will limit the growth of household demand. Moreover, the deceleration of housing prices and the sustained increase in inflation at rates of between 3.5% and 4% are holding back the increase in household wealth and real income. The moderation of household spending will be more intense than the boost already coming from the improvement in foreign demand. This boost to goods and services exports will offset the deterioration in the price-competitiveness of foreign sales. However, the continual increase in prices in the domestic market in comparison with imports will favour the growth of foreign goods and services. With all of this, in 2006 the GDP is expected to grow above the 3.4% of 2005, and to slow to 3.0% in 2007.

### Improvement in the economic situation: employment, indebtedness and foreign demand

With annual GDP growth of 3.5% in the first quarter of the year, the Spanish economy was as dynamic as it had been in previous periods, underpinned by a 5.0% contribution from domestic demand, partially offset by the foreign sector detracting 1.5 points. In the first half of 2006, different activity indicators, especially the real estate sector, employment and indebtedness, outstripped the expectations in force at the end of 2005, which were consistent with a scenario of gradual slowing as from

Chart 1.5.  
EMU: Inflation

Year-on-year rate



■ HCPI  
■ Core inflation  
Source: Eurostat

Chart 1.6.  
IA BBVA - Spain

Synthetic indicator of the state of the Spanish economy



■ May.06  
■ Dec.05  
Source: BBVA Economic Research Department

Chart 1.7.  
Real household income and wealth  
Annual increase



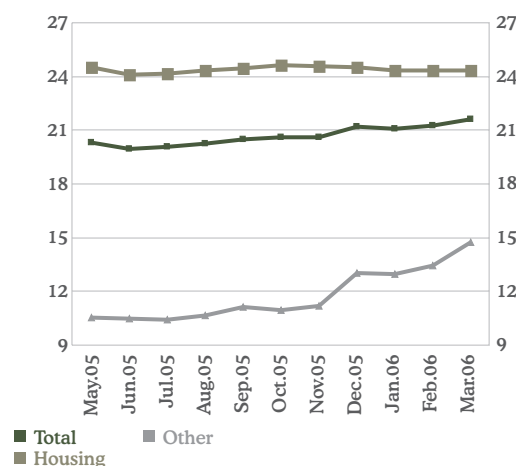
■ Wealth, right  
■ Disposable income, left

Source: BBVA Economic Research Department



Chart 1.8.  
Household lending

annual increase



Source: Bank of Spain

Table 1.1. Summary of Spanish economic forecasts

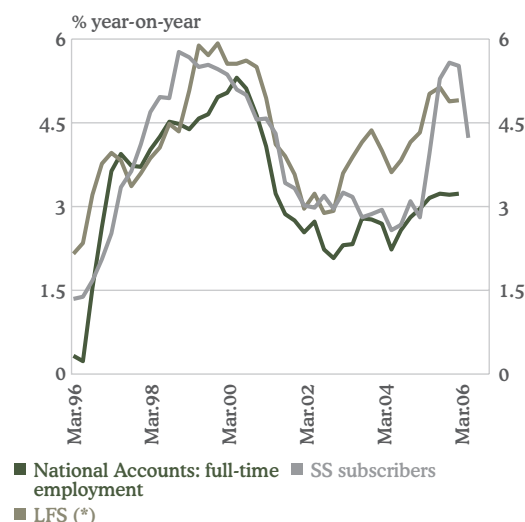
(annual variation rates in percentages, unless otherwise indicated)

	2003	2004	2005	2006	2007
GDP at 2000 prices	3.0	3.1	3.4	3.6	3.0
Private Consumption	2.6	4.4	4.4	3.8	3.2
Public Consumption	4.8	6.0	4.5	4.9	5.0
Investment	5.6	4.9	7.3	6.5	4.6
Capital goods	2.5	3.7	9.5	8.3	6.4
Construction	6.3	5.5	6.1	6.1	3.7
Housing	9.5	6.0	6.0	7.5	4.5
Other	3.5	5.1	6.1	4.9	3.0
Variation in stocks (*)	0.0	0.0	0.0	0.0	0.0
Domestic demand (*)	3.8	4.9	5.3	5.1	4.2
Exports	3.6	3.3	1.0	6.7	8.7
Imports	6.0	9.3	7.1	9.5	9.7
Foreign balance (*)	-0.8	-1.8	-1.9	-1.5	-1.2
CPI	3.0	3.0	3.4	3.7	2.7
Spread with the EMU	1.0	0.9	1.2	1.5	0.8
CNTR Employment (full-time)	2.5	2.6	3.1	3.1	3.0
Unemployment Rate	11.5	11.0	9.2	8.4	7.9
Balance on Current Account (% GDP)	-3.5	-5.3	-7.4	-8.0	-8.1

Source: Official bodies and BBVA

(\*) Contribution to GDP growth.

Chart 1.9.  
Growth of employment



Source: INE, Ministry of Labour and BBVA Economic Research Department

the first half of 2006. Thus, the indicator of the state of the Spanish economy drawn up by BBVA, the IA BBVA<sup>1</sup>, has been on a rising trend from the beginning of 2005 and, although it seems to slow in the middle of 2006, it outperforms the expectations of the end of 2005.

The factors determining household consumption, disposable income and wealth are increasing more moderately, in line with the behaviour of real wage income (employment and real wages) and the continuous slowdown in housing prices. Thus, the scenario of a slowdown in household consumption, which has been observed since the second half of 2004 and will continue in 2006 and 2007, is consolidated. However, the rapid growth of consumer credit in the first half of 2006 could be helping to hold back moderation in spending, which will be less acute than had been expected.

Mortgages are also increasing in a sustained fashion and this, in a context of slower housing prices, points to an increase in household demand for financing. At the same time, rises are observed on some real estate indicators for demand (appraisals) and activity (housing starts), which are consistent with greater buoyancy in housing construction than anticipated. Domestic demand factors, the same ones as for household consumption, justify a medium-term scenario of gradual adjustment for the sector. Thus, investment in housing will foreseeably register its largest increase since 2003, to slow also more acutely in 2007, when the tougher financial conditions start to be more strongly felt. However, employment will continue to be the main factor supporting disposable household income, with growth rates of nearly 3% registered in 2005 in terms of the National Accounts, the highest rate of the last three years. The continual decreases in the real unit labour cost favour more intensive use of the labour factor. Moreover, the extraordinary process of immigrant regularization in 2005 normalized the situation of 573,000 workers, 3% of Social Security subscribers at the end of the year.

In contrast with this scenario of moderation on the domestic front, foreign demand will make a positive contribution to the growth of goods and services and corporate investment. The sharp increase in exports shown in the National Accounts in the first quarter of 2006, with the highest growth rate of the last five years, responds to the improvement in world goods trade. In addition, the increases in goods sales are currently particularly large in destinations outside the EU and amongst capital goods for transport. In these circumstances, the income effect of stronger demand amply offsets the slower trend in respect of the increase in Spain's relative prices. In a context where the low level of the cost of capital employed will begin to rise and the positive financial situation of businesses will be maintained, corporate investment will continue to grow at historically high levels, but without reaching the rate of 2005. Here, the qualitative indicators reflect faster growth of industrial orders from abroad than from the domestic market.

<sup>1</sup> It reflects the state of the Spanish economy by aggregating in a single series the information provided by different indicators of production, spending, expectations, investment, employment and construction. It is a standardized indicator with a zero average and typical unit deviation, so that positive (negative) levels equate with growth rates higher (lower) than tendential growth.



## Inflation: indirect effects, but not from a second round

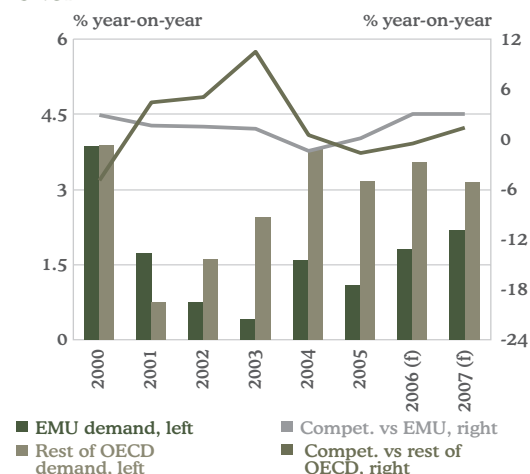
In an environment where the start of the adjustment of spending in the economy is taking its time and given the sustained pressure from the price of commodities, particularly oil, in recent quarters, expected inflation for 2006 rises to 3.7%, 0.3 points more than the 2005 figure, and is put at 2.7% in 2007. The profile expected is adjusted to the outlook for oil prices, which should fall from the present levels of over 70\$/barrel to around 60 dollars in December 2006 and 55 dollars at the end of 2007.

Over and above the performance of the total CPI, BBVA's Tendency Index, which eliminates the direct impact of energy and other volatile items from the basket, will rise by 3.0% and 3.2% in 2006 and 2007 respectively, rates unseen since 2003. Between 2002 and 2005, industrial manufacturing prices, which represent nearly half of the Tendency CPI, slowed from 2.5% to 1%, as a result of the virtual stagnation of commodities prices in euros until 2004 and the growing globalization of trade. The indirect effects of higher commodities prices since the middle of 2004 are being passed through to the consumer prices of manufactured products in a scenario of sustained growth of spending. However, no second-round effects through a price-wages spiral, of which there is no evidence, are to be expected. The sharp increase in the activity rate, with the arrival of immigrants and women joining the labour market, has led to a negative wage drift which has meant that the increase in the wage cost per worker is lower than negotiated in collective agreements. This reduces the rigidity of the Spanish economy's wage-formation process and favours the persistence of inflation through safeguard clauses.

Chart 1.10.

## Goods exports, demand and competitiveness

With respect to the EMU and the Rest of the OECD



Source: Ameco and BBVA Economic Research Department

Chart 1.11.

## Inflation



Source: INE and BBVA Economic Research Department

Chart 1.12.

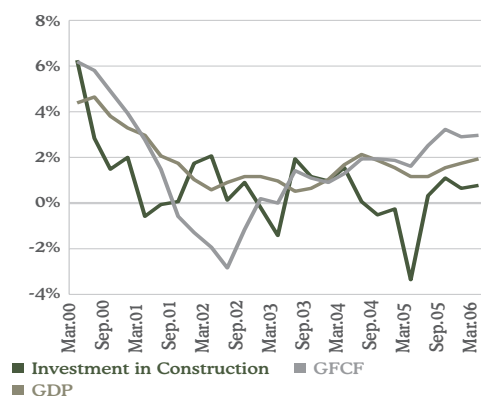
## Wage growth



Source: Ministry of Labour and BBVA Economic Research Department

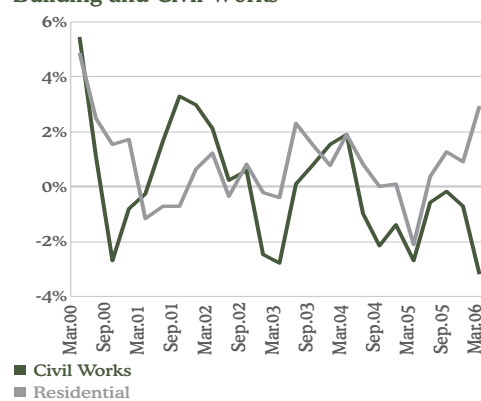
Chart 2.1.  
Activity in Construction. EMU

Annual rates of variation



Source: Eurostat and BBVA Economic Research Department

Chart 2.2.  
Performance of Construction  
Building and Civil Works



Source: Eurostat and BBVA Economic Research Department

Chart 2.3.  
Residential Building: permits

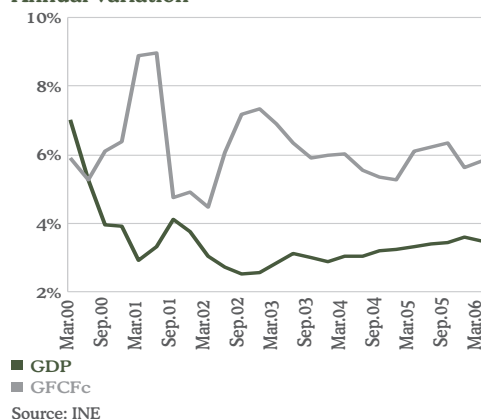
Annual change



Source: Eurostat and BBVA Economic Research Department

Chart 2.4.  
Spain: GDP and GFCF in Construction

Annual variation



Source: INE

## 2. Activity in construction

### Promising performance in construction in the EMU

In the early months of 2006, the activity indicators for the construction segment rose slightly in the European Monetary Union as a whole, largely driven by the increase in residential investment. The greater buoyancy of activity in construction is consistent with faster economic growth and the increase in fixed capital which occurred in the EMU in the first quarter of the year. The positive opinions of sector players as regards the performance of backlog orders, which are at the good levels they registered at the beginning of the decade, are pointing to an increase in sector activity in the course of 2006, supported by good momentum in the residential segment.

In the first half of 2006, sector activity continued to present positive growth rates for the third quarter in succession, with a year-on-year increase of 0.9% in the first three months of the year. This advance was the result of expansion in residential activity, which grew at a year-on-year rate of 2.9% and amply offset the 3.4% downturn in investment in civil works executed in the first quarter of this year.

