Real Estate Watch Spain

Economic Research Department
February 2006

2006, a turning point in housing production
The soft landing extends throughout 2006
Mortgages will account for 65% of total loans at year end
New trends in residential tourism

Index

Closing date: February 10th 2006

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
Elena Nieto	34 91 537 37 76	enieto@grupobbva.com
Tomás Riestra	34 91 537 35 88	riestra.giner@grupobbva.com

Available on the website:

http://serviciodeestudios.bbva.com

Editorial

The strength of the Spanish economy in 2005 was clearly reflected in construction activity, which expanded at an annual rate of 6.3%. This accounts for 15.3% of the GAV and generates over 100,000 new jobs per year. In 2006, the outlook is for average growth of 5.7% overall, with civil works expanding 4.9% and housing construction growing at 6.6%.

Building activity in 2006 will benefit from the high number of projects approved in 2005, which projected a record 780,000 housing units between refurbishments and new construction. The slowdown in sales will result in a slight decline this year in the number of new projects starting.

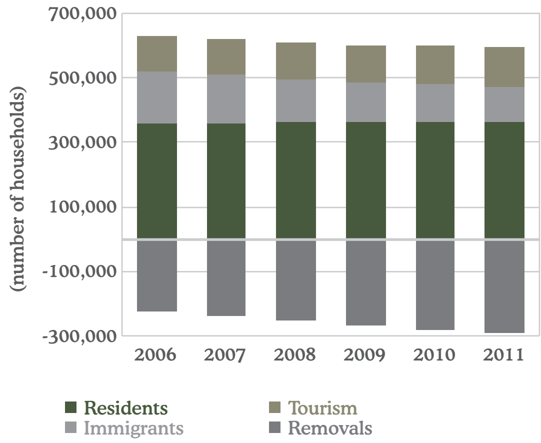
The strong production of housing units in recent years stems from demand factors associated to both economic and demographic variables. Over the medium and long term, the outlook is for demographic factors to generate a gross flow of around 600,000 households per year. This increase will be based on three pillars: the formation of households among the resident population, the evolution of migratory flows and the arrival of non-residents for long duration stays.

The generalised slowdown in housing prices became obvious throughout 2005. This "soft landing" trend for housing prices is expected to continue in 2006 in a context where the main factors which have contributed to underpinning the current phase of expansion –very low interest rates, very dynamic employment and high foreign demand - will continue to perform relatively well over the short and medium term. The figures for the last half of 2005 confirmed the trend for ordered and moderate growth in real estate prices and forecasts point to an increase in the 5-7% range for the year-end with a slight decline in the number of transactions in comparison with previous years.

Low interest rates have led to intense growth in mortgage loans in 2005 of close to 25%. This year the forecasts point to higher interest rates, although any increases are expected to be moderate and drawn out over time. A tightening of monetary policy will lead to more negative affordability ratios, but will not, however, prevent the financial capacity of families to maintain their current levels thanks to greater disposable income and slightly longer mortgage length.

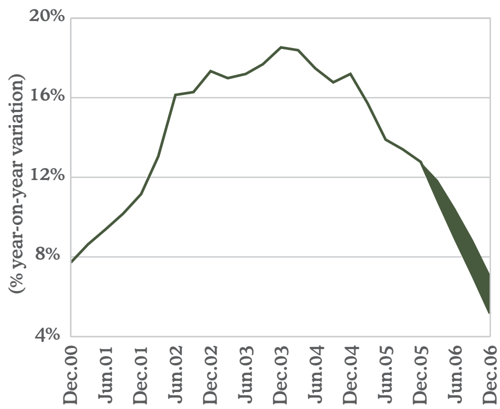
The topic of the quarter will take an in-depth look at the factors that underpin the favourable evolution of foreign investment in real estate in Spain in recent years. Looking to the future, the process of financial globalisation and the reduction in air fares will both help boost the inflow of foreign capital, especially if the Spanish coastal municipalities continue to be considered as a favoured destination for the growing European population of retirees.

Household flow forecast



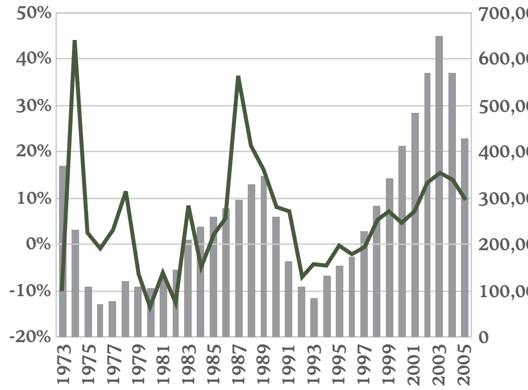
Source: BBVA

Housing prices in Spain



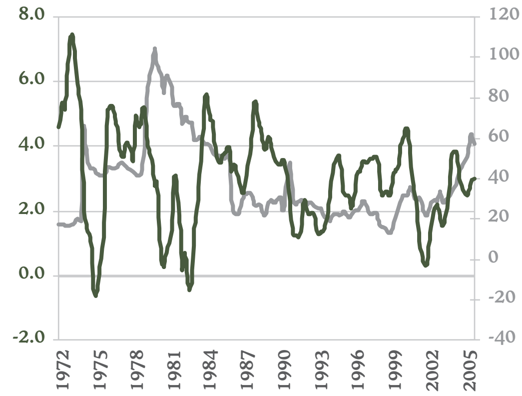
Source: Ministry of Housing and BBVA

Foreign investment in real estate and housing prices in real terms



Source: Sastre (2002) and BBVA

Chart 1.1.
Real oil prices and GDP growth OECD countries



■ OECD GDP
■ Brent crude

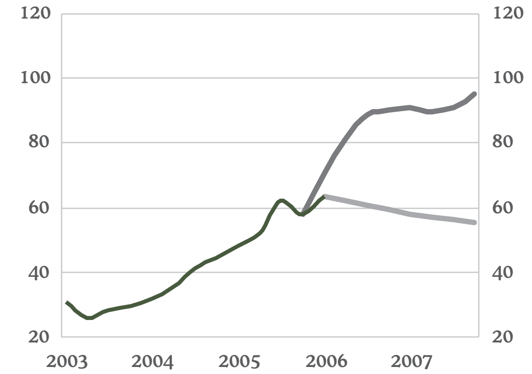
Source: OECD and Datastream

Table 1.1. GDP. Year on Year Growth

	2004	2005	2006
USA	4.2	3.6	3.3
EMU	1.8	1.3	2.0
Japan	2.7	2.0	2.5
China	10.1	9.8	9.0

Source: IMF and BBVA

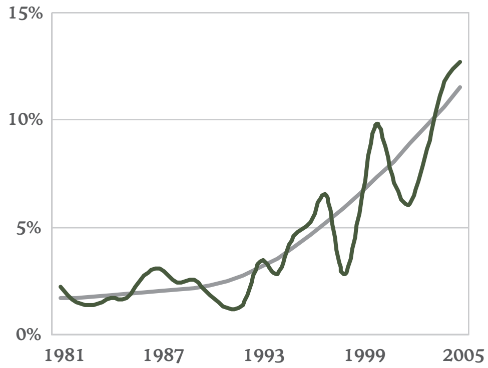
Chart 1.2.
Oil prices and outlook
In USD per barrel



■ Risk
■ Base

Source: Datastream and BBVA

Chart 1.3.
Capital flows
In percent of worldwide GDP



Source: IMF

1. Economic environment

Internacional

Strong activity, despite oil prices

Oil prices are once again playing a leading role in the economic environment. In 2005, the worldwide economy was able to maintain good growth rates despite the increase in oil prices and, foreseeably, in 2006 will continue to consolidate this growth phase. Nonetheless, there are some threats, especially if the reactivation of Iran's uranium enrichment programme results in an embargo of Iranian oil. If the political waters calm down, as expected in the base scenario, oil prices could begin to come down in the second half of the year despite pressure in the first half thanks to the application of a risk premium. In all, average oil prices in 2006 will be 61 dollars/barrel, up from the 55 dollars recorded the previous year, and fall back down to the 57 dollar range in 2007.

Despite the risk of slower growth, 2006 has begun with positive forward indicators and, especially, expectations that although growth may slow somewhat in the US, the other economies will continue to grow or take up the slack. Examples of the former can be found in Southeast Asia, and particularly China, which has just revised their growth upward and will continue to record growth rates of close to the median for recent years. Europe would be a case of the latter, where everything points to a recovery in internal demand which will facilitate growth that is slightly above potential.

Overall, worldwide economic growth will be similar to that recorded in 2005, but with a somewhat different breakdown. The US will continue to maintain growth rates close to their potential, but lower than that recorded in 2005. The real estate sector is showing signs of moderation as a result of the increase in US interest rates. This moderation will be coupled with slower growth in consumer spending and investment, which, together with the contribution of a somewhat more favourable foreign sector, will translate into growth of 3.3% in 2006. Within this context, it is foreseeable that the Federal Reserve will maintain an emphasis on controlling inflation and bring short-term interest rates up to 4.75% in the first quarter, with a chance of boosting rates as high as 5.0% over the first half. This could spell the end of the rate hikes which began in June 2004.

A favourable international environment and the end of the currency's appreciation against the dollar have allowed the European Monetary Union to improve its economic outlook. Confidence has begun to increase sharply, especially in Germany, with improved expectations for a recovery in activity from the 1.3% registered in 2005 up to 2% in 2006. Nonetheless, there are still some doubts on the horizon. The uncertainty surrounding growth, within an environment of limited inflationary pressure, will keep interest rate hikes in 2006 at moderate levels, foreseeably closing the year at 3.0%.

In all, the loosening of monetary policy to more neutral positions is being carried out in an environment of very limited deterioration of the outlook for inflation. This leads us to believe that the maximum for official rates in this expansive cycle will be lower than in the previous cycle, which in turn limits any possibility that the interest rate hikes have a significant impact on the economies.

Globalisation, financial diversification and currencies

One of the main factors in the performance of the financial markets has been the deepening and diversification of the capital flows. This, together with a reduction in risk premiums, is contributing to a decline in yields on long-term debt instruments. Consequently, one of the key questions for the future is whether these factors will be maintained. Although it is difficult to anticipate adjustments regarding risk premiums, the tendency for reductions in the nominal and real volatility of the economies does not appear in danger over the short term and the credibility of the current monetary policy should not be compromised. Regarding the globalisation and diversification of capital flows, we do not expect any sharp change in behaviour. Accordingly, within this context, we can expect long-term rates to stay at low levels. Particularly, the yield curve in the US could remain practically flat, with the 10 year rate closing 2006 at the 4.8% level. In the EMU, the 10 year yield could close the year at 3.7 or 3.8%. This implies the continuation of a positive yield spread between the US and the EMU, although there will be some narrowing.

Although to a lesser extent than in 2005, the yield spread will continue to benefit the dollar despite the elevated current account deficit maintained by the US economy. However, is unlikely that the US currency will find other factors to drive it up. In this sense, it should be noted that the maximum levels for the dollar seen towards the end of the 1990s were accompanied, as regards capital flows, by very strong direct foreign investment in the US economy which is absent in the current environment. Although the US economy maintains a positive differential in productivity in comparison with other areas, no particular sector or industry appears to be in a position to lead an investment process similar to that seen at the close of the 90s with respect to the new technologies. Consequently, the absence of any major drivers for the next two years, with the support of the yield spread, and the risk that at some time the current account deficit again puts pressure on the dollar, the US currency could move to the 1.2-1.25 range in 2006 against the euro, with a slight inclination towards the appreciation of the dollar in the first half.

EMU

Europe, consumption is the key

The latest figures point to the consolidation of the recovery in the EMU. Although it is true that following the strong growth in the third quarter, the European economy experienced a deceleration in the fourth in response, in part, to a decline in foreign demand, the recovery is still in place. Accordingly, the generalised improvement in forward indicators, based to a large degree on confidence surveys, point to a return to growth rates to close to potential in the first half of the year.

In light of the favourable outlook for worldwide and European economic growth, companies finally appeared to be taking advantage of their healthy financial positions and the favourable market conditions to launch more investment programmes. Unemployment indicators are also improving, it including in the industrial sector, which allows for confidence in a recovery of private consumption, the last link needed to support a sustainable recovery. All of this is reflected in the AI-BBVA-EMU activity indicator. This indicator shows an upturn in the cyclical situation, reaching the highest level since August 2001, with a positive contribution by the production components (industry

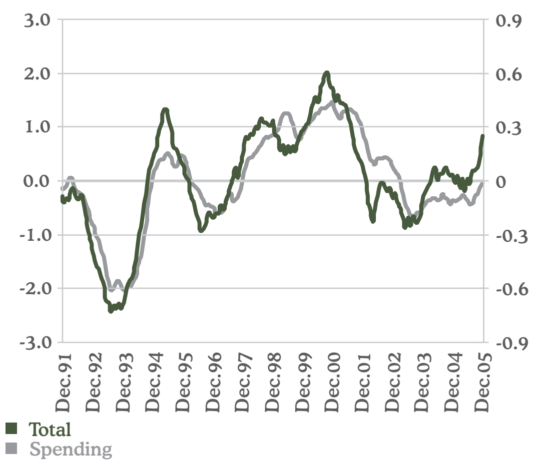
Chart 1.4.
OECD: Inflation volatility and real 10-year interest rate

Source: OECD and BBVA

Chart 1.5.
Dollar/Euro exchange rate

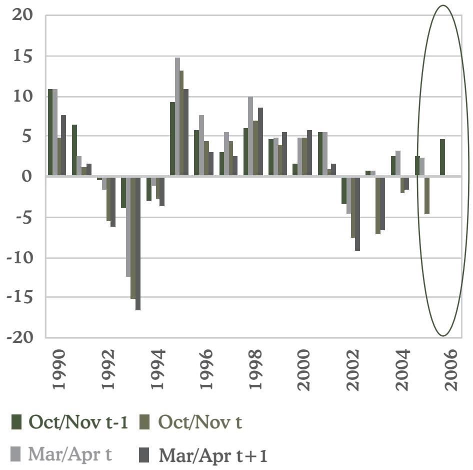
Source: ECB and BBVA

Chart 1.6.
AI-BBVA-EMU Total and contribution of spending



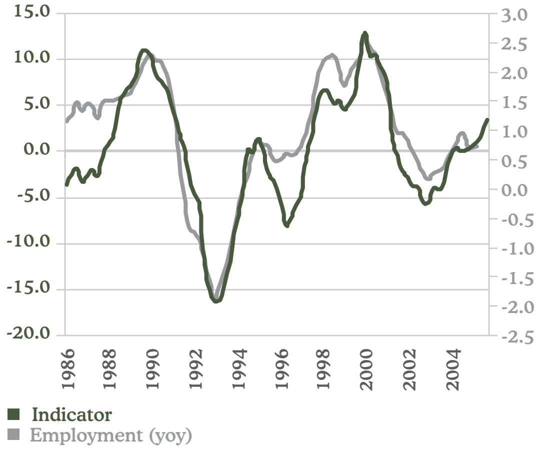
Source Eurostat and BBVA

Chart 1.7.
Investment plans. Volume
EC survey



Source: European Commission

Chart 1.8.
EMU: Employment and indicator



Source European Commission, Eurostat and BBVA

Chart 1.9.
Germany: consumer confidence and loans

Source: European Commission and Bundesbank

and construction), expectations and employment. Although the household spending component no longer represents a drain, it still does not contribute to the indicator.

The recovery of private consumption in the EMU, and in particular Germany, continues to be the factor which generates the highest level of uncertainty in the current European environment. Spending indicators continue to be lacklustre and there is concern that the announced three-point increase in VAT in 2007 could put the brakes on a nascent recovery. Moreover, there is concern that the effect of anticipated buying, together with impact of the World Cup to be held in Germany, could lead to a transitory increase which may be confused with a sustainable recovery. Nonetheless, there are various factors which should be taken into consideration in this analysis. Firstly, part of the increase in VAT will be used to finance a cut in payroll taxes, so any dampening effect on consumption will be partially compensated. Secondly, within an environment of wide corporate profit margins and moderate demand, it is unlikely that companies will pass on the entire increase to the consumer. Lastly, and most importantly, consumption in Germany has for quite some time been growing at below its long-term threshold level. In recent years consumer savings have increased significantly, partly in response to uncertainty regarding tax accounts and the sustainability of social welfare systems. An environment of greater confidence could, in part, offset the negative impact of the VAT increase, and push consumption more in line with the long-term balance level. Similarly, the outlook for employment has improved in recent months, as can be seen by the rebound in consumer expectations. The increase in the demand for credit after various years of stagnation also allows for a more optimistic outlook. These factors do not seem to be linked to the transitory factors mentioned above, which could lead to a boost in private consumption in 2006. In all, within a scenario of a progressive increase in available income, a key factor in the performance of private consumption in Germany, and the favourable evolution of wealth, with an appreciable revaluation in financial wealth and the marginally improved performance of real estate wealth, it does not appear that the increase in VAT will necessarily impair the recovery in private consumption. In addition, financial conditions are expected to maintain relatively favourable with gradual increases in official rates.

In light of the progressive improvement in activity and concerns regarding monetary growth and the possibility that the level of inflation and oil prices result in a deterioration of the inflation forecasts, the ECB began a series of rate hikes this past December. It is likely that the European Central Bank will again apply another 25 basis point increase in interest rates. The European monetary authority is facing, once again, the challenge of high oil prices which could put pressure on consumer prices (inflation will hold at above 2% in coming months) and put the brakes on the recovery in confidence levels. However, the inflationary pressure is minimal and the increase in energy prices does not appear to have had a significant impact on consumer spending or wages. In addition, the moderate rate of the recovery in activity in the euro zone will not allow for the output gap to be closed in 2006 and the growing globalisation will help to compensate, in part, the demand pressure generated subsequently. In an environment of economic recovery, the normalisation of interest rates requires that upcoming movements be upward, although the limited demand pressure on prices will allow for the rate hikes to be gradual.