The downturn in civil works was due more to the impact of the adverse weather which hit the centre of Europe at the beginning of the year than to economic factors and, consequently, the segment can be expected to pick up over the year. The good performance of backlog orders in the construction industry anticipates an improvement in the sector as a whole in 2006, which will last into 2007, and will contribute to stronger growth in the EMU, especially in central European countries.

### Residential development takes off in Europe

This improvement in activity in the second half of 2005 stemmed from the increase in the industry's backlog orders which, after last year's summer break, were very dynamic, especially in the residential segment. The increase in public investment in infrastructures and stronger residential demand are leading to an increase in the construction business in Europe and, especially in EMU countries. In fact, the reactivation of public works in the United Kingdom and the slower downturn in production in Germany and the countries in its environment explain a good part of the sector recovery.

As a result of this situation, the opinion of sector employers is at the most optimistic levels of the last ten years, both as regards backlog orders and in terms of confidence in the sector. This optimism was also clearly reflected in the number of real estate projects to be developed, as is shown by the 9.8% increase in the number of houses endorsed for construction in the first quarter in the first quarter of 2006 in the EMU as a whole.

From a geographical point of view, the residential segment will mainly be driven by the leading economies in the centre of Europe. In the first quarter of the year, the number of housing endorsements increased by 12% in France and 17% in Germany. In contrast, it was the smaller economies where residential development diminished, as is the case of Greece, Portugal, Finland and Sweden, where the number of houses to be started in 2006 will be lower than in 2005.

## Renewed dynamism of construction in Spain

In the early months of 2006, construction showed renewed buoyancy in Spain. This led to a more dynamic growth rate than in the previous quarter and everything suggests that this trend will be maintained over the year. Construction continues to be one of the most active segments of the Spanish economy.

So far this year, the leading activity indicators have been rising at a faster pace, especially in the residential segment. Over the year as a whole, the building segment can be expected to pick up, while civil works will grow slightly more slowly, which implies that, in National Accounting terms, the sector will advance at an average rate of 6.1% in 2006, similar to the rate registered in 2005. In 2007, the trend is pointing to slower growth in both building and civil works, which will lead construction to fall to an annual increase of around 3.7%.

Supporting this performance, the figures for both the increase in the labour force in construction and for materials consumption in the early months of 2006 show more dynamic growth rates than in 2005, with an increase of 7.3% in employment in the first quarter and of 9% in cement consumption in the first five months of the year.

This positive situation is clearly reflected in sector confidence indicators, which are at a relatively optimistic moment. Contributing to this is the fact that backlog orders in hand guarantee a total of nearly 600 days of work for the sector, 50% more than the average work companies had in the second half of the nineties. The view of sector companies is positive in both building and civil works and the opinion poll suggests that this situation will continue throughout the year, although it is more positive for housing than for the rest of the sector.

The growth of construction activity has led costs in the sector to increase more than costs in the economy as a whole, especially in the case of materials and sundry supplies, which grew at an average rate of 7% in the first four months of 2006. However, labour costs performed more in line with other sectors, rising slightly below inflation. In 2006 cost tensions can be expected to persist in the construction sector, especially in materials.

## Investment in civil engineering slows

The growing role played by private initiative in infrastructure financing is making it possible to decouple the pace of investment in civil works from the budgetary cycle of the different administrations, which is lending greater stability to a segment that used to be characterized by very fluctuating performance. This situation brings improvements for investment that result in an increase in activity.

Thus, in the first quarter of this year, investment in civil works grew at a rate of 4.1%, presenting a profile of gentle moderation with respect to 2005, according to what can be seen in the National Accounting figures. For the year as a whole, the segment will grow at an average rate of nearly 5%, one point below the average rate observed in 2005.

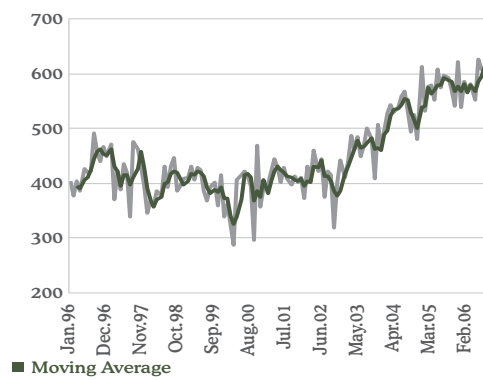
**Table 2.1. Construction**

Annual rates of variation

	2004	2005	2006	2007
GFCFc	5.5%	6.1%	6.1%	3.7%
Residential	6.0%	6.0%	7.6%	4.5%
Rest	5.1%	6.1%	4.9%	3.0%

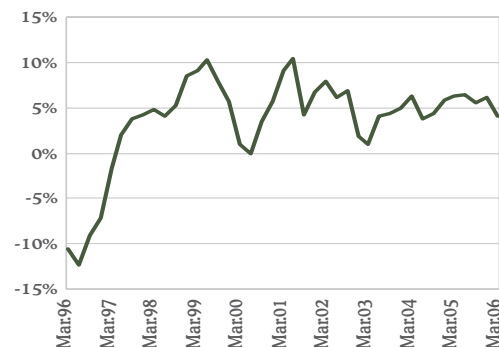
Source: INE and BBVA

**Chart 2.5.**  
**Days of Work Guaranteed**  
Construction Sector



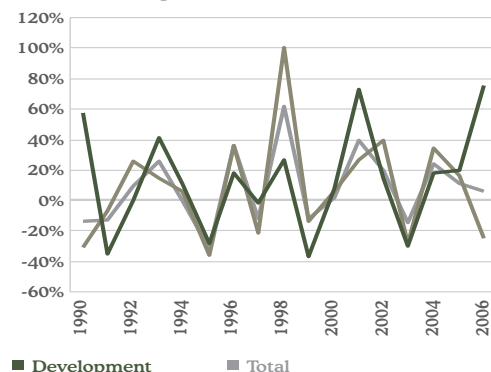
Source: Ministry of Industry and BBVA Economic Research Department

**Chart 2.6.**  
**Construction: Non-residential investment**  
Annual Variation (%)



Source: INE

**Chart 2.7.**  
**Official Tenders: Total, Infrastructures and Development**  
Annual variation (%)



Source: INE

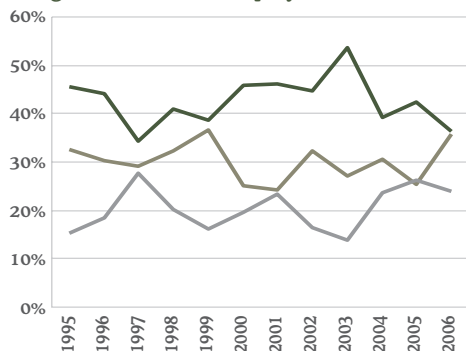
**Table 2.2. Official Tenders. Civil Engineering** Millions of euros

	Total	Railways, Roads & Urban Thoroughfares	Ports & Airports	Irrigation, Supply & Sanit	Land Develop	Other
2000	11,739,811	7,577,927	508,472	1,487,826	900,486	1,265,100
2001	16,340,638	9,612,257	835,376	1,894,958	1,557,370	2,440,677
2002	19,610,613	13,472,499	458,953	2,013,820	1,787,786	1,877,555
2003	16,706,348	9,665,804	1,086,387	2,515,502	1,268,329	2,170,326
2004	20,862,956	13,003,771	2,164,058	2,241,450	1,492,524	1,961,153
2005	23,100,681	15,126,997	1,172,354	3,066,620	1,799,661	1,935,049
01/05/05	7,405,999	5,213,166	575,705	669,132	502,939	445,057
01/05/06	7,864,891	3,906,157	374,327	1,649,619	884,190	1,050,598
Variation	6.20%	-25.07%	-34.98%	146.53%	75.80%	136.06%

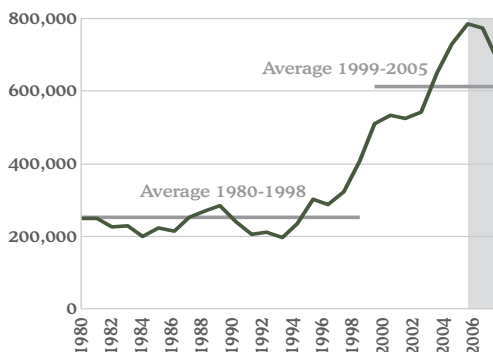
Source: Ministry of Public Works

**Chart 2.8. Civil Works Tenders**

Weight of the different players



Source: Ministry of Public Works and BBVA Economic Research Department

**Chart 2.9. Spain. Housing starts**

Source: Ministry of Public Works and BBVA.

**Table 2.3. Housing starts in Spain**

	Total Spain no.	Large Cities no.	Cities/ Total (%)	Resort Coast no.	Coast/ Total (%)
2000	594.820	58.060	9,8%	333.231	56,0%
2001	561.186	59.958	10,7%	312.857	55,7%
2002	575.546	62.748	10,9%	310.517	54,0%
2003	690.206	64.814	9,4%	377.832	54,7%
2004	739.620	50.461	6,8%	399.012	53,9%
2005	786.714	50.556	6,4%	419.264	53,3%
2006 (*)	775.000	45.000	5,8%	410.000	52,9%

(\*) The figures for the whole of 2006 are estimates using figures to April 2006

Source: Colegio de aparejadores and BBVA

Coast: Mediterranean, Canaries, Cadiz, Huelva

Large Cities: Madrid, Barcelona, Valencia, Seville, Zaragoza and Malaga

This increase in activity will come from both private and public investment. In this respect, after a year when public works tendered grew by over 10% in nominal terms, in the first four months of 2006 they increased at a year-on-year rate of 6.2%, maintaining the softly slowing profile that started in 2004. The downturn in investment in infrastructures and in ports and airports was relatively offset by the sharp increase in items more related to water treatment and land development, which have been growing fast since the middle of 2003.

In the first four months of 2006, the volume of works contracts tendered by public administrations and regional bodies totalled over 7,850 million euros, which was an increase of 6.2% with respect to the volume tendered in the first four months of 2005. The increase of nearly 150% in the amount of investments going to irrigation, sanitation and water supply and of 75% in the amount going to land development works, together with the reduction of 25% in the volume of investment in infrastructures and 35% in ports and airports, are the main features of the public works tenders held in the early months of 2006.

In the last fifteen years, the Central Administration has accounted for the greater part of tenders, with 45% of the total, followed by regional governments with 30% and local councils with 19%. However, as municipal elections draw nearer, local bodies are increasing their investments and this year they account for nearly 60% of the total. Thus, in the early months of 2006, the lead in tenders was shared evenly, at around 36%, by the State and the regional governments, followed by local councils with 24%. This increase in public tenders in 2006 will also be supported by financing from European structural funds and private funding for some projects under way, so that activity in the civil works segment will continue to grow in 2006, albeit at a slower pace than in 2005.

## Residential investment increases: over 800,000 houses are projected

Real estate development in Spain had a new lease of life in the early months of 2006. This was clearly reflected in the increase in activity in the residential segment, which grew at a rate of 7.4%, nearly a point and a half more than the 2005 average. In view of the large number of housing starts in previous quarters, residential investment will continue to grow at a rate of 7.6% in 2006, and the number of houses completed will increase over the year. Since the last quarter of 2005 and in the early months of 2006, housing starts in Spain increased and this will support the trend.

In the twelve months accumulated up until April 2006, more than 807,000 houses were endorsed, giving an increase of 6.6%. Less buoyant demand will lead the pace of housing starts to slow gently to 775,000 in 2006 as a whole, and will bring a moderate adjustment process in the sector. This adjustment will be more noticeable in the markets on the Mediterranean coast and in the large cities.

In some large cities, the shortage of urban land is one of the elements that is leading to a downturn in real estate development, which is moving to adjoining towns or provinces. Here, Madrid is a clear example: while in the capital the number of endorsements has fallen by nearly 30% in the last three years, in neighbouring provinces they have doubled in the same period. This frontier effect can also be seen in smaller cities.

Both on the Balearic Islands and in the Canary Islands, real estate development has been more sluggish than in the country as a whole. In the Balearic Islands, the number of housing endorsements fell by 7.6% in the first four months of the year, while it increased by 1.1% on the Canary Islands. Performance was uneven on the Mediterranean coast, with an increase of nearly 25% in Murcia and stability in the Region of Valencia.

However, if the growing trend observed in the early months of the year continues, a total of 850,000 starts could be registered in 2006, which would be a sizeable increase in residential supply in a year when demand will slow. This last scenario implies a stronger risk of there being a sharp adjustment in the Spanish residential market.

In line with the trend of previous quarters, the number of houses completed in the first four months of 2006 increased by 14% with respect to the same figures the preceding year, thus exceeding 175,000 houses. Over the year as a whole, more than 550,000 new houses will be delivered, to rise to nearly 600,000 in 2007.

### Non-residential building picks up

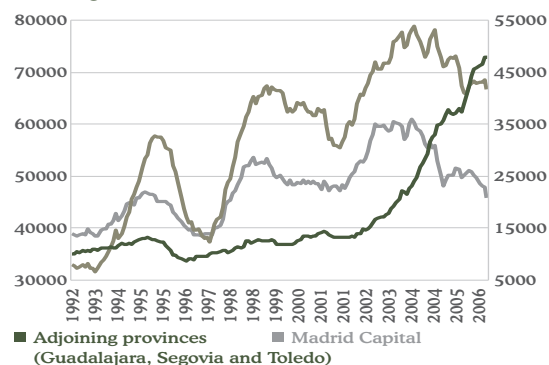
In the first four months of 2006, over 7.5 million square metres of non-residential area was endorsed in Spain, a 5.8% increase in year-on-year terms. The trend indicates that a total of 23 million square metres will be endorsed in 2006, of which 19% will correspond to industrial properties, 32% to space for commercial uses or warehouse purposes and 10% to offices.

In the first four months of the year, the area to be built for commercial purposes increased by 42%, to over 3 million square metres, while the space going to offices fell by 33% and accounted for a total of just over half a million square metres. The trend is likely to continue in the two segments, albeit at a slower pace. The development of industrial space will benefit from the expected increase in company investment in capital goods and, after a year of moderation, it will change trend and start to present positive rates once again.

Chart 2.10.

### Madrid and Adjoining Provinces:

#### Housing starts. Number

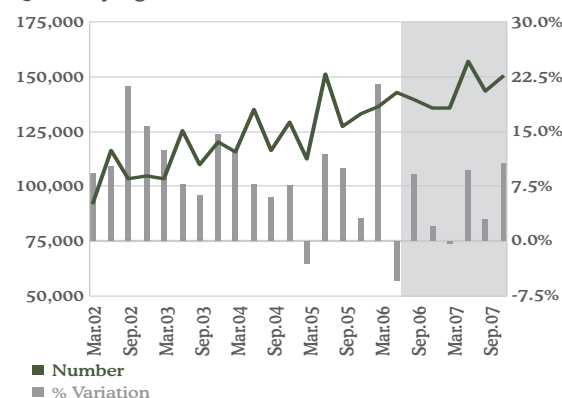


Source: Ministry of Public Works and BBVA Economic Research Department

Chart 2.11.

### Housing Completed

#### Quarterly figures. No. and % annual variation

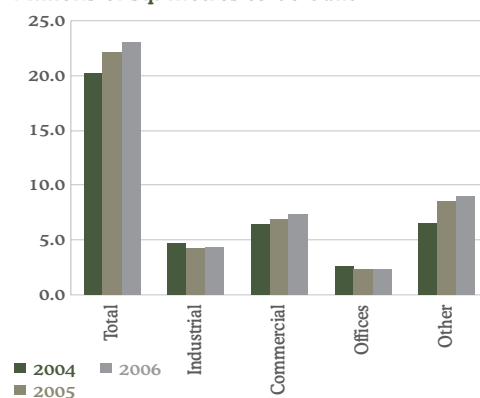


Source: Ministry of Public Works and BBVA Economic Research Department

Chart 2.12.

### Non-residential Building

#### Millions of sq. metres to be built



Source: Ministry of Public Works and BBVA Economic Research Department



# Land use planning and Economy

## Introduction

In the last thirty years, there have been three reforms in land legislation: the Act of 1976, the amended text of 1992 and the 1998 Act on valuations. The first two were promulgated after some years of sharp revaluations in real estate with diminishing demand and their main purpose was to “put an end to speculation over land”. They were both characterized by being relatively restrictive and gave local governments the powers required for intense intervention in the land market. The 1998 Act was born in a different context, after some years of falling prices and at a time of increasing demand. This Act was less restrictive and simply established common criteria in respect of planning valuations, leaving the local administrations to decide on the peculiarities of urban development. In the eight years this Act has been in force, a total of nearly 5 million houses have been started in Spain, a figure equivalent to 80% of the housing starts in the twenty years the two previous acts have been in force. If this Act had been more restrictive and prevented real estate development, the intense demand for properties would have pushed prices up much more in these past few years.

Although the three laws have permitted some development in market forces and have made it possible to transform some rustic land into urban land, none of them can claim to having completely stabilized housing prices.

## Intervention or market

Urban land is an economic asset that can be used for different purposes and, consequently, a mechanism must exist to assign uses and densities in the most efficient way possible to raise the frontier of society’s well-being to a maximum. The market may be left to do this or intervention or a mixture of the two may be chosen. It is a political decision that society must take in its different spheres.

Public intervention in the land market exists in one form or another in all the developed countries in the world and in nearly all semi-developed countries. In Spain, there is strong intervention in the land market and the legal framework makes it difficult for market forces to come into play.

## Bases for intervention

If we define a competitive market as one where:

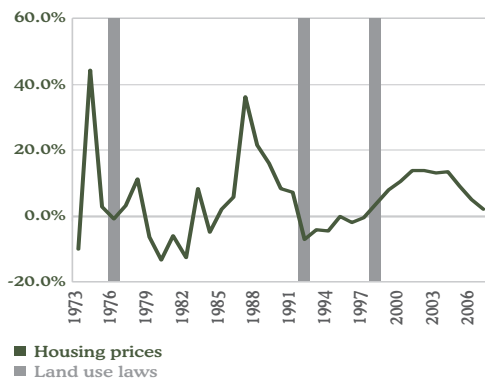
- There is a large number of buyers and sellers.
- Factors mobility is possible.
- The product is homogeneous.
- The players have sufficient information,

then, it can be said that the land market is typically uncompetitive because some of the conditions mentioned are frequently not fulfilled. It is clear that the characteristics related to the land asset (such as location, irremovability, etc.) affect the functioning of its own market, where these characteristics are the origin and justification of public intervention to regulate the said market. Broadly speaking, it has been said that the open market is not an efficient system for determining the best spatial location that economic activities demand and thus, administrative intervention is necessary. The basic argument is that administrative intervention would prevent the “failures” that occur in the market. These “market failures” can be grouped into the following categories:

- The existence of externalities associated with our actions on land means that considerable differences arise between the valuation of the costs and benefits made by the private and public sectors. In many cases, interventions in land (for example, the creation of a road or a green area) imply the existence of both positive and negative externalities, which are difficult to quantify and are not generally reflected in prices. Consequently, the market, which uses prices as a decision-taking mechanism, would not be efficient for the location of activities.
- Some interventions in land and some real estate assets have the characteristics of a public asset (sewerage network, parks, libraries) and, thus, the market is not the most efficient system to provide these because of the difficulty of establishing a price that reflects the fact it is a community asset. The market mechanism does not allocate public assets adequately, while administrative intervention, at any of its levels, can establish a level of allocation of public assets that is satisfactory to everyone. The provision of public assets justifies a certain degree of administrative intervention.

### Housing prices and land use laws

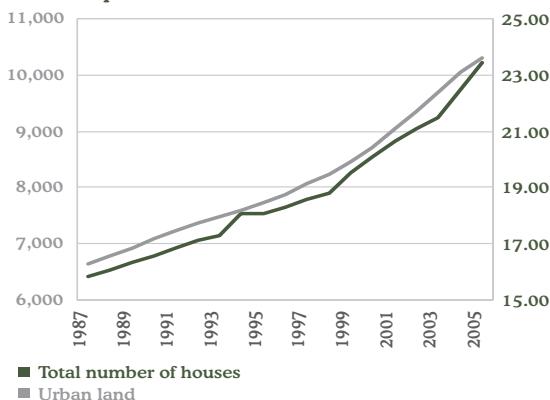
Real rate of variation (%) and law come into effect



Source: BBVA Economic Research Department

### Urban land and total number of houses

Millions of sq. metres and of houses



Source: BoS, Catastro and BBVA.

- Another argument used is the lack of competition in the land market; i.e. the existence of monopolies implies the inexistence of markets *de facto*. It has frequently been alleged that there is a monopoly of land supply in the land market because ownership of urban land tends to be concentrated in just a few hands. Thus, the monopolistic capacity of the few owners of urban land implies that there is strong control over the quantity of land on offer and, consequently, over its price. This idea is supported by the fact that each plot of land is a unique unrepeatable asset, which gives its owner a certain monopolistic power over its destination and price. In this case, intervention would try to prevent individual interests prevailing over collective interests.
- Lastly, the lack of transparency and the scant information existing in respect of land and its development are two obstacles to the correct functioning of the market, which administrative intervention could resolve. It is argued that the persistent asymmetry of the information does not work in favour of the essential transparency required for a mature market to function correctly and to allocate resources efficiently.

The desire for public intervention in the land market has mainly been based on the above arguments, too often assuming that this intervention is benevolent and beneficial, without considering the real effects it has had over time.

### The costs of intervention

The public administration's regulation and intervention in the land market has involved costs and drawbacks which should be taken into account when it comes to choosing a particular land policy or other alternatives.

These costs could be summarized as:

- Public intervention, or failing that, the intervention of the planner, also comes up against information problems, especially when it comes to identifying social preferences, and to completely valuing all the costs and benefits arising from land policies.
- The land policies drawn up by the public administrations generally pursue multiple targets which may on occasion be in conflict with each other (for example, seeking to build up town centres and clear traffic jam at the same time, etc.). Establishing a set of priorities to achieve each objective over time can produce distortions which have pernicious effects on the land market.
- Administrative intervention does not guarantee the inexistence of monopolies in the land market; quite the contrary, if the planner's intervention implies that urban land supply is perfectly quantified and delimited by the "line" or planning limit, the monopolistic capacity of the landowners will increase because, given the increases in prices, they will not be threatened by new suppliers moving in. Delimiting the land to be developed restricts the capacity of choice.
- In many cases, the administration does not have the absolute capacity to develop land use policies and this can mean that

the goals desired (and with them the benefits pursued) are not achieved. In other cases, the administration is too rigid and fails to adapt quickly enough to brusque changes in demand, generating a certain artificial shortage of urban land which will have a negative effect on prices.

In short, it is not clear whether administrative intervention in the land market solves the problems it aims to. In fact, in view of its results in the last few decades in Spanish cities (where there is an obvious shortage of urban land, some of the highest urban densities in the West, traffic congestion, high property prices, etc.), it could be considered that the costs produced by this intervention have been greater than the benefits generated.

### Speculation and rent-seeking

Spanish legislation minimizes the role of the market and introduces some opacity in the process of developing Spanish cities. Strong intervention in land use planning has produced a shortage of land. In this context of a shortage, the economic agents speculate, seeking maximum profit within the existing legal and administrative framework. Local administrations have also contributed to this situation by taking part in the process.

Everyone knows that public intervention in the economy and its own working mechanisms can be the source of extraordinary high profits. The case of land is no exception: the processes for classifying and reclassifying land uses are mechanisms which make it possible to obtain high profits, in a single administrative act. And whenever there is income in potential, a seeker will appear and try to appropriate it, as is indicated in the "rent seeker" concept described by A. Krueger (1974).

The fact that some plots of land are included in the planning "line" gives them economic capacity, insofar as it is on these plots and not on others that real estate activity can be conducted. The potential income that can be obtained from these plots depends on how much is classified as building land, the purpose they will be used for and, more especially, their monopolistic position in the market. It is logical to believe that a rent seeker will have a strong incentive to influence the planning decision process in favour of his own interests and will try to ensure that it is the land selected by him and not others that is included within the "line".

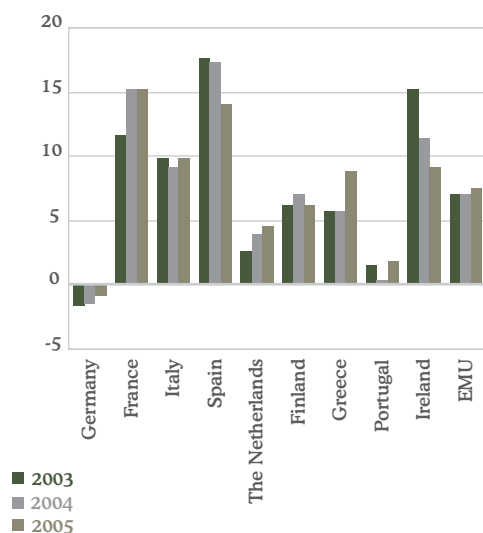
At the same time, local administrations have quite often had recourse to land use classifications and reclassifications as an extra source of revenue, thus decoupling planning decisions from the rationality targets which in theory justify public intervention in land.

The extra capital gains that end up in the hands of the "rent seekers" and the extraordinary municipal revenues obtained on classifications and reclassifications are not usually neutral in the formation of the end prices of real estate assets.

If social and economic efficiency is the goal, Spanish planning regulations should be more sensitive to the market and correct its failures.