Spain

Indications of a slowdown

In the European context of a consolidation in the cyclical recovery, the economic outlook for Spain points to growth remaining stable in the 3.4% year-on-year range in the beginning of 2006. For the full year, the performance of the factors driving business and consumer demand point to a gradual moderation in aggregate spending in the Spanish economy, with the slowdown in internal demand being partially compensated by a decrease in the negative impact of the foreign sector. GDP will grow 3.1% in 2006, 30 basis points below that recorded the previous year. The contribution of domestic demand will be 4.4 percentage points, while the drainage of the foreign sector will be 1.3 percentage points.

Improvement over the situation at the close of 2005

In January of 2006, the activity indicator of the condition of the Spanish economy prepared by BBVA, the BBVA–AI[1], registered its highest level since October of 2003, outperforming the expectations existing in the third quarter of last year. The cyclical improvement in the environment was driven by the good performance of construction and industrial production, while there was a deterioration of the variables linked to capital investment.

The factors influencing consumer spending, disposable income and wealth, are registering more moderate growth in line with the performance of wages (employment and real salaries) and the continued deceleration in housing prices. Employment in 2005 registered its strongest growth since 2001 (3.1% and 5.0% respectively). However, real salaries registered a significant decline (-1.6%), resulting in a moderation of the growth in income from wages and salaries over 2004.

The exceptional performance of the Spanish labour market is driven by supply and demand. The increase in the supply of job positions[2] coincided with the shock of the positive demand resulting from the entrance into the EMU. The outlook for the future points to the continued dynamism of the Spanish labour market within a scenario of the continued incorporation of women into the workplace. However, the influx of immigrant labour, historically remaining at high levels, is showing signs of deceleration. In addition, it appears to be difficult for any additional downward adjustments in salaries, and consequently to increase the amount of demand for labour factors given the indication favoured by the current collective bargaining system.

Lastly, the financial conditions in which Spanish households will be operating will continue to have a globally expansive character for demand, favouring consumer spending and residential investment, although we will not see the loose credit of previous years.

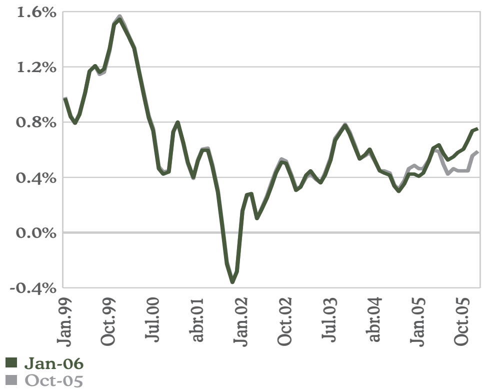
More construction, less capital goods

Consequently, growth in household consumption, both consumer spending and residential investment, will slow to levels that are more

[1] This reflects the state of the Spanish economy through the analysis of information provided by different indicators of activity, spending, expectations, construction and employment. It is a standardised indicator with a zero average and standard unit deviation, with positive (negative) levels being compared with growth that is above (below) the trend line.

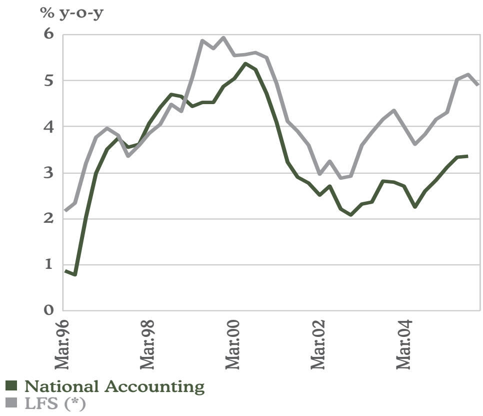
[2] The increase in the employment rate in Spain is due to the growing incorporation of women into the workforce and the influx of immigrant labour, a factor which is contributing to an increase in the flexibility of the conditions for geographic and functional mobility.

Chart 1.10.
BBVA – AI



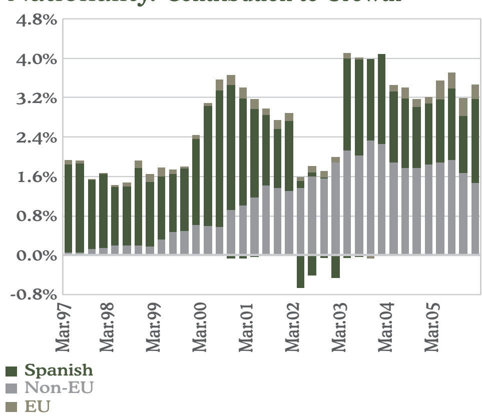
Source: BBVA

Chart 1.11.
Employment growth



Source: INE and BBVA. (*) LFS adjusted for Survey Effect

Chart 1.12.
Active Population in Spain by Nationality. Contribution to Growth

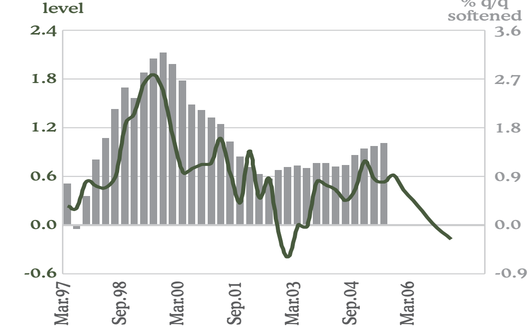


Source: INE and BBVA

Chart 1.13.
BBVA – AI

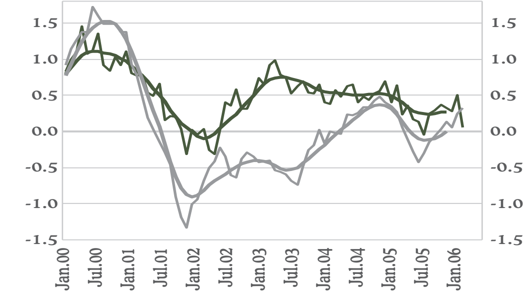
Source: BBVA

Chart 1.14.
Capital and other investments



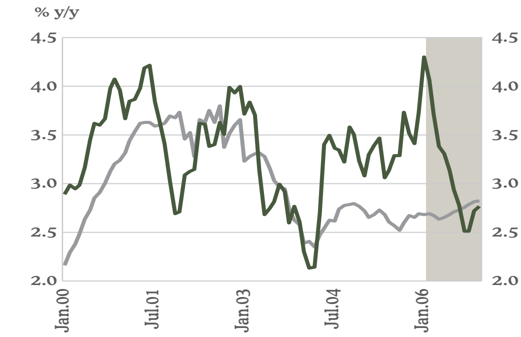
Source: BBVA

Chart 1.15.
Index of industrial climate
Standardised data



Source: European Commission and BBVA

Chart 1.16.
Inflation



Source: BBVA

coherent with the long-term balance level. However, while the slowdown in consumer spending indicators point to the continuation of the current moderation in consumption, the strength of the construction indicators (cement consumption, business opinions) make it very probable that the deceleration in this variable will be less intense than that expected to date, delaying the downturn until the second half of 2006.

Conversely, investment in capital goods stands out for its pro-cyclical nature, the decline registered in status indicators, synthesized into a decline in the investment component in the BBVA - AI. Given that the cost of capital is at historically low levels and that there are no relevant changes in the favourable financial situation of companies, the moderation in capital investment would be linked to the worsening expectations for demand. Given that capital goods exports are growing at an increasingly fast rate and that there exists a cyclical expansion throughout the EMU, the deterioration of corporate expectations would be a reflection of the lower strength expected from overall domestic demand.

Inflation and energy prices

With the expected scenario for oil prices (around 60 dollars/barrel for Brent crude at the close of 2006, only three dollars less than in January), consumer prices in Spain are expected to decline to 3.2% in 2006 from the 3.4% registered in the previous year. This will imply that there will continue to be no need for a second round of collective bargaining negotiations or regarding corporate profit levels because of any worsening in financial position in response to energy costs. The globalisation of trade and the greater efficiency in the use of oil justify the lower response by consumer prices to the increase in energy costs[3].

In all, within a globally favourable environment, the most relevant risk for the Spanish economy and for EMU as a whole is that oil prices consolidate at historically high levels, even higher than that registered to date. This shock, bullish for production costs and bearish for available income and consumer and business expectations, would imply a scenario of lower growth and higher inflation rates.

[3] In addition, the increase in oil prices in euros expected in 2006 (seven euros, up to 51 euros/barrel for Brent crude) is not as strong as that registered in 2004 in 2005

Table 1.2 Spain, GDP Base 2000

y/y rates	2001	2002	2003	2004	2005	2006
Household consumption	3.2	2.9	2.6	4.4	4.4	3.8
Public Admin. consumption	3.9	4.5	4.8	6.0	4.7	4.5
GFCF	4.5	3.3	5.6	4.9	7.5	6.4
Capital goods	0.1	-2.9	2.5	3.7	9.3	7.0
Construction	6.8	6.2	6.3	5.5	6.3	5.7
Other Products	6.0	5.0	7.7	4.4	8.2	7.4
Var. stocks (*)	-0.1	0.0	0.0	0.0	0.0	0.0
Domestic demand (*)	3.6	3.0	3.8	4.7	5.2	4.5
Exports	4.0	1.8	3.6	3.3	1.1	3.3
Imports	4.2	3.9	6.0	9.3	7.5	7.4
Foreign balance (*)	-0.1	-0.3	-0.8	-1.6	-1.8	-1.3
GDP mp	3.5	2.7	3.0	3.1	3.4	3.1

(*) contributions to growth
Source: INE and BBVA forecasts

Interest rates, housing prices and consumption

The expansion registered in real estate in recent years in such countries as the United States, Spain and, to a lesser extent, France, appears to correspond to a large extent to macroeconomic reasoning. Nonetheless, everything points to the favourable financing conditions, an environment of abundant liquidity and very low interest rates, having provided an additional stimulus. Consequently the question arises of what the impact of a gradual correction in excess liquidity through an increase in interest rates would be on the real estate market in such countries. Moreover, given that the dynamic nature of real estate prices has supported private consumption in recent years, it is feared that a deceleration and/or correction could amplify the impact that a normalisation of interest rates would have on consumption. This is especially true for economies were household debt has registered significant increases in recent years.

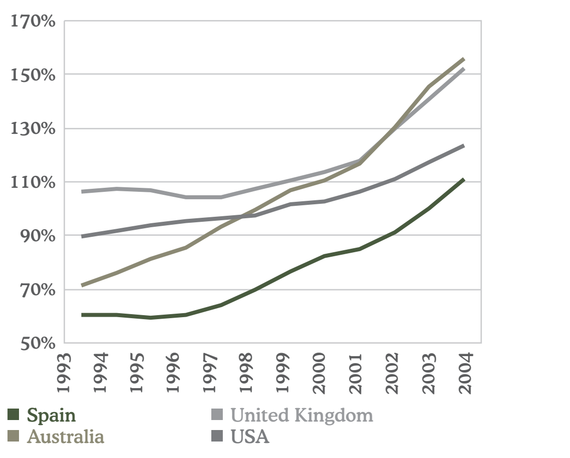
The examples of the United Kingdom and Australia

In this sense, it could be useful to review the situation in countries like the United Kingdom and Australia, which have recently gone through experiences of this nature. In both cases real estate prices grew over several quarters at a rate of around 20% year-on-year in real terms. Families not only significantly increased the level of real estate wealth or equity withdrawal (difference between outstanding mortgage payments and the net investment in real estate assets), but also their level of unsecured debt, reaching levels of indebtedness well above the current levels seen in Spain (see chart below). This occurred within a context in which private consumption was growing strongly. Both the Bank of Australia and the Bank of England were the first to raise interest rates despite the fact that consumer prices were under relative control. Concerns for financial stability and imbalances played a strong role in their decisions[1].

[1] See the minutes of the meetings of the Bank of England on a five and 6 November 2003 or the communication by the Bank of Australia on 8 May 2002 announcing the hike in interest rates.

Household debt

In % of disposable income



Source: OECD and the central banks of Spain, Australia and United Kingdom

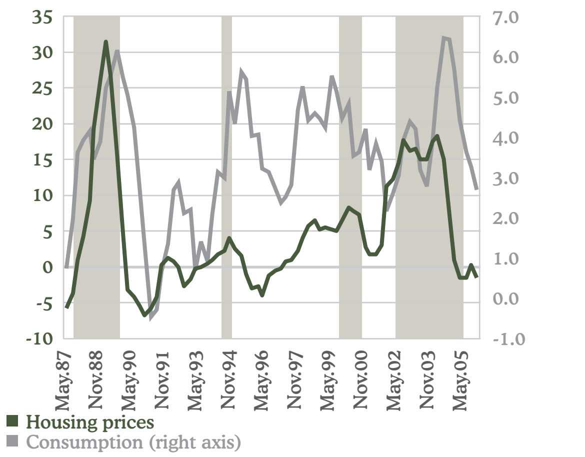
In both cases there was a significant deceleration in housing prices approximately one year after the start of the cycle of interest rate hikes. In all, the adjustment was softer, especially in the United Kingdom, than the experience from previous episode seems to have indicated. In terms of financial stability, no problems were detected. Despite the increase in the indebtedness of families, there was no significant increase in delinquencies.

There was also a notable deceleration in private consumption in both countries. Nonetheless, with growth rates of around 1.5% year-on-year in the United Kingdom and close to 3% in Australia, we are in no way talking about a recession in consumer spending as seen in previous episodes of real estate correction. This was also despite the fact that the Anglo-Saxon countries boast higher sensitivity of consumption to real estate wealth, something which is attributed to the depth and efficiency of their mortgage markets[2].

[2] See Catte P., Girouard N., Price R. and P. André (2004): "Housing markets, wealth and the business cycle", OECD Working Paper no.394

Australia: consumption and real housing prices

Year-on-year rate



* Shaded areas denote times of interest-rate hikes.
Source: Bank of Australia and ABS

Impact of housing prices on consumption

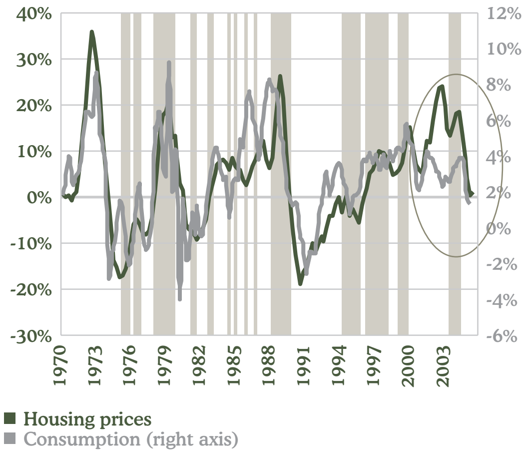
Normally two channels are identified through which real estate prices can impact on private consumption. The first channel is wealth. The home represents a significant portion of a family's wealth and an increase in real estate prices implies an increase in that wealth, at least for homeowners. Conversely, non-homeowners are worse off either because they must pay higher rents or because they must save more for a future acquisition. The aggregate impact, accordingly, is not as direct as for other assets. Any increase in housing prices does not necessarily translate into an increase in the aggregate wealth of an economy. Nonetheless, it will produce a change in the relative position of the consumer groups (homeowners versus renters), each with a different propensity to consume, and in relative pricing (residential versus non-residential), which could generate substitution effects.

The second channel is financial. Any increase in real estate prices allows for homeowners to obtain more credit more cheaply by increasing the value of their available collateral. This impact is especially relevant for those families with greater credit restrictions as they are generally those for whom financial assets represent a lower proportion of their total wealth. Similarly, this channel gains greater relevance in those countries with more liquid and flexible markets and greater development of instruments which facilitate access to real estate wealth through mortgage equity withdrawal.

In the case of the United Kingdom, historically there has been a strong link between real estate prices and private consumption, as can be clearly seen on chart 3 below. The explanation could lie in either of the two reasons mentioned above or in any combination thereof. A third explanation for the similarity between the movements in real estate prices and private consumption could be that they are jointly affected by a third factor. For example, an improvement in the expectations of future income could lead to both an increase in spending and an increase in housing prices[3].

The close link between real estate prices and private consumption in the United Kingdom appears to have broken since approximately 2000. The reasons normally given to explain this rupture take two forms[4]. Firstly, it is attributed to an improvement in the access to credit, both mortgage and non-mortgage, in part thanks to the improvement in the mechanisms available to financial entities for managing risk, all within an environment of very low interest rates. Agents appear to have taken advantage of these improved conditions not only to consume more, but also, and to a greater extent, to accumulate more assets[5]. In fact, the ratio of consumption to disposable income remained fairly stable throughout this period in the United Kingdom. A second explanation could be that in recent years housing prices and private consumption did not move in line with a common factor, such as income expectations. Specifically, it is thought that real estate prices had a greater influence in recent years on factors such as the rate of household formation or demand for second homes or investment property due to both the low return on alternative assets or for reasons of prudence in light of possible future problems in pension levels.