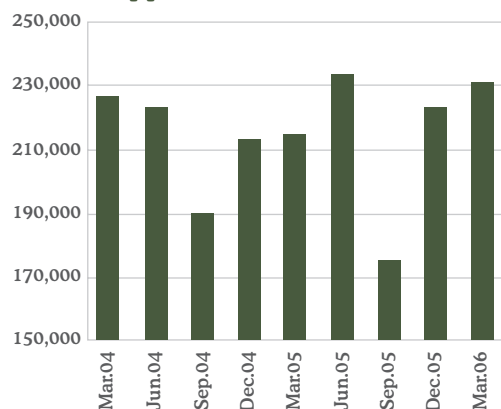


Chart 3.1.  
Increase in housing prices in  
the EMU



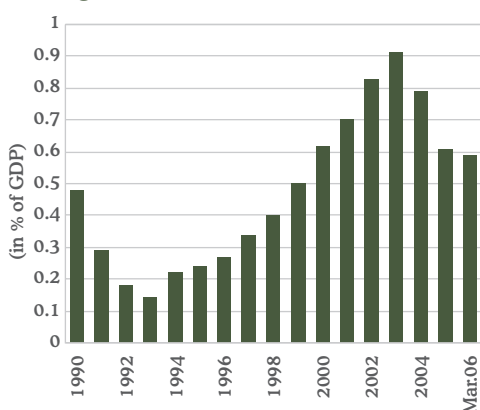
Source: European Central Bank

Chart 3.2.  
Houses appraised



Source: Ministry of Housing

Chart 3.3.  
Foreign investment in real estate



Source: Bank of Spain

## 3. The real estate market

### Moderation across the board in the real estate markets

At a global level, since the middle of 2005, signs of moderation have been observed in the most dynamic real estate markets, such as the US, France and Ireland. This slowdown is associated with the tightening-up of monetary policy that is taking place in the main economic regions and which has started to be gradually passed through to property prices, although they are still increasing at high rates in historical terms.

The cooling of housing demand which was observed throughout 2005 and in the early months of 2006 in the US, as a result of the change in the bias of the FED's monetary policy and the deterioration in affordability ratios, is leading to a slowdown in the residential market in terms of activity, transactions and rates of real estate appreciation. In this respect, in the first quarter of 2006, residential investment in the US increased by 5.8%, almost a point and a half below the 2005 average, housing transactions were down by nearly 5% and prices rose at a rate of 8.4%, nearly two points below the average rate observed in 2005. As a result of the more sluggish demand, the periods for selling housing have grown longer: by just over two months in the case of new housing, which takes 6.3 months to sell, and by just over a month in the case of existing houses.

In 2005 in the EMU, housing prices continued to rise at similar rates to in 2004, although the breakdown and nature of this rise have changed. The increases in prices in different EMU countries have been drawing closer to each other since the second half of 2005, because of the slowdown that is occurring in the most dynamic markets such as France, Spain and Ireland, and the acceleration in the least active markets, such as Germany, The Netherlands and Portugal, although relatively uneven behaviour continues to be observed in the Union's different markets. According to the figures available, this tendency towards standardization seems to have been confirmed in the first half of this year.

In the United Kingdom, where the market was early to slow, as described in the last issue, a small increase in the growth of housing prices has been observed in 2006, after they fell slightly in real terms in the last quarter of 2005.

### In Spain, "renewed dynamism" in the sector...

In Spain, some real estate market indicators showed an upturn in the early part of 2006: the number of transactions increased and the price rises were above their trend. Thus, the slowdown in the number of housing transactions observed in 2005 came to a halt in the first quarter of the year and the growth rate was higher than in previous quarters. The good performance of the economy in general and of employment in particular worked in favour of the number of houses sold in the first quarter of the year in Spain. However, the increase in the number of transactions registered was observed in the new housing segment, which may sometimes reflect past decisions, while sales of existing houses continue to register much more moderate growth rates. This increase in sales was also seen in the number of houses appraised: in the first quarter it rose by 8% to 231,000 houses.

In spite of these figures, market sentiment is advocating a gradual cooling in demand in the course of 2006, as is shown by the longer sales periods for developments and the increase in houses in stock which are still on sale. In fact, as Ministry of Housing figures show, not all the housing built is sold and this will eventually be reflected in a change in the dynamics of housing demand.

In addition to all of this, investment on the part of non-residents is falling and continues to lose weight in the economy, representing 0.59% of the GDP in the first quarter of 2006. In any event, the volume of net investment in real estate made by foreigners amounted to 1,115 million euros, a year-on-year decrease of 10%. However, for the second quarter in succession, the downturn in entries of investments in property has become more moderate; the figures accumulated over twelve months show a 15% reduction in the first three months as compared to the 18% decrease in the series in September last year.

### .....stops the deceleration in housing prices

The figures for the first quarter of 2006 indicate that the average price of housing was 1,887.6 euros per square metre in Spain, a year-on-year increase of 12%. Although the series showed slightly gentler growth than in the previous quarter, the analysis of the trend shows that this deceleration has come to a halt, and this is an additional risk for the expected adjustment.

The performance of housing prices in the first quarter of 2006 came as an upward surprise, with higher-than-expected increases in the main self-governing regions. Thus, in Catalunya, the Region of Valencia and the Basque Country, prices in the early months of 2006 increased more than in the last quarter of 2005. This breaks the more moderate price trend that had been observed in the last eight quarters.

In this respect, when the figures for the trends in the different self-governing regions are aggregated and weighted by the number of appraisals, a rise is observed in the performance of the price trend in the last two quarters. This would largely be explained by the greater contribution from Catalunya, which has increased its weight by one percentage point during the period, and from Madrid and the Region of Valencia, which both increased their weight by 0.6 percentage points.

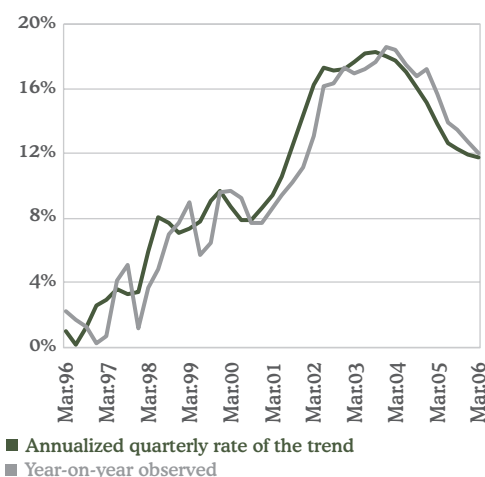
In relation to the type of housing, the variation in prices in the first quarter of 2006 was similar for new and existing housing, with an increase of 12% in both cases. The growth paths of these rates, however, have performed differently since the last quarter of 2005: while the increase in the price of existing houses fell from 14% to 12%, new housing appreciated by two points to reach 12%. Existing houses, which are less subject to cost restrictions, are more flexible in respect of market performance, with higher rises in prices than new housing at times of strong demand and smaller rises when demand slows.

**Table3.1. Annualized quarterly growth of the house prices trend**

	March.06	Dec.05	Variation
Spain	11.8%	12.0%	-0.2%
Andalusia	12.7%	12.7%	0.0%
Aragon	16.0%	13.3%	2.7%
Asturias	9.4%	9.6%	-0.2%
Balearic Islands	13.5%	10.5%	3.0%
Canary Islands	9.1%	7.9%	1.2%
Cantabria	18.1%	12.2%	5.9%
C-La Mancha	12.1%	11.0%	1.1%
C-Leon	12.4%	10.7%	1.7%
Catalunya	16.4%	13.2%	3.2%
Region of Valencia	16.0%	13.8%	2.1%
Extremadura	9.4%	9.7%	-0.3%
Galicia	15.3%	15.4%	0.0%
Madrid	9.9%	8.6%	1.2%
Murcia	9.3%	10.2%	-0.8%
Navarre	8.7%	9.1%	-0.4%
Basque Country	14.8%	11.3%	3.4%
La Rioja	13.8%	13.3%	0.4%

Source: BBVA Economic Research Department

**Chart 3.4.**  
**Price of open-market housing**  
**% year-on-year variation**



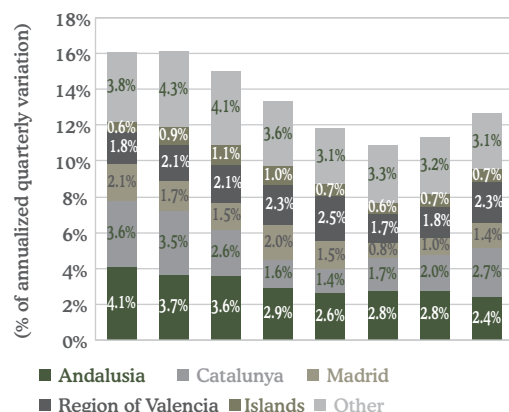
Source: BBVA Economic Research Department

**Chart 3.5.**  
**Housing prices**  
**% year-on-year variation**



Source: BBVA Economic Research Department

Chart 3.6.  
Contributions to the housing  
price trend



Source: BBVA Economic Research Department

## In 2006 affordability indicators will undergo the greatest deterioration this decade

The pace of the increase in housing prices and the rises in interest rates which are taking place in the money markets, are leading to a deterioration in the housing affordability ratios, the worst in the last eleven years. In this respect, the 2006 figures show that a household with average income would need the equivalent of 5.6 years' gross income to buy an average home, as compared to the 5.2 years necessary in 2005.

When these financial conditions are weighted to calculate the effort required to buy a home, the deterioration is greater when the increase in mortgage rates so far this year is taken into account. Thus, in 2006 paying the mortgage instalments necessary to acquire an average home on the market will imply nearly 23% of weighted income, when the payments are adjusted for tax, while in 2005 the average was below 20%. The forecasts for 2007 shows that this indicator will deteriorate by just over 2 percentage points.

Equally, the purchasing power of the average Spanish household will feel the effects of the tougher financial conditions, which will lead to an average 3% reduction in households' purchasing power, to some 210,000 thousand euros, thus drawing near to the average housing price observed in the market. This stagnation in households' purchasing power will further curb residential demand, which is very much based on expectations.

## The market will continue to slow in 2006... but more gently than expected

In the last two quarters, the gradual deceleration in housing prices has come to a halt. This renewed dynamism in prices is the response to a reactivation in demand which has been reflected in the increase in transactions and has brought the slowdown in housing prices to a halt.

However, the market' determining factors continue to point to a soft slowdown in the market. The sharp deterioration in affordability indicators as a result of the increase in interest rates, in a context of economic deceleration and the exhaustion of extraordinary demand shocks (emancipation of the baby-boom generation, immigration, employment and financial conditions) should work in favour of a return to the path of gradual deceleration which had been observed since the end of 2003. Thus, the development of housing can be expected to adapt to the new conditions of demand in order to allow a soft landing for housing prices.

Table 3.1. Affordability indicators

	Wages	Employed by household	Household wage income	Price of a 90m <sup>2</sup> home (1)	Price/Wages	Loan Interest rate	Loan Maturity	Loan instalment/Household wage income	Affordable home (€)* (2)	BBVA Indicator (2)/(1)
Promedio 1995-1999	14,574.6	1.36	19,916	65,710	3.30	7.7%	18	27.5	86,493	1.3
2000	15,776.4	1.51	23,835	79,220	3.32	5.8%	22	21.4	123,426	1.6
2001	16,248.2	1.54	25,038	87,030	3.48	5.8%	23	22.2	130,467	1.5
2002	16,855.4	1.58	26,548	100,719	3.79	4.9%	23	21.9	153,130	1.5
2003	17,538.9	1.58	27,740	118,465	4.27	3.7%	24	21.9	180,374	1.5
2004	18,076.2	1.59	28,801	139,136	4.83	3.4%	24	23.6	196,751	1.4
2005	18,549.8	1.63	30,325	158,490	5.23	3.4%	25	24.6	214,851	1.4
2006(e)	19,043.3	1.64	31,268	175,080	5.60	4.2%	27	28.0	208,738	1.2
2007(e)	19,548.0	1.64	32,096	186,425	5.81	4.9%	28	30.5	203,433	1.1

\* The estimate is for a home that could be afforded if one third of wage income goes to paying the instalment of a loan for 80% of the value of the home in market conditions at each moment in time.  
Source: BBVA

## An indicator of real estate crises

Paul van den Noord, an OECD economist has just published a working paper ("Are House Prices Nearing a Peak? A Probit Analysis for 17 OECD Countries") which proposes an econometric model for estimating the probability of property prices "peaking" in developed countries.

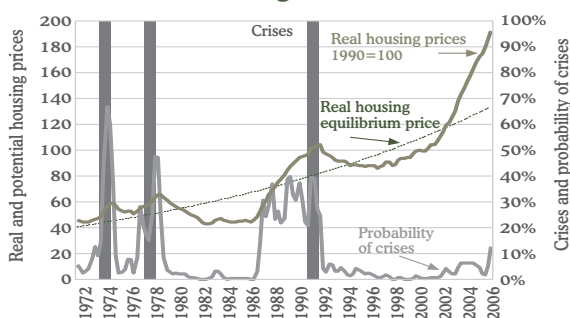
The model defines a "property peak" as one which is preceded by six quarters when the cumulative increase in the price of housing is more than 15% in real terms and is followed by six quarters when there are decreases in real housing prices. The model relates the probability of there being a real estate crisis with:

- past performance of housing prices (such as acceleration in the performance of the price),
- the house price gap defined as the difference between the current price and the trend and
- nominal long-term interest rates (which affect the cost of the debt).

The results for Spain are summarized in chart 1, which shows the evolution of the probabilities estimated by the model, the periods of "property peaks", the behaviour of real housing prices and the trend.