United Kingdom: consumption and real housing prices. Year-on-year rate



* Shaded areas denote times of interest-rate hikes.
Source: Bank of England and ONS

Household consumption and accumulation of assets and liabilities.
In % of disposable income

	Net acquisition of real estate assets	Net acquisition of financial assets	Consumption	Net acquisition of financial liabilities
United Kingdom				
1998	6.0	9.3	92.4	7.4
1999	6.3	9.4	93.6	8.9
2000	6.0	6.8	93.4	11.0
2001	5.5	11.1	92.4	10.4
2002	7.0	14.8	94.0	14.2
2003	7.4	15.1	93.7	17.7
Australia				
1998	8.0	11.3	87.5	15.9
1999	8.3	10.7	89.9	8.5
2000	9.4	18.1	90.3	17.7
2001	7.5	18.3	89.2	12.6
2002	8.7	21.0	89.8	21.3
2003	10.1	20.7	91.6	24.8

* In the UK, net acquisition of real estate assets is close to gross capital formation among households
Source: ONS and ABS

One way of illustrating the change in the relationship between real estate prices and private consumption is through an estimation of the function of consumption which includes the variables of disposable income, net financial wealth, non-

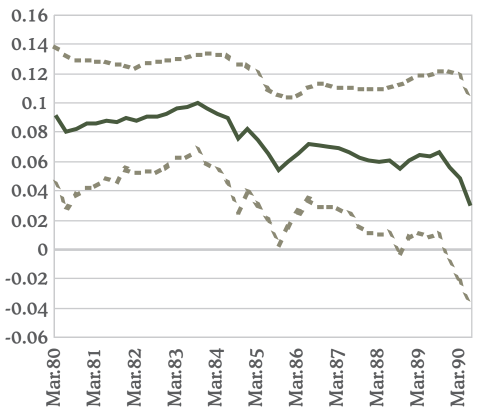
[3] See Atanasio O., Blow L., Hamilton R..and A. Leicester (2005): "Boom and Busts: Consumption, House prices and expectations" Working paper 05/24, The Institute for Fiscal Studies

[4]. See Nickell, S.(2004) "Household debt, house prices and consumption growth" Bank of England Quarterly Bulletin, autumn, pages 383-89 and "House prices and consumer spending", table from the Bank of England Inflation Report, November 2004, pages 12-13

[5] Nonetheless, the distribution effect should also be taken into account given that can increase in indebtedness does not necessarily stem from an increase in assets, nor in a propensity to consume, neither does the level of solvency or exposure to interest rate risk have to be the same.

financial wealth, and real long-term interest rates. With a sampling duration including from the first quarter of 1980 through the third quarter of 2005, we performed a recursive estimation in periods of 15 years which shows that, precisely, the sensitivity of consumption to non-financial wealth had been losing weight in recent years.

United Kingdom: recursive estimation of the sensitivity of consumption to non-financial wealth



Source: BBVA

In any case, given that it can be seen that the increase in real estate prices did not translate into greater consumption, it seems reasonable to believe that the adjustment in housing prices would not translate into a significant correction in private consumption. And in part this was specifically the case, not only because of the possible decline in the long-term sensitivity of private consumption to non-financial wealth.

The performance of the rest of the variables that impact on private consumption have also been more favourable than in other phases of real estate correction. Real disposable income and employment declined less than on other occasions thanks to the combination of strong worldwide economic growth and a preventative monetary policy, which have allowed for a softer adjustment in real estate prices and a lower increase in interest rates. In addition, part of the increase in interest rates has already been reverted (the Bank of England low word interest rates by 25 bp in August 2005).

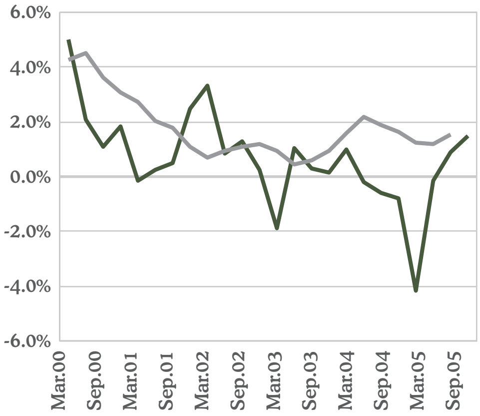
In summary, it can be seen that in Australia and the United Kingdom, despite the increase in interest rates, the real estate correction, and the high level of household indebtedness, there was no recession in private consumption, although there was a significant deceleration. A preventative monetary policy within a favourable worldwide economic environment has contributed to the good performance of disposable income and employment and, consequently, to the correction in the real estate market being softer than on previous occasions. It can also be seen that, in the United Kingdom, a moderation of the sensitivity of consumption to non-financial wealth is probably attributable to less restrictive credit policies in recent years. However, the resulting increase in indebtedness, although not primarily dedicated to consumption, is not without risk, particularly if the households increasing indebtedness are those with lower financial solvency or are more vulnerable to an increase in unemployment.

Elena Nieto, enieto@grupobbva.com
Economic Research Department, BBVA

Chart 2.1.

Europe: GDP and Construction

Annual variation (%)



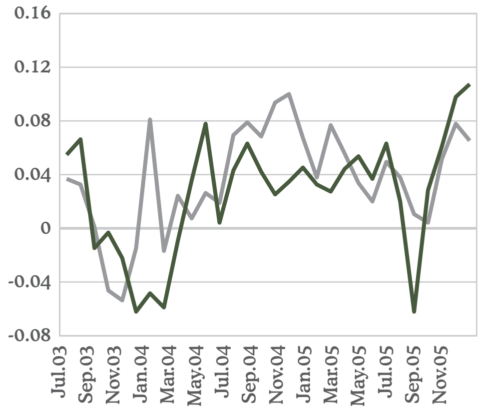
■ GDP
■ Construction GAV

Source: Eurostat

Chart 2.2.

Construction in Europe: Backlog Orders

Annual variation

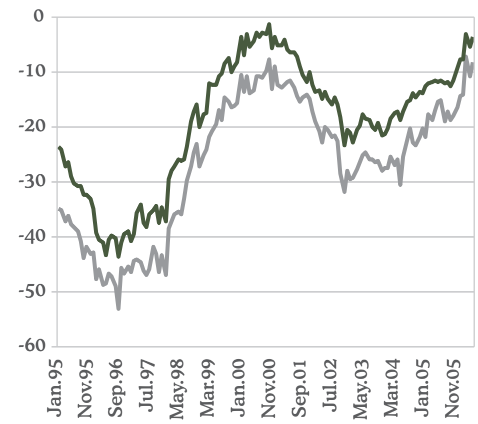


■ Civil Works
■ Building

Source: Eurostat

Chart 2.3.

Construction: Confidence



■ Backlog orders
■ Confidence in the sector

Source: Eurostat

2. Activity in construction

In Europe activity in the construction sector improved in the second half of 2005, establishing a positive trend for 2006, especially in housing.

The slight recovery in the European economy in the second half of 2005 had a significant impact on the construction sector, which in the third quarter of the year registered positive year-on-year variations for the first time since the start of 2004. In the first half of 2005 activity continued to contract, registering a decline of 4.0% in the first quarter. However, construction activity registered greater strength in the second and third quarters of 2005 and everything points to this trend continuing in the first half of 2006.

The recovery in the European economy throughout 2006 and the expectations of higher growth in 2007 will have a positive reflection on the performance of the industry, which, after returning to a growth trend in the second half of 2005, will continue with a gradual recovery in 2006. The building segment will be more dynamic than civil works, which is more dependent on budget considerations.

Improved confidence among agents, which is leading to an increase in the number of real estate projects

The improvement in construction activity in the second half of 2005 stemmed from an increase in the order backlog in the industry which, following the decline last summer, has again demonstrated strength, especially in the housing segment. The improvement in public investment in infrastructure and greater housing demand is driving an increase in construction activity in Europe, especially in EMU countries. In fact, the reactivation of public works in the United Kingdom and the lower decline in production in Germany are behind a large part of this recovery.

The situation has led to opinions among industry executives to reach the highest levels of optimism seen in the last 10 years, both as regards backlog and confidence in the industry. This optimism is also having a clear impact on the number of new real estate projects being developed, which have increased considerably in the last few quarters as can be seen from the 12.7% increase in the number of building permits issued in the first three quarters of the year across the EMU.

As a result of the improvement in construction activity, employment in the industry has expanded at a rate of 1.5%, twice that of the economy as a whole, within an environment of cost controls: construction costs advanced 1.2% in the third quarter of 2005, one half of the rate registered in the year-earlier period.

From a geographic point of view, although the greater strength has corresponded to the smaller recently incorporated economies, the recovery of construction activity in Germany, together with the increase in investment in France, Netherlands and the United Kingdom, have allowed the industry to register a growth trend at the end of 2005.

The construction sector in Spain grew steadily in the first three quarters of 2005 and will reach an average growth rate of 6.3 per percent in 2005.

Construction activity has been gradually accelerating since the end of 2004, reaching growth rates of approximately 6.5% at the close of 2005. The strength was due to, basically, the strong growth of the housing segment and, to a lesser extent, to the good performance of civil works. In the nine years of the expansion cycle in construction, the relative weight of the industry has increased from 11.8% in 1997 to 15.3% of the gross added value produced in Spain in 2005.

Throughout last year, the forward activity indicators for the sector pointed to a slower rate of growth, anticipating a certain moderation in construction this year. Both the building and civil works segments will show slower growth in 2006 with the industry registering an average growth rate of 5.7% in terms of the National Accounting, showing a declining profile as the year progresses.

Based on this tendency, the quarterly figures for both construction employment and housing starts are registering gradually lower growth rates. At any rate, both the occupation levels for the industry, providing over 2.4 million jobs at the close of 2005, as well as the volume of cement consumed, around 4.2 million metric tons per month, are at historic highs.

Confidence indicators for the construction sector have remained in the positive zone since the end of the last decade, with a softly growing trend in the two last years. Current data show that the actors in the industry, based on the high level of activity, continued to register maximum levels of confidence in the good performance of the sector and the trend for the indicator points to this positive vision continuing in 2006. The good performance of the indicator and the positive outlook among operators regarding the order backlog will lead to the opinion surveys in the industry demonstrating a clearly optimistic profile.

This increase in construction activity has also been coupled with an increase in construction costs which surpass that for the rest of the economy, especially as regards materials and sundry supplies, which have registered growth rates of 8.5% on average in 2005. Labour costs, however, have evolved more in line with the rest of the sectors of the economy, growing at below inflation. Throughout 2006 it can be expected that the upward pressure on construction costs will continue.

Investment in civil works registered positive rates in 2005 for the fifth consecutive year. The increases in awards last year assure a good level of investment in 2006.

Civil works investment in 2005 grew at an average rate of over 6.5%, demonstrating a profile of slight moderation at the close of the year, as can be seen from the data from the National Accounting. The materialisation of both Spanish public and private investment and European structural funds are leading to a new dynamism in the civil works segment, which has continued to evolve at positive rates since the end of 2000.

Chart 2.4.

Spain: GDP and Construction

Annual variations (%)

Source: INE and BBVA

Table 2.1. Construction

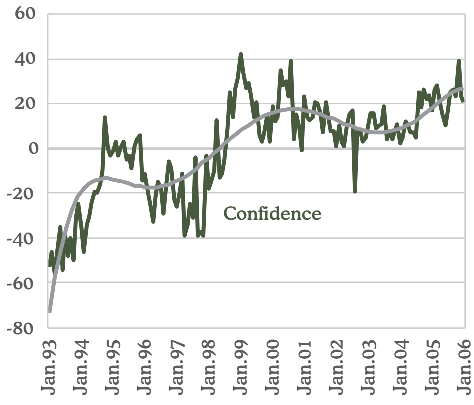
Annual variations

	2003	2004	2005	2006
GFCFc	6.2%	5.5%	6.3%	5.7%
Residential	9.5%	6.0%	6.7%	6.6%
Other construction	3.5%	5.1%	6.0%	4.9%

Source: INE and BBVA

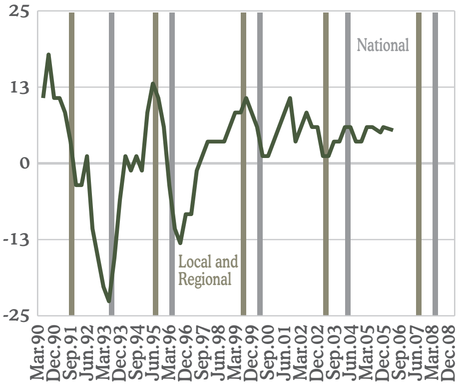
Chart 2.5.

Construction: Confidence Indicator



Source: Ministry of Economy and Finance

Chart 2.6.
Civil works and elections
Annual variations



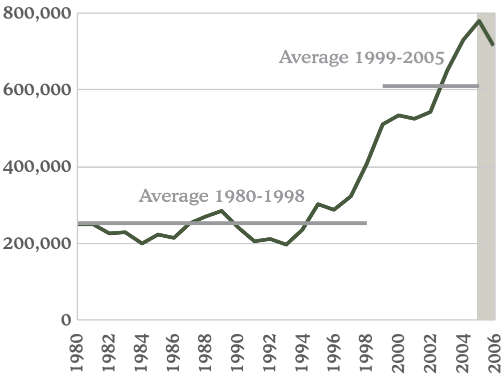
Source: Ministry of Public Works and BBVA

Table 2.2. Official Tenders. Civil engineering
Millions of euros

	Total	Railways Roads and Urban Thorouhfares	Ports and Airports	Irrigation Water Supply and Sanitation	Other
2000	11,740	7,578	508	1,488	2,166
2001	16,341	9,612	835	1,895	3,998
2002	19,611	13,472	459	2,014	3,665
2003	16,706	9,666	1,086	2,516	3,439
2004	20,769	12,910	2,164	2,241	3,454
2005*	22,496	14,791	1,122	3,174	3,409
var. ´05/04	8.3%	14.6%	-48.2%	41.6%	-1.3%

* Figures to November
Source: Ministry of Public Works and BBVA

Chart 2.7.
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	690,207	64,814	9.4%	377,832	54.7%
2004	739,658	50,461	6.8%	399,012	53.9%
2005 (*)	780,099	39,572	5.1%	417,240	53.5%
2006 (*)	715,000	50,000	7.0%	400,000	55.9%

(*) The figures for the whole of 2005 and 2006 are estimates based on data to November 2005.
Source: Colegio de aparejadores and BBVA
Coast: Mediterranean, Canaries, Cadiz, Huelva
Large Cities: Madrid, Barcelona, Valencia, Seville, Zaragoza and Malaga

Official tenders by national and regional governments throughout 2005 reached a total volume of almost 22,500 million euros, an increase of 8.3% over the volume registered in 2004. The increase in investments in irrigation, water supply and sanitation, and the higher volume of resources allocated to communications infrastructure will account for most of the government awards.

Among the official tenders in 2005, the investments in transportation infrastructure (Railways, roads, ports and airports) accounted for almost 2 out of every three euros awarded, while the contracts awarded for irrigation, water supply and sanitation accounted for 14.1% of the total. The conclusion of works in some airports is behind the lower volume in this heading.

This increase in official tenders in 2005 will also be supported by the financing provided by European structural funds as well as private sector financing of some projects underway. Accordingly, activity in the civil works segment will continue to increase throughout 2006, although at a slower rate than in 2005.

Housing starts in 2005 again reached all-time highs. The lower volume of demand for housing will lead to a slowdown in new projects in 2006.

Since the mid-1990s there has been a structural change in the construction industry that has allowed for the volume of housing production to currently triple the average for the last 20 years.

This high volume of a housing production apparently surpasses the needs derived from demographic factors, which highlights the important role that Spain is developing as a destination for second homes, a demand that greatly surpasses that in the domestic market. In this sense, the strong increase in income among resident households and an increase in tourists entering Spain have provided a significant push to the holiday home segment in recent years. This trend indicates that, over the medium and long-term, the market for holiday homes will continue to mature.

For the full year, the projects endorsed place the number of housing starts at 780,000, representing an increase of 5.4% year-on-year. The boost to the segment mainly occurred in smaller tourist areas, where the new projects represent an increase of 5.8% the number of homes to be built. In large cities, where the pressure of land prices is more intense and the generation of a supply of new housing is more complex, the number of planned units in 2005 declined by over 20% year-on-year, while, conversely, the nearby towns and cities or provinces recorded the expansion in supply.

Throughout 2005 sales continued to slow in an almost generalised manner, which will result in a slowdown in housing production in the more saturated markets. Our forecasts point to the number of planned housing units to decline to 715,000, which is still above the average for the last six years.

The number of housing units completed in 2005 increased by almost 6% over the previous year, for a total of over 525,000 units. Over 2.25 million new housing units have been delivered over the last five years, boosting total housing supply by 10% over that registered in the 2001 census. This volume of units equals the total number of units completed throughout the 1980s. In 2006, a total of almost 600,000 new units are expected to be completed, which will mark a new all-time high.

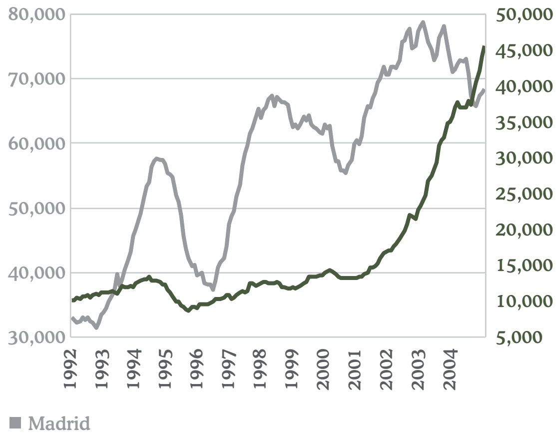
Non-residential building shows strength. For 2006, the trend points to improved activity in the segment.