As can be observed in the chart, in Spain's case, the series shows three "peaks": one corresponding to the period 1973Q3-1974Q2, one to 1977Q2-1978Q1 and the last one observed in 1990Q4-1991Q3, all of them shaded in on the chart. In these periods, after observing cumulative increases of 17%-20% in real housing prices in the six preceding quarters, there was a turnaround in price behaviour and in the six successive periods cumulative downturns of around 10%-12% in real terms were observed.

**Comparison of Crisis Probability vs Evolution of Housing Prices**



Source: OECD and BBVA

This positive trend is a pattern that is repeated in 16 of the 17 OECD countries analyzed, with Germany the only exception in the period observed (1970Q1-2005Q4). To calculate long-term growth, a simple regression model was used, the Ordinary Squared Minimums, on the logarithm for the real housing price. Trend calculated in this way for Spain would be around 3.5% per annum. These appreciation trend is slightly higher than the average OECD increases, which are at an annual average of around 3%. Despite the simplicity

of the estimate and the limitations of the model as population is not taken into account, the positive evolution of the equilibrium price trend becomes a fundamental factor for explaining the existence of real estate investment funds and companies as long-term investment instruments.

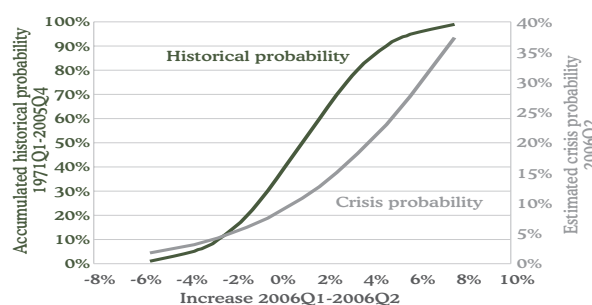
According to the model, with the latest figures drawn up by the Ministry of Housing where there is an increase of 12% in the price of the square metre of open-market houses appraised in the first quarter of 2006, the probability of real housing prices falling in the next six quarters is of just over 10%.

A simple exercise the model enables us to do is to infer the possible probabilities of a real estate crisis in the second quarter of 2006, conditioned to future scenarios for housing prices in the said quarter (yet to be published).

Assuming that the future distribution of the price of housing is similar to what was observed in the past (characterized as normal distribution), the model makes it possible to estimate crisis probabilities for the coming quarters of 2006. Given the current interest rate levels and the recent performance of housing prices, the model indicates that there should be quarterly increases in housing prices of around 5% or annual increases of around 20% in 2006 so that the probability of an adjustment in prices occurring would be of 40%.

The results for the year are shown in the chart below. The left-hand axis shows the accumulated historical probability of each of the quarterly increases in housing prices in Spain, while the right-hand axis shows the probability of crisis estimated by the model for each of these increases.

**Probability of Real Estate Crisis**  
Historical comparison and Probit model

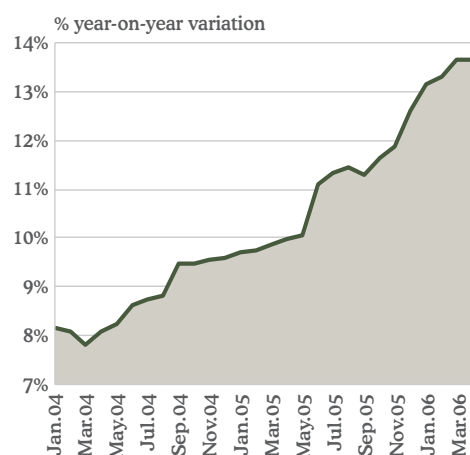


Source: BBVA

However, it is worth considering that although the model "gives" intuitive results when it comes to estimating the probabilities of crisis or real estate peaks (this grows with increases in interest rates and faster growth of housing prices), and fits in very well with the first two crises (1973-1977), it was not so accurate in the 1990 crisis, where it began to "show" significant crisis probabilities as from 1985, five years before the peak occurred.

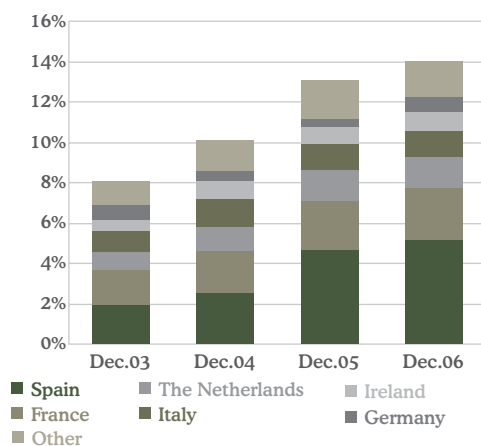


Chart 4.1.  
Lending for house purchase in the EMU



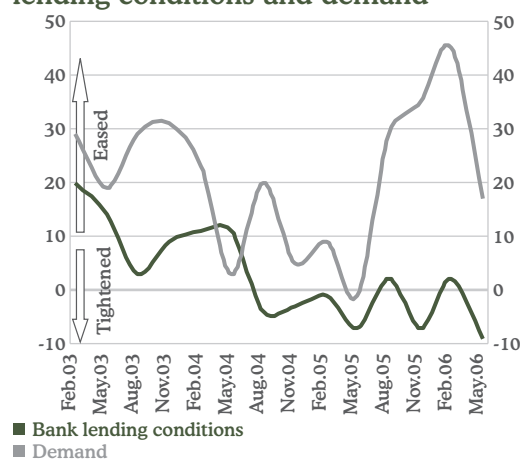
Source: European Central Bank

Chart 4.2.  
Contributions to the growth of lending for house purchase in Europe



Source: BBVA Economic Research Department

Chart 4.3.  
EMU loans for house purchase: bank lending conditions and demand



Source: European Central Bank

## 4. Real estate financing

### European mortgage growth focused on some countries

Lending to the private sector in the EMU continued to present an accelerating profile, with rates of variation of nearly two digits in the case of households. Financing for house purchase accounts for around 70% of the loans granted to households and this implies that the household lending trend in the euro zone is a faithful reflection of the performance of mortgage financing. Thus, loans for house purchase have grown faster than other lending since 2000 and increased at rates of 12-13% in the first five months of 2006.

However, the more dynamic performance seen in aggregated mortgage loans in the euro zone is explained by the performance in Belgium, Germany, Spain, France, Ireland and the Netherlands, countries where real estate financing for households grew faster in the first five months of the year. In contrast, Greece, Italy, Portugal, Austria and Finland registered growth rates which were similar to at the end of 2005, or even lower. Nonetheless, it is important to point out that in every case, with the exception of Germany, the variation rates in lending for house purchase continued to register double-digit nominal increases. In fact, the significant dimensions of the German market, the source of nearly a third of EMU financing, together with its modest, albeit faster, growth (year-on-year 2.3% in May, as compared to 1.2% in December) gives the financing aggregate for the whole of the euro zone a downward bias.

Consequently, it is interesting to analyze how far the recovery in mortgage financing we are witnessing is the result of the performance of just a few countries. Chart 4.2 shows the contribution of the main markets in the euro zone to the aggregate's year-on-year growth rate. As can be observed, three markets alone, Spanish, France and The Netherlands, account for 9 p.p. of the 13.5 p.p. increase in lending for house purchase up until May 2006<sup>1</sup>. Thus, in a scenario of gradual deceleration of lending for housing in Spain, maintaining or increasing mortgage growth rates in the EMU will require other countries to forcefully take over in respect of financing.

The probability of this being so is high, considering the recent performance of the EMU's survey on bank loans. Between January and April this year, after slightly restrictive behaviour in the preceding period, European banks eased their mortgage conditions. In relation to previous quarters, the financial institutions considered that the improvements in the cost of financing and the change in outlook for both the economy as a whole and for the real estate sector, justified easing lending standards. In contrast, the extremely expansive tone of demand they perceived at the end of 2005 has become more moderate, although it is still clearly positive. The survey on bank loans drawn up for Germany gives a similar profile for demand for lending, although it is worth highlighting the notable change that has taken place in German banks' lending standards, which have moved towards much more eased thresholds than at the end of last year.

The relatively optimistic outlook for European banks as regards mortgages contrasts with a macroeconomic environment where

<sup>1</sup> In the case of Spain, it should be remembered that this information overestimates the increase observed as a result of the impact Circular 4/2004 had on the balance of mortgages.

financial conditions have continued to be tightened up. However, the increases in official interest rates which have taken place since the end of 2005 are affecting European economies in different ways. Although the countries in the euro zone have a common monetary policy, the pass-through of official interest rates to the interest rates on bank transactions is a process which involves different types of factors. One of the most important of these is the structure of mortgage rates. Thus, countries where floating rates predominate are much more sensitive to the behaviour of short rates, which implies that they are much more affected by the tone of monetary policy than mortgage systems where fixed rates are more common. In addition, as indicated in a recent study conducted by the ECB<sup>2</sup>, there are other important aspects that explain the speed of this pass-through, amongst which the ECB emphasizes the degree of competition existing in the banking sector.

Chart 4.6 shows the increase in mortgage rates in different European countries from the minimum observed in June 2005 and April 2006. Thus, as compared to an increase of 75 p.p. in the ECB's official rate, the mortgage rate in the EMU has only risen by 40 b.p. The time taken to include new monetary conditions in the cost of lending and the remuneration of deposits is well-known in economic literature. This phenomenon is even more evident if we consider that market interest rates, such as 12-month Euribor, to which a good part of mortgages are indexed in some countries such as Spain, rose by 112 b.p. during the period. Moreover, as the empirical studies show, there is a wide divergence between countries as a result of the effects of the structure and competitive environment of the mortgage market mentioned earlier. Thus, as the chart shows, the increases in mortgage rates on new transactions in the period considered ranged between Finland's 66 b.p. and France's 7 b.p. Within this range, with an increase of 61 b.p., Spain is one of the countries which is passing the increases in interest rates on to the new mortgages contracted to the greatest extent.

### Mortgage growth in Spain remains at around 24%

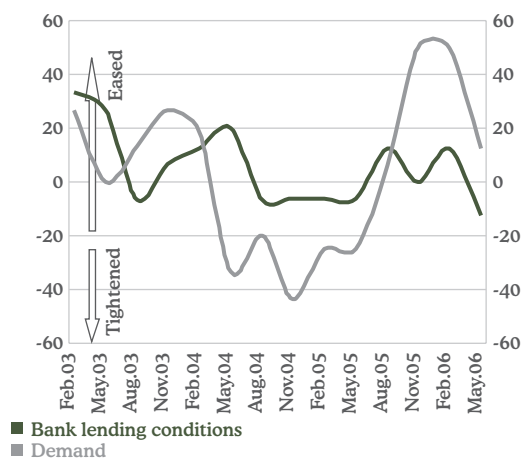
In Spain, credit granted to the private sector (including off-balance-sheet lending through securitization) continued to speed up to reach over 22% in April. Non-mortgage lending is acquiring increasing importance in this performance; it has clearly accelerated since the second half of last year. However, loans for house purchase continued to be the main reason for the growth of household lending, since nearly three of every four euros of funding that banks grant households go to this end.

In the early months of 2006, loans for house purchase maintained a growth rate of nearly 24%, in line with the performance this variable has registered since 2004. According to the INE (National Institute of Statistics), the amount of mortgages granted for housing in the first four months of the year performed even more dynamically, since it rose by around 2 p.p. to 26.9%. The buoyancy of the mortgage business is the result of a quantity effect and a price effect. In other words, market dynamism stemmed from the combination of an increase in the number of new transactions (+11.5% with respect to the previous year) and the larger amount of the average mortgage granted, which has increased by 1.7 p.p. so far this year to reach

<sup>2</sup> Kok Sorensen, C., T. Werner (2006) Bank interest rate pass-through in the euro area: A cross country comparison. ECB Working paper series n° 580/January 2006

Chart 4.4.

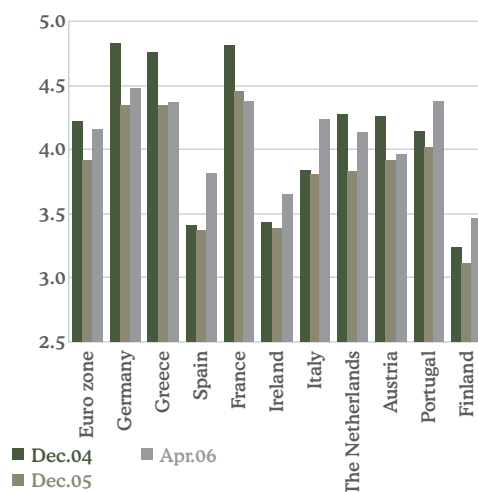
### Loans for house purchase in Germany: bank lending conditions and demand



Source: Bundesbank

Chart 4.5.