In non-residential developments, throughout 2005 construction was started on a total of almost 22 million m^2 of non-residential surface area, for a year-on-year increase of 8%. Despite the deceleration in investment in office space and a minor downturn in the production of industrial sheds, the higher number of projects endorsed for commercial and warehouse space, with a year-on-year increase of 5.6%, an increase in the construction of other types of surface areas, such as leisure uses, has allowed for a change in the trend of recent years and allowed the segment to record positive growth in 2005.

The development of commercial space maintained strong growth throughout 2005, breaking the trend of the previous year. The high yield obtained by these types of projects in recent years is a strong stimulus for these types of spaces. Accordingly, throughout 2005, a total of 6.8 million m^2 were endorsed. The slowdown in consumption expected in 2006, together with a policy of more restricted openings, will affect the rate of development of new commercial space, which will result in more moderate growth in the activity in this segment in 2006.

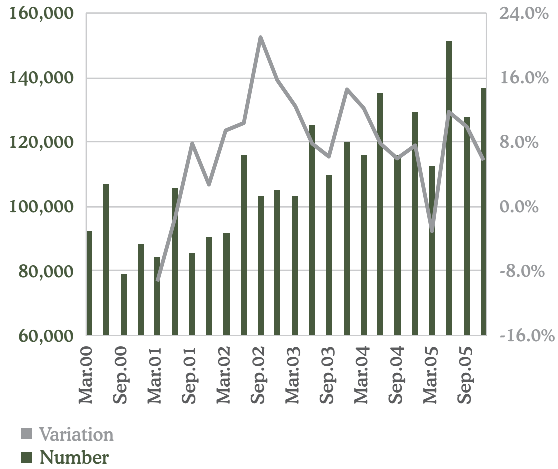
In 2005, the office market continued in the slump of previous months and the volume of new works declined by almost 9% to 2.4 million m^2, 5% below the average of the last five years. Despite the reduction in the volume of office space, there have still been no signs of a boost in supply for this type of non-residential surface area. An increase in rent levels in the segment would be a clear stimulus for new supply to enter into the market.

Chart 2.8.
Madrid and adjoining provinces Housing starts. Number



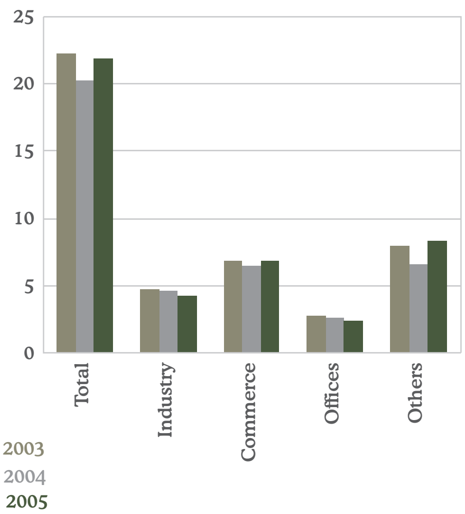
Source: Ministry of Public Works and BBVA

Chart 2.9.
Housing completed
Number and annual variation (%)



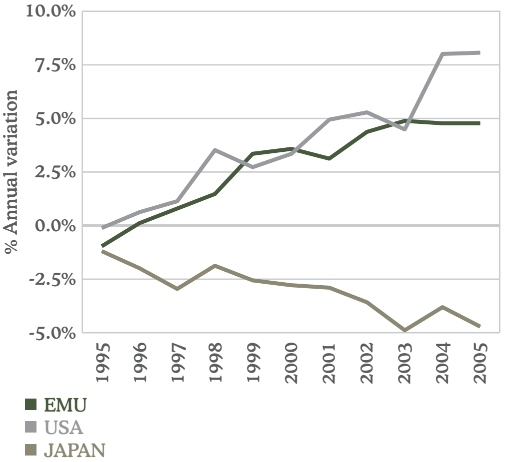
Source: Ministry of Public Works

Chart 2.10.
Non-residential space
Millions of m^2 to be built



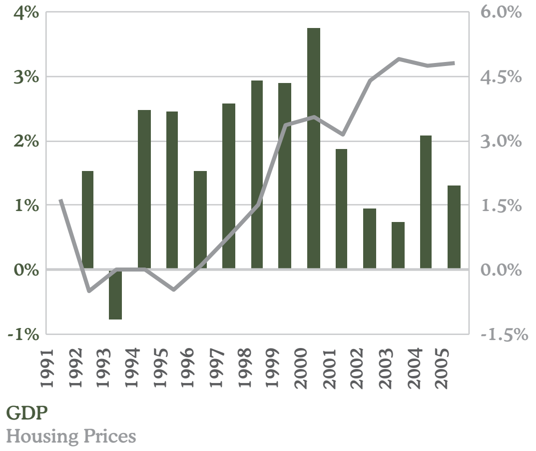
Source: Ministry of Public Works and BBVA

Chart 3.1.
Housing Prices
Real annual variation 1995-2005. % annual variation



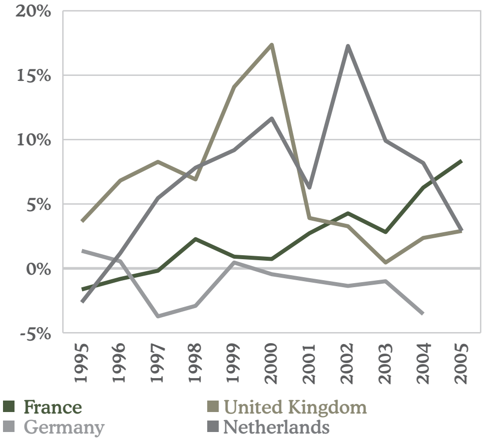
Source: Bank of Spain

Chart 3.2.
EMU: housing prices in GDP
Real annual variation



Source: Eurostat and ECB

Chart 3.3.
Europe: housing prices
Real annual variation



Source: Bank of Spain

3. The real estate market

The increase in real estate prices in 2005 continued at rates above inflation among the leading Western economies. Within a European context, price performance was not uniform.

There has been a continuous revaluation in housing prices since the mid-1990s among the most developed economies. Except in Japan, where the real estate inflation of the previous cycle and the weakness in the economy in recent years has had a very negative impact on the housing market. In most of the Western economies, the high demand for residential assets has translated into higher prices.

The high level of liquidity existing in the system, the low real interest rates, employment growth and the evolution of demographic variables all combine to sustain the advances in prices, to a large extent, in both most EU member nations and the United States. The increases in nominal interest rates in the US economy will tone down demand for housing and, consequently, housing prices, such as has happened in the United Kingdom and Australia following the interest rate hikes in these countries.

In the first half of 2005, housing prices rose at a rate of close to 5% in real terms, above that registered in 2004. The improvement in financing conditions taking place since 2001 has allowed for housing prices to accelerate in years of lower economic growth and low job creation. In 2006, the outlook for an improved economic situation in the EU will bolster demand for housing and lead to similar revaluations as those recorded in 2005 across the EU.

A stronger advance in the European economy in 2006 and the resulting improvement in employment in the leading economies of the Union will act as the new drivers behind housing demand, which will, however, have to adapt to an environment of rising interest rates. Nonetheless, interest rates will remain low throughout the current year.

The differing situations among the leading European economies are also reflected in the real estate markets, with clearly differentiated price performance. Accordingly, while in Netherlands and the United Kingdom price increases are toning down, in France and Italy prices are growing at above inflation and accelerating. In the German market, conversely, housing prices continue to decline as in 2005, although at a slower rate than in previous years.

The improved outlook for growth in the leading European economies points to a certain improvement in demand, which could bolster prices in Germany. Prices advance in France, Italy and neighbouring countries, meanwhile, will continue to climb. In the case of the most dynamic markets, such as Ireland and Spain, the 2005 figures point to more moderate growth.

Housing prices throughout 2005 continued on a trend of gradual and ordered moderation. For 2006, forecasts point to growth rates of around 6% at year-end.

The Spanish real estate market in 2005 continued to demonstrate the dynamism of previous years, although the signs of a slowdown intensified, both in quantity and in prices. Indications of moderation are rising not only in the primary housing segment, but also in the market for second homes. However, price increases continued at two digit rates and the number of transactions surpassed the average of the last five years.

In this sense, average housing prices in Spain closed 2005 with an increase of 12.8%, which is four percentage points lower than that recorded at the end of 2004 and six percentage points below the all-time high, aggregating with this figure with nine quarters of deceleration. Forecasts indicate that the moderation will continue in 2006 and that housing prices will close the year with an increase of between 5 and 7%.

The slowdown in housing prices is occurring in an environment of lower demand, as can be seen from the decline in sales and the still growing supply in both new homes and used. This is behind the deceleration occurring in both segments, although it is sharper in used homes which had recorded the highest increases since the beginning of 2002.