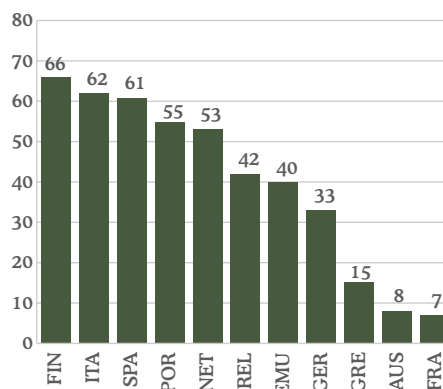
### APRC on new business - Lending to household for house purchase



Source: Eurostat

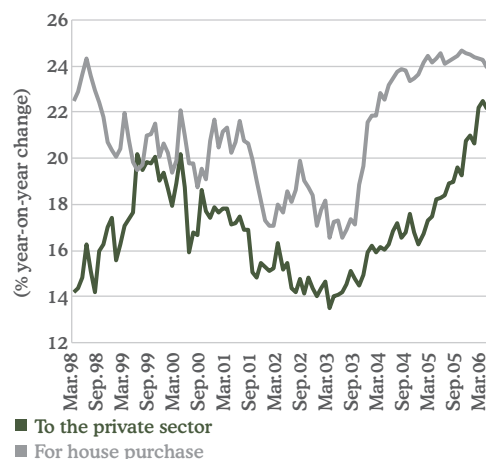
Chart 4.6.

### Increase in mortgage rates (April 2006- June 2005)



Source: BBVA Economic Research Department

Chart 4.7.  
**Increase in credit granted**  
(% year-on-year change)



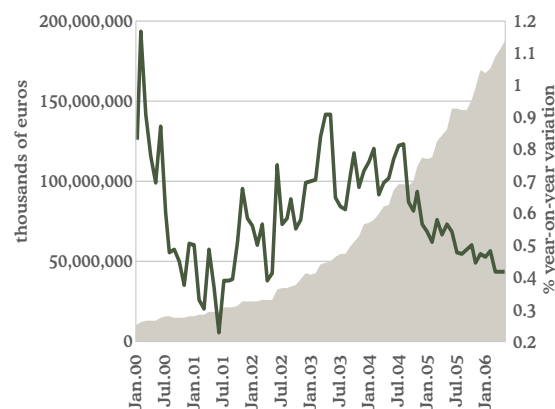
Source: Bank of Spain

Chart 4.8.  
**Annual variation in the average amount per mortgage and number of mortgages**  
Accumulated between January and April



Source: INE

Chart 4.9.  
**Asset securitization funds**



Source: Bank of Spain

13.8%. This last increase was basically due to increases in housing prices remaining at over two digits.

As the growth of bank deposits was insufficient to finance this sharp increase in mortgages, banks have continued to have recourse to the capital markets. Thus, securitization funds which are largely structured around mortgages, have maintained increases of over 40% so far this year, although their growth rate has slowed. Activity in the mortgage bond market has been even more intense, with the balance increasing by over 60% in the same period.

The buoyancy of credit granted for house purchase contrasts with the increasing cost of mortgage financing mentioned earlier and this shows that the change in European monetary policy's cycle is being offset by other factors. Firstly, despite the higher interest rates, monetary conditions in Spain are in no way neutral and this continues to favour borrowing.

Secondly, partly as a result of the above factor, the macroeconomic environment is still extremely favourable, especially as regards job creation, one of the main supports of the real estate sector.

Thirdly, it is important to remember that the performance of mortgages for households is to a good extent affected by the time-lag in the case of new housing between the decision to buy a home and taking possession of it. These types of transaction are reflected in household mortgage financing with a lag and this, together with the slow repayment of this type of financing because of the long maturity, implies that the balance of mortgages to households is extremely persistent.

Fourthly, the mortgage market continues to move in a very competitive environment. The latest survey on bank loans conducted in April 2006, shows a slight easing in lending standards, although this mainly occurred because of the lengthening of mortgage maturities, with fiercer competitive pressure the main reason for this slight improvement in the conditions of supply. Moreover, banks have observed a slight increase in demand for this type of financing which they attribute, above all, to the favourable outlook for the housing market.

The sharp increase in housing starts in recent years has led to notable dynamism in lending to the construction and real estate sectors. Thus, in the first quarter of 2006 the construction sector grew by 27%, in line with the rate registered at the end of 2005. In this sector, lending granted for the construction of buildings and emblematic works increased by 30%. Lending granted to real estate services companies was even more notable: in the first quarter of the year it rose to 50% with respect to the same period the previous year.

### New statistics on changes in mortgage conditions: from fixed to floating rates

The INE (National Statistics Institute) has recently started to publish new information about the changes in mortgages and mortgage repayments, which gives some interesting results. In the first four months of the year, the number of mortgages which changed their conditions increased by 32%. Of the total changes, 80% took place



at the same bank. Around half of the changes registered in these mortgages were in interest rates. The general trends in this type of change indicate that paradoxically and even despite greater monetary restriction, there are changes in mortgage indexing from a fixed rate to a variable rate. Equally, as is already observed in the new operations contracted, the Euribor is the benchmark most used in the changes in loans for housing.

### The slowdown in lending, more obvious in 2007

The renewed dynamism of the Spanish economy and the real estate sector, together with the inertia characterizing mortgage performance, will mean that mortgages will maintain their expansive tone this year. However, the gradual adjustment the real estate market will undergo, in a less favourable context for interest rates, will lead demand for mortgages to slow and this will be more obvious in 2007.

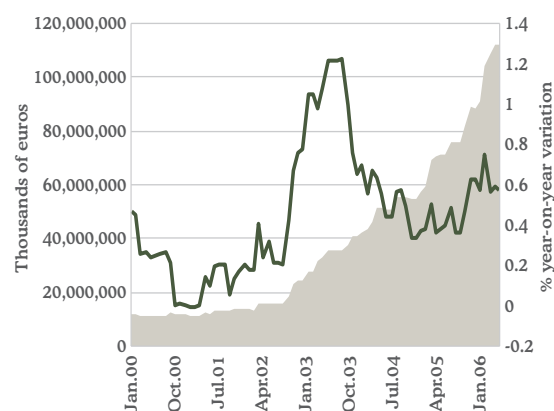
The continuous expansion in lending of the last few years has produced an increase in the indebtedness of households which reduces their capacity to take on new debt in an environment where interest rates will continue to rise. However, as is described in the adjoining box, because of their progressiveness and the limited range in comparison with the interest rates prevalent in the Spanish economy before it entered the euro, the increases in interest rates will allow the tougher monetary policy to be absorbed without any major tensions for Spanish households.

However, it is important to remember in this type of analysis that the impact of higher interest rates may be felt to a greater extent in households whose financial situation is less comfortable. According to Bank of Spain estimates<sup>3</sup>, it is observed that in the case of the Spanish economy, the indebtedness ratio and the debt burden present a negative relation with the level of income, which makes the stratum of the population with the lowest income (households in the 0-20 percentile) particularly vulnerable to changes in financing conditions. Nonetheless, according to the central bank's own calculations, after deducting their debt burden these families would see their income fall by 2.5 p.p., 5.1 p.p. and 7.3 p.p. with respective increases of 100 bp, 200 bp and 300 bp in the cost of financing. Considering how moderate these effects are, it can be concluded that even this segment of households will be able to assume the change in financing conditions.

<sup>3</sup> Analysis by segments of the sensitivity of the household debt burden to increases in interest rates. Bank of Spain's Annual Report for 2005.

Chart 4.10.

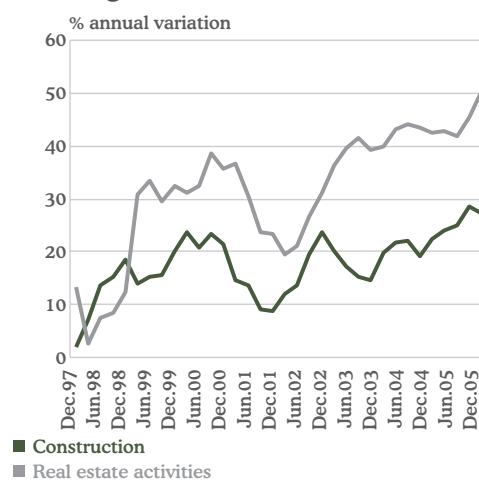
### Outstanding balance of mortgage bonds



Source: Bank of Spain

Chart 4.11.

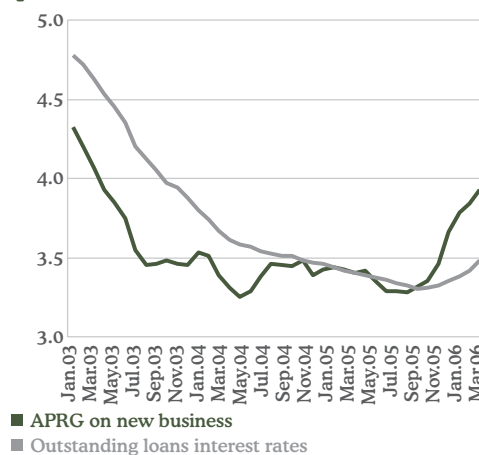
### Lending to the real estate sector



Source: Bank of Spain

Chart 4.12.

### Spain: Interest rates on loans for house purchase



Source: Bank of Spain

## The household debt burden: an affordable increase

Spanish households' indebtedness has increased significantly in recent years and exceeds 120% of their disposable income. Taking on a higher level of debt has a structural component stemming from the greater macroeconomic and financial stability that belonging to the EMU has brought with it.

However, the increase in households' liabilities has important economic effects. Thus, the financial position of households and the economy has become more sensitive to shocks in interest rates and in asset prices. Generally speaking, employment and the debt burden are the main reasons for the increase in defaults on the part of households<sup>1</sup>. This box presents an estimate of the debt burden.

Taking advantage of the release of the microeconomic data from the Survey of Households Finances and the interest rate statistics available for both the EMU aggregate and for some of its major economies, a debt burden has been drawn up. Although it is an indicator that should be viewed with caution because of the great differences between the macro analysis and the micro analysis of this type of variable, it enables us to make an international comparison and to obtain some idea about the impact the future path of monetary policy will have on household economy.

### Debt burden Estimation

The debt burden is simply the amount of the loan instalments households have pending<sup>2</sup> in relation to their disposable income. To calculate it, the amount of debt pending must be known, together with the maturity periods of the loans, the interest rates households pay on these debts and disposable household income.

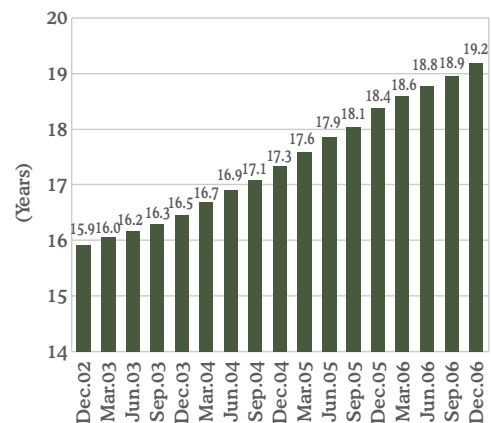
The main problem to estimate the household debt burden is the lack of statistics about the maturity of the different loans in banks' portfolio. Thus, in its estimates the Bank of Spain<sup>3</sup> uses non-public information provided by the banks. However, although it only presents the financial situation of households for business year 2002, the publication of the micro figures in the Survey of Households Finances makes it possible to estimate the average life of the loan portfolio distinguishing between loans for housing and the others.

On the basis of this survey, the profile of household debt repayment by type of loan in 2002 was extracted and used to calculate the average life of the loan portfolio on that date. Then the growth of the gross portfolio of loans for housing which are assumed to be granted for the average period given in Property Registrars' statistics was calculated and the average life of the portfolio was then estimated. Thus, as of December 2006, the average life of

loans for housing in banks' portfolio is estimated at 19.2 years. This figure could have downward bias since, according to a survey conducted in the first quarter of the year for the *Agencia Negociadora de Productos Bancarios*, household mortgages in force already had an average maturity of 21 years. This discrepancy could be due to the lack of data on early repayments and the maturities of the loans that are repaid. In the case of other loans, as there is no average maturity, as from 2002 they were left constant at the levels existing in the survey<sup>4</sup>.

<sup>4</sup> This assumption is reasonable as it is assumed that the greater weight of short-term financing has been offset by the lengthening of the maturities of loans for acquiring consumer durables.

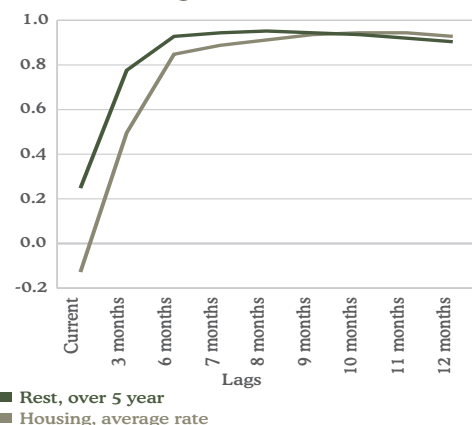
### Estimate of the average life of the portfolio of loans for housing



Source: BBVA Economic Research Department on the basis of the Survey of Households Finances.

In respect of interest rates, unlike the Bank of Spain's methodology, the interest rates on the outstanding balances were used rather than the rates on new transactions, since they are a better reflection of the impact of interest rates on the loan portfolio. In fact, when the correlation between market rates and the interest rates on the outstanding balances of loans is analyzed, it is observed that the interest rates in the loan portfolio take six months to reflect the behaviour of market rates.

### Correlation between market rates and interest rates on outstanding balances of loans\*



\* Correlation coefficient between the interest rates on the outstanding balances and their benchmark market rate (12 months for housing and 3 months for the rest). Source: BBVA Economic Research Department

<sup>1</sup> As is indicated in "Household debt and the macroeconomy". BIS Quarterly Review. March 2004.

<sup>2</sup> Including the loans written off the balance sheet as a result of securitization.

<sup>3</sup> See Del Rio, A. "El endeudamiento de las familias". Bank of Spain Working paper no. 0228 (2002).

Another problem when it comes to analyzing the household debt burden is the treatment of debt maturing in less than a year, because there are debts that are renewed when they reach their maturity, without having to pay the principal, as is the case of credit lines or cards.

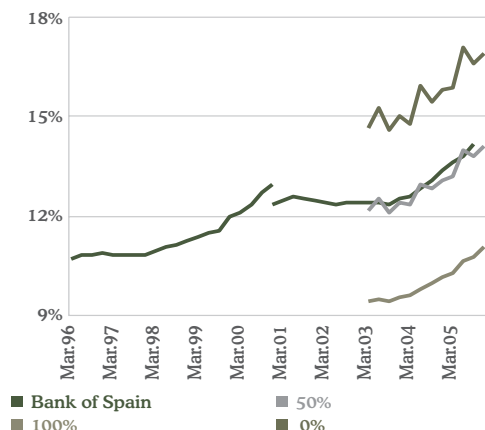
Here, we chose to calculate three types of debt burden on the basis of three assumptions. The first is that households only pay interest on debts that are for less than one year. Second, it is assumed that 100% of the principal of debt maturing in less than a year is paid and, third, there is an intermediate assumption where half is paid.

## Evolution of the Spanish household debt burden

As can be observed in Chart 2, the debt burden has increased continuously in the last decade. However, no direct relation is observed with the level of indebtedness, due to the behaviour of interest rates and the length period for which loans are granted. In fact, when the debt burden is broken down into principal and interest, the interest payment is found to have remained very steady at around 4%, while the payment of the principal, influenced by the increase in the volume of debt, is what has led to an increase in the debt burden.

### Evolution of the debt burden

(Bank of Spain and estimated according to the percentage of roll-over)

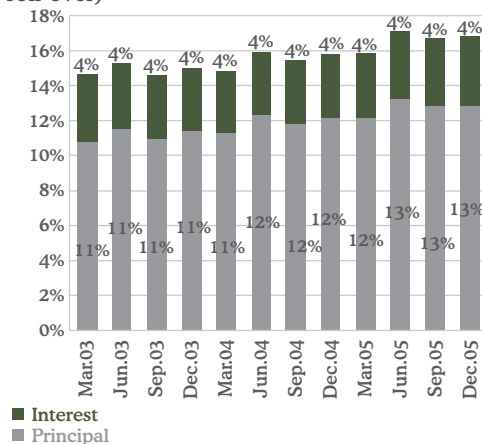


Source: BBVA Economic Research Department

In fact, the contributions to the debt burden from the increase in debt, income, maturity and interest rates show that in the last two years, the increase in the debt burden is largely explained by the sharp increase in loans granted to households, partly offset by the positive performance of household income. Interest rates and loan maturities also made a negative contribution, albeit in a more marginal manner.

### Breakdown of the total debt burden

(0% roll-over)



Source: BBVA Economic Research Department

## International comparison

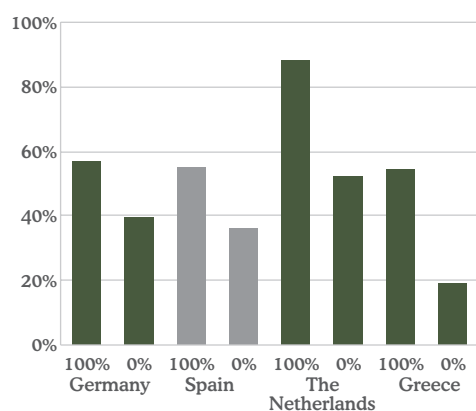
The increase in indebtedness in recent years was boosted by the Spanish economy's convergence with other European economies. To illustrate this, the household debt burden was calculated for countries which have same type of loan and interest rate statistics as the Bank of Spain (Germany, The Netherlands and Greece) and for the EMU aggregate<sup>5</sup>.

As can be seen in chart 4, the total debt burden (with the payment of 100% of the principal of short-term debt) for the four economies selected would range between the Netherlands's 23% and Germany's 15% and, for long-term debt, between the Netherlands's 14% and Greece's 5%. Spain, with 16% in the first case and 11% in the second, would be in an intermediate position. However, caution must be exercised when it comes to comparing the levels of the debt burden because there are significant differences in how this burden is distributed in different countries. Thus, as the European Central Bank reveals in its Financial Stability Report of June 2005, while in some economies such as United Kingdom or the Netherlands approximately 65% of households have some kind of debt, in Germany the percentage is between 40% and 50% and in Italy less than 20%. In Spain's case, according to the Survey of Households Finances, 46% of Spanish households had some type of debt in 2002.

On analyzing the debt burden for house purchase, it is surprising to see that it carries less weight in the total than in the Netherlands or Germany. In the case of the Netherlands, it may be due to the frequent use of the

<sup>5</sup> Because of the lack of information about the maturities of loans of over 5 years, the same ones were used as for Spain. Consequently, this comparison should be viewed with caution.

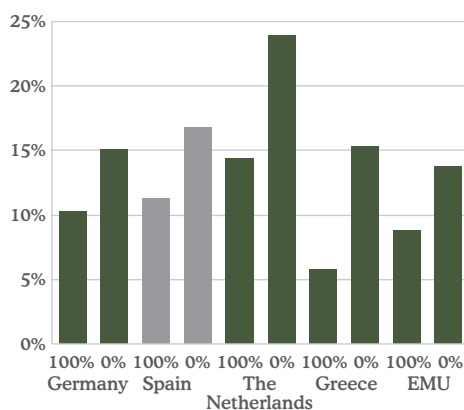
### Weight of loans for house purchase in the debt burden (2005)



Source: BBVA Economic Research Department

mortgage equity withdrawal, i.e. consumer financing through the mortgage, while in Germany this product is as little developed as it is in Spain.

### International comparison of the debt burden according to % roll-over



Source: BBVA Economic Research Department

Moreover, when the burden from interest and the burden from the principal in this type of financing are compared, it is observed that Spanish households have lower mortgage interest payments in relation to the burden from the principal, illustrating the lower mortgage rates in Spain. However, it should be remembered that the cost of financing reached record lows in the last three years and the heavy weight of mortgage financing at a variable rate means that the debt burden is much more sensitive to the contemporary level of short-term interest rates.

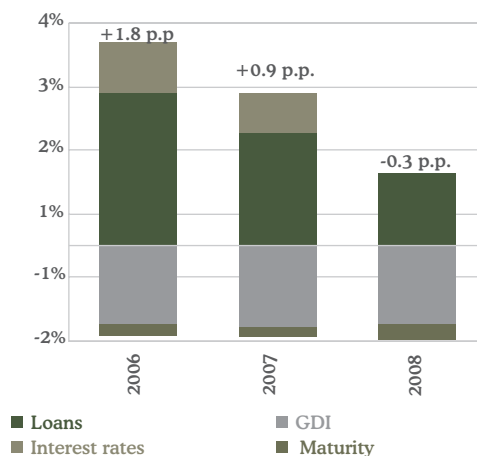
### Outlook for the debt burden

The increase in indebtedness puts households in a more vulnerable position than in the past in respect of variations in interest rates. In this context, the change in the bias of the ECB's monetary policy will put more pressure on the household debt burden. At least 72% of Spanish households' outstanding debt is at a floating rate, which implies that even without contracting new debt, households are going to need more resources to cope with their indebtedness.

However, the impact of the increases in interest rates on the loan portfolio will be gradual, which will enable households to adapt to the increase in their debt burden. Thus, when BBVA Economic Research Department's scenario for interest rates, income and lending is added and maintaining a trend of increasing the remaining period in the mortgage portfolio similar to what has been witnessed in recent years, it is observed that between 2005 and 2007, the debt burden could increase by 2.7 percentage points of disposable income. It should be emphasized that, as occurred in the past few years, the greater part of this increase would be explained by the on-going buoyancy of lending. In fact, the higher interest rates will only pressure the debt burden with a cumulative increase of 0.8 percentage points of disposable income. Moreover, it should be borne in mind that the performance of financing is in turn dependent on the interest rate scenario and, consequently, more aggressive scenarios of increases in interest rates would reduce demand for loans and, thus, their contribution to the debt burden.

In short, from a macroeconomic perspective, it cannot be forecast that the turnaround in monetary policy will have severe consequences for the financial situation of Spanish households.

### Outlook for the contributions to the increase in the debt burden



Source: BBVA Economic Research Department

María Sánchez, maria\_sdiaz@grupobbva.com  
Tomás Riestra, riestra.giner@grupobbva.com  
BBVA Economic Research Department

## 5. Efficiency in housing production

**Ignacio San Martín**

BBVA Economic Research Department

### Introduction

In the four years since the last census, conducted in 2001, the start of a total of 2.8 million new houses has been projected in Spain, which is an annual average growth rate of 2.7% in the total number of houses. This is a much higher rate than in the eighties (1.9%) and nineties (2.3%) and more in line with the rates observed in the sixties and seventies, which were periods of intense building as large numbers of people migrated from the countryside to the cities.

In 2005, a total of nearly 790,000 new houses were endorsed, which is equivalent to production of over 17 houses for every 1,000 inhabitants. This volume is only surpassed by Ireland today and equalled by Finland and Greece at the beginning of the nineties. This high volume of production has meant that residential investment already accounts for nearly 9% of Spain's GDP.

In this environment, Spanish developers have capitalized on the strong increase in residential demand to boost their finances, increase their size and extend their territorial scope. Thus, the volume of leading developers' revenues has trebled in the last four years and their capitalization has increased by 230% during the period.

One of the next steps for Spanish developers is international expansion. Here, several questions are posed in the sector: Are Spanish companies more efficient than their competitors in an environment other than Spain? Will they know how to exploit their competitive advantages? Will they obtain similar returns to what they obtain in Spain?

### Theoretical aspects

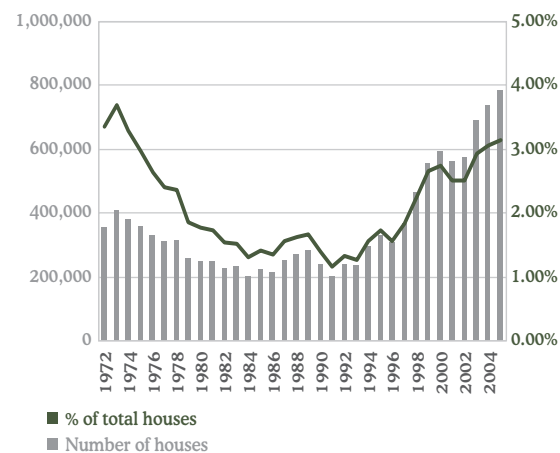
#### *a) Inefficiencies in the real estate market*

From the conventional standpoint, both the land and housing markets tend to be viewed as relatively inefficient markets, due to:

- the existence of externalities in planning and construction,
- the presence of public assets in the market or
- the difficulties in obtaining true complete information, which leads to relatively inefficient allocation of resources<sup>1</sup>.

In general, from the academic standpoint, there is a need for: a) a large number of buyers, b) a large number of sellers, c) relatively standard products and d) full information for a market to function efficiently. In the housing market as a whole, the products are very diverse, especially if the characteristics of location are taken into account. Even if the products are stratified so that there are different

Chart 5.1.  
Housing starts in Spain  
Number and % of the total



Source: Ministry of Public Works and BBVA Economic Research Department

<sup>1</sup> Evans, A.W. (1995). The property market – ninety per cent efficiency?. Urban Studies, Vol 32, N° 1, pp.55-59. 1995



segments of relatively homogenous products, there must be abundant supply and demand and sufficient information for efficiencies to be generated in the market.

However, what is observed is that there are not many suppliers or demanders in the different segments of the local markets and, what is more, there is a certain shortage of important information. In this respect, following Evans (1995), there are three reasons why inefficiencies occur in the housing market: firstly, the differences in the location of supply; secondly, the considerable segmentation of the market; and, lastly, the existence of a set of characteristics peculiar to each home which makes it different from all the others.

Apart from the factors mentioned, the scant number of times a home generally changes hands and the limited occasions when there are numerous buyers and sellers for a set of houses mean that competition is limited and, consequently, it is difficult to make efficiency gains in the real estate market.

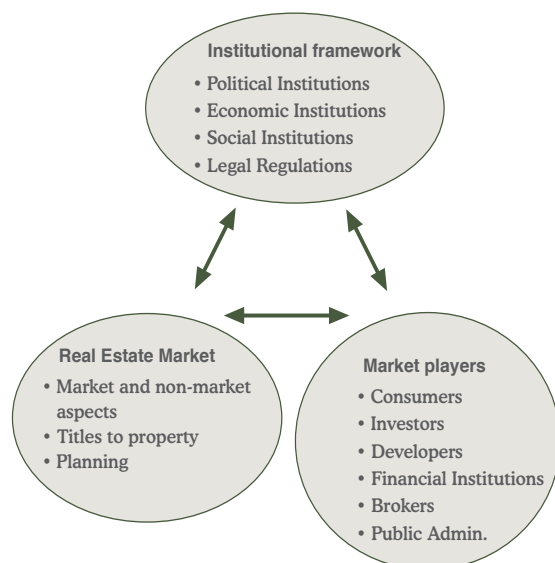
The existence of inefficiencies implies that, in the price-fixing process, the valuations of real estate assets are not as accurate as the valuations of other assets, such as those for assets traded in the equity markets. In fact, real estate valuations reflect more elements than those directly related to costs. And here resides part of the difficulty of modelling the behaviour of housing prices in the different markets.

#### *b) The institutional view*

The inefficiencies in the real estate market imply that there is the possibility of exploiting specific aspects of the real estate process that can generate extraordinary profits. In this respect, to better understand the nature of the inefficiencies mentioned<sup>2</sup>, the real estate market can be split into a three-level hierarchy. At the highest level would be the institutional framework, delimited by legal regulations and political, economic and social conventions. At the second level would be the real estate market as such, defined by its structure, its dimension and its protocols in the way it functions. At the third level would be the main agents operating in this market, such as consumers, financial institutions and real estate developers (chart 5.2).

From the above standpoint, efficiency becomes a relative concept that goes beyond technical restrictions or the availability of resources. In the case of the real estate market, the institutional approach changes the meaning of efficiency from what it is physically possible to make or build to the concept of what it is socially desirable to build. Thus, it could be technically possible to construct a certain type of building of a specific height, or efficiently develop a certain part of the city, but these opportunities might be limited by municipal uses, planning or the citizens' own desires.

Chart 5.2.



Source: Keogh and D'Arcy. 1999

<sup>2</sup> Keogh, G and D'Arcy, E (1999) Property Market Efficiency: An Institutional Economics Perspective, Urban Studies, Vol 32, N°13, pp.2401-2414, 1999 .

Economic, social or regulatory changes that take place in the medium and long term constantly redefine this institutional frontier and condition the development of the real estate market and, with it, the development of the industry operating in it. In this respect, a regulatory framework that foments and favours the development of the market will be more propitious for generating efficiency gains in real estate development than more discretionary regulatory environments, where “rent seeking”<sup>3</sup> is stimulated as a way of obtaining extraordinary profits and takes priority over improvements in efficiency.

### *c) More local aspects*

The real estate markets are extremely locally-oriented. On the one hand, local administrations’ capacity to determine the uses of land and to establish the processes for transforming the same or granting building permits leads to wide differences arising between the different local markets. On the other, the degree of concentration of the construction industry in each municipality conditions the level of competition amongst the players.

In respect of local administrations’ capacity, in the markets where there are fewer restrictions to real estate development, the availability of land is generally greater and there tend to be fewer barriers preventing the entry of competitors in the market. In these markets, the development business can respond more rapidly to increases in demand, gaining in efficiency and keeping prices more stable.

In the markets where there are limitations to development, either because the land policy is restrictive or because the number of building permits are limited, developers cannot respond adequately when there is an increase in demand, and this generates increases in prices. In the circumstances, the developers who have land or a permit may receive a “premium” for this without there necessarily having been any efficiency gains.

In these restrictive markets, having land for operating in the long term thus becomes a fundamental strategic element for the companies and so they will tend to accumulate more land in their portfolios than in markets with fewer restrictions. Since a wider margin is generally obtained in these markets from the availability of land or permits than from efficiency gains, companies’ efforts focus more on obtaining land than on improving efficiency.

In relation to the concentration of industry, in the markets where there is less concentration and a larger number of developers, competition foments the improvement in companies’ efficiency. In the markets where supply is highly concentrated and competition is less fierce, developers have fewer incentives to improve their production processes.

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<sup>3</sup> For a more in-depth discussion of the concept of “rent-seeking” and how it affects the economy see: Krueger, A.O. (1974), “The Political Economy of the Rent-Seeking Society”. The American Economic Review, n° 64, pp-gg 291-303.



## Technical aspects

Once the real estate production frontier has been established in the institutional context, the search for efficiency in building centres around increasing technical possibilities and improving the production processes of the industry as a whole. To do this, it would be desirable to have a set of internal indicators for the industry itself, applicable to sector companies, which make it possible to pinpoint the areas and processes that could be improved and, thus, increase the efficiency of the sector<sup>4</sup> in general and of the companies in particular.

These indicators can be divided into different categories and are aimed at measuring: a) the time it takes to build and market a development, b) the production costs, c) the qualities of the end product, d) customer satisfaction, e) corporate results and f) other aspects related to the development. In turn, it is possible to enrich and disaggregate these indicators even more if a distinction is made between the different stages a development goes through before it is totally completed; in this way, production times and costs can be classified both in the process of designing a development and in land development or the building process as such.

### *a) Construction time*

In Spain there are few indicators that may be directly used as references for measuring the efficiency of the industry, or of private companies, at their different stages. Thus, there is scant information about the first set of indicators, those related to the time the different stages of the real estate development take. Although it is easy to determine the time that will be spent on building the property, pinpointing the time required to change land into urban land or to obtain a building permit is not so simple. In addition, the timing changes according to the region where the product is being developed.

Generally speaking, the planning process in Spain requires an estimated time of between 3 and 10 years to transform rustic land into urban land; obtaining a permit can take between 3 and 9 months while the time taken to erect the building could be between 18 and 28 months or more, depending on its complexity.

The town planning process in Spain is slow and rigid. Once the planning regulation has been fully defined and the physical area for development has been delimited, the next step in the process is to define the type of development project. There are usually long time lags in both cases. Once the project has been established, the model of development management has to be established. The development works include work on roads, sanitation, water and electricity supply, and parks and gardens.

### *b) Production costs*

Cost indicators are easier to estimate because there is more information available. The Public Works Ministry draws up series with

<sup>4</sup> An interesting set of indicators can be found in: DETR 2000 Key Performance Indicators Report for The Minister of Construction. Department of Environment, Transport and Regions (DETR). London 2000.

quarterly figures on the evolution of materials and labour costs by type of work. In this way, companies have a benchmark for measuring their efficiency in this respect.

Analysis of the evolution of building costs in recent years shows that they have adjusted to the performance of the general price index since the second half of the last decade, thus breaking the trend where costs were rising above inflation in the eighties and first part of the nineties (chart 5.3). Amongst construction costs, labour costs have been the ones to increase at the fastest pace from the historical standpoint, although in recent years their performance has been more similar to that of building materials (chart 5.4).

### c) Quality and customer satisfaction

In respect of the quality of the end products in the real estate market, there are no public indicators that make it possible to measure efficiency in this sense, either for the industry as a whole or for private companies. The situation is similar in terms of customer satisfaction, although here information is available at the company level and so improvements are possible in this field.

### d) Corporate results

However, there is sufficient information about corporate results to be able to draw up a series of indicators that make it possible to measure the improvement that has taken place in the efficiency of companies and the industry. In this respect the data for the last few years reveal: the booming sales volumes of listed companies, which trebled in the period 2000-2004, the significant increase in the gross margin which represents nearly 28% of total sales, and in net profit, 25% of sales. In the same period, the market value of these companies rose to reach 575% of sales.

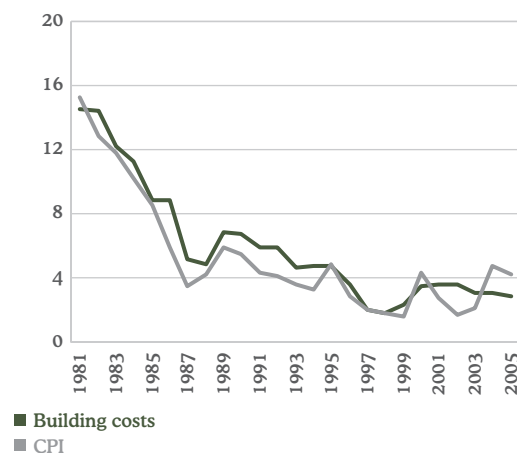
## Competitive advantages in Spain. Features of the Spanish model

The increase in real estate investment which has occurred in Spain has led the residential development industry to grow significantly. This growth was based on three factors:

- 1 Strong housing demand.** The improvement in Spanish households' real income, the large increase in the immigrant population and the arrival of an increasing number of holiday-makers who decide to spend a longish time at their own houses has led to a strong increase in residential demand in recent years. Thus, while in 1987-1997 the volume of transactions reached an average of just over 500,000 a year, the figure has doubled between 1998 and the present day.
- 2 The improvement in financial conditions.** The Spanish economy's adherence to the discipline of the single European currency led to a structural decrease in interest rates in Spain. This, together with the longer repayment periods and other improvements, made it possible to boost financing for housing in Spain, from the standpoint of both production and acquisition. In

Chart 5.3.  
Building costs and CPI

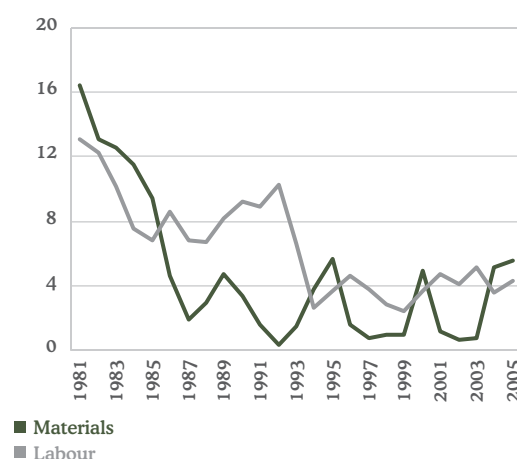
Annual variation



Source: INE, Ministry of Public Works and BBVA Economic Research Department

Chart 5.4.  
Building: materials and labour cost

Annual variation



Source: Ministry of Public Works and BBVA Economic Research Department

Table 5.1. Listed real estate companies

	2000	2004
Gross Margin (% sales)	20.9%	27.7%
Net Profit (% sales)	18.6%	24.9%
Market Value (% sales)	450%	575%
Sales (millions of 2004 euros)	1,075	3,325

Source: BBVA Economic Research Department

this respect, the volume of resources going to the housing segment grew to reach a volume equivalent to 80% of the GDP in 2005, 50 percentage points more than its weight in 1997.

**3 Improvements in the land production process.** The changes in regulations which occurred in the nineties in respect of planning in Spain have permitted the development of management systems that have increased supply and speeded up the process of producing urban land. A key element in this growth has been the widespread use of systems of collaboration between players as the best methods of adding land to the urban process, which has been boosted by the contribution of private initiative in the planning process.

The existence of an increase in demand was a necessary condition for the strong growth of the development business but it was not sufficient for the most efficient companies to gain market share. In fact, part of the improvement in the results of developers' results came not only from efficiency gains, but also because the companies successfully capitalized on the improvements and the increase in competition that occurred in the finance industry and positioned themselves strategically in the new land generation processes.

In this respect, some features peculiar to the Spanish regulatory system, such as the right to pre-register the new work and horizontal division at the beginning of the work or the possibility of transferring financing from the developer to the end customer, have made it possible to foment the interrelation existing between the development industry and the finance industry.

This high degree of collaboration has been one of the key aspects for the expansion of residential development in Spain. In fact, the closer relation between developers and financial institutions has provided developers with larger resources to build up land stocks, enjoy greater leverage capacity and, consequently, consume less equity, and this has brought larger profits and territorial expansion.

As regards the generation of land, the improvements introduced in the middle of the nineties in the production process meant that in the period 1998-2005 an average of 225 million metres a year was classified as urban land, while in the decade 1987-1997 this average was of just over 140 million square metres. Despite this increase in supply, because of the strong growth of housing demand, property prices have risen and this has been clearly reflected in land prices. Thus, part of the income generated in the housing market has reached land in a residual manner, although there have not necessarily been any efficiency gains.

## Suggestions

If Spanish developers wish to pass on their own experience and expand into other countries, they should aim at markets where there is strong potential demand for housing and possibilities of there being efficiency gains in complementary industries and, also, great improvements in the financial system.

Moreover, in more restrictive markets, it would be advisable to have in-depth knowledge of the regulations in force, especially in relation to planning aspects and permits, and of the administrative procedures to be followed in order to build the real estate development. There are other aspects peculiar to the markets, such as those related to marketing products or consumer protection, which also condition the competitive advantages of the different players.

In short, expansion in other markets requires a certain command of elements other than those strictly related to the efficiency of the real estate development business.





## For further information, contact:

Servicios Generales Difusión BBVA Gran Vía 1 planta 2 48001 Bilbao P 34 944 876 231 F 34 944 876 417 [www.bbva.es](http://www.bbva.es)

Legal Deposit: M-3479-1994

## Economic Research Department:

### Director:

José Luis Escrivá

### Subdirector:

David Taguas

### Chief Economists:

Spain and Sector Research: Carmen Hernansanz

Europe: Sonsoles Castillo

North America: Jorge Sicilia

United States: Nathaniel Karp

Mexico: Adolfo Albo

Latam and Emerging Markets: Luis Carranza

Argentina: Ernesto Gaba

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