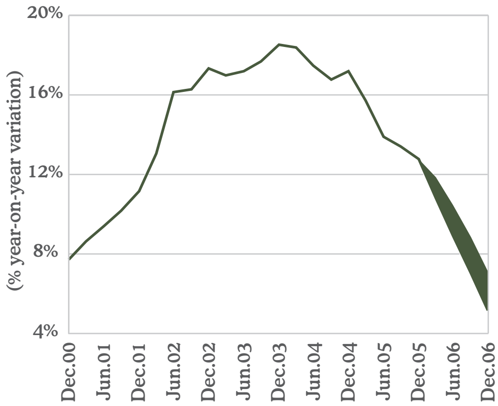
The deceleration is generalized across almost all Regional Governments. In the last year only three regions (Navarre, Galicia and Valencia) registered an increase in the rate of growth. Conversely, the regions which recorded the highest increases in 2004 (Murcia, Andalusia and Catalonia) registered the strongest deceleration (between 14 and 9 percentage points) in 2005. In general, there is no appreciable difference between price performance in the interior and on the coast.

Price performance among the large cities has been varied. While housing prices in Barcelona have decelerated year-on-year more than in Madrid, the Catalonian capital registered an increase in the second half of the year, while Madrid maintained the tendency for moderation.

The analysis of the housing price trend indicates a clear moderation in price levels across practically all of the Regional Governments.

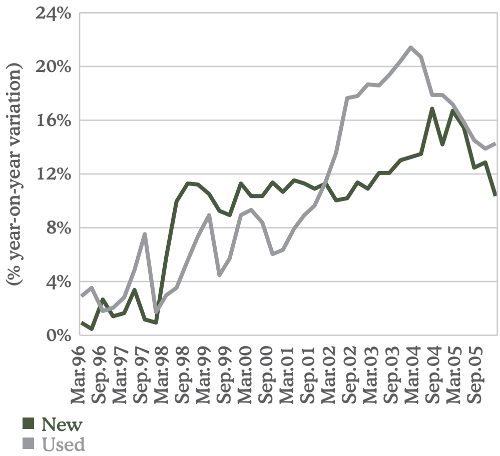
The analysis of the new data on housing prices published by the Ministry of Housing highlights the existence of a surge in seasonal character in this series, both on the general level and on the more disaggregated levels. To mitigate this problem and extract the information offered by the new series, we have seasonally adjusted the data and calculated the trend.

Chart 3.4.
Housing Prices in Spain



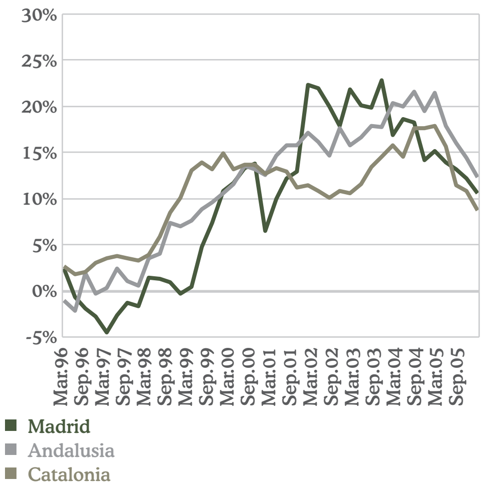
Source: Ministry of Housing and BBVA

Chart 3.5.
Housing Prices in Spain



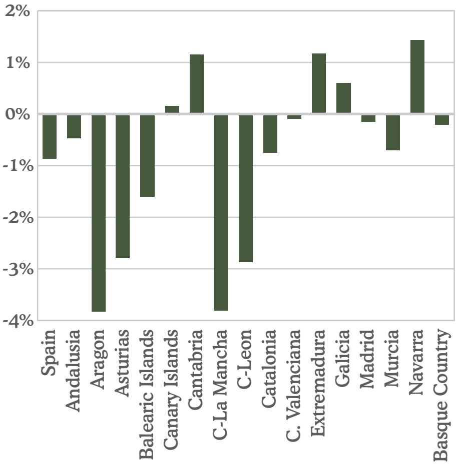
Source: Ministry of Housing

Chart 3.6.
Housing Prices
Annual variation



Source: Ministry of Housing

Chart 3.7.
Error in the fourth-quarter forecast
Data observed/data forecast



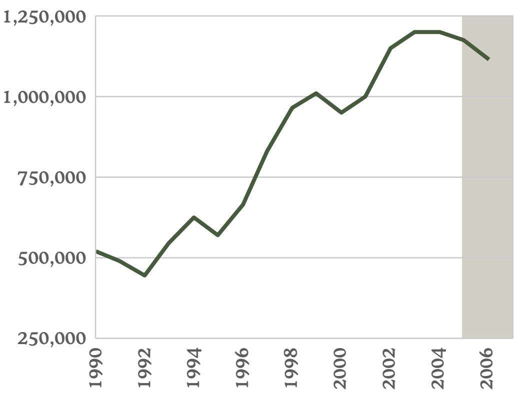
Source: BBVA

Table 3.1. Housing prices. Trend

	Dec.05	High	nº of quarters since high	Spread with last high
Spain	12.6%	18.3%	9	5.8%
Galicia	15.3%	15.3%	0	0.0%
C-León	12.0%	15.4%	5	3.4%
Asturias	10.2%	14.1%	8	3.9%
C. Valenciana	14.8%	19.3%	3	4.5%
Extremadura	11.7%	18.1%	4	6.4%
Aragon	11.0%	18.5%	7	7.5%
Navarra	9.9%	17.0%	24	7.0%
Canary Islands	8.4%	15.4%	22	7.0%
Andalusia	10.7%	21.5%	7	10.8%
Catalonia	9.6%	20.2%	6	10.6%
C-La Mancha	11.4%	24.8%	4	13.3%
Madrid	8.2%	21.6%	12	13.4%
Cantabria	7.5%	20.1%	19	12.6%
Murcia	13.2%	26.8%	7	13.5%
Basque Country	8.0%	23.0%	23	15.0%
Balearic Islands	8.2%	29.1%	25	21.0%

Nota: Variations correspond to annualized quarter-on-quarter rates
Source: BBVA

Chart 3.8.
Housing transactions. Number



Source: BBVA

As we advanced in our previous BBVA Real Estate Watch of November 2005, the analysis of the trend shows that since the end of 2003 there has been a clear deceleration in housing prices both on the national level and within the context of the different regions. The data for the fourth quarter of the year ratifies this and even points to a more intense deceleration in price growth in certain Regional Governments such as Castilla-La Mancha. In real terms, given the rebound in inflation, this deceleration in prices is even more pronounced than in previous quarters.

On the whole, the trend for housing prices advanced at a rate of 12.6% year-on-year at the close of 2005, almost 6 points below the high for the third quarter of 2003. This ordered moderation in prices can also be seen in a most of the regions. In this sense, excepting Galicia where the real estate cycle has not been especially expansive in the past, the rest of the communities are registering price increases that are below that seen in previous quarters.

In general, the moderation in pricing is more pronounced in those regions which had recorded the highest increases, such as in the Balearic Islands, the Basque country and Murcia. Conversely, those regions having recorded lower highs are currently registering softer adjustments.

The slowdown in price growth is occurring both in the interior and in the coastal regions, that are more oriented towards tourism. It is interesting to note, however, that the Islands were the first to record a surge in prices as well as the subsequent moderation thereof; as also occurred in Navarre and the Basque Country. In Madrid, Andalusia and Catalonia, the regions with the highest populations, the trend for housing prices has been more intense than the national average, with a moderation of over 10 points from their highs.

This price performance is occurring within a context of a soft decline in sales.

The first estimates for housing transactions for the whole of 2005 point to a slight decrease in the number of sales and establish a trend that will lead to a lower volume of sales in 2006. Last year a total of more than 1,175,000 housing units were sold, for a decrease of 2% over the previous year. Forecasts for this year point to total sales of 1.1 million housing units, for a decline of 5% in the number of transactions. The declines in sales are affecting both new and used housing in practically all markets.

Over the medium and long-term, demand for housing will be primarily conditioned on the evolution of both demographic and economic factors. In this sense, the analysis of the demographic variables is expanded on the box “Housing Demand in Perspective”.

The slight increase in interest rates has not prevented an improvement in the financing capacity of households, but has resulted in a certain tightening of housing affordability indicators.

The moderation in housing demand in the last year is associated to the deterioration in access conditions to housing resulting from a tightening in the financial environment. Since the beginning of this decade, the increase in real estate prices has had a negative impact on affordability indicators, effects which were practically offset by the continuous declines in interest rates and the lengthening of the payback periods, but are clearly reflected in the volume of housing demand. In 2005, despite the slower advance in housing prices, affordability ratios deteriorated more than in 2004 in response to the slight increase in mortgage rates.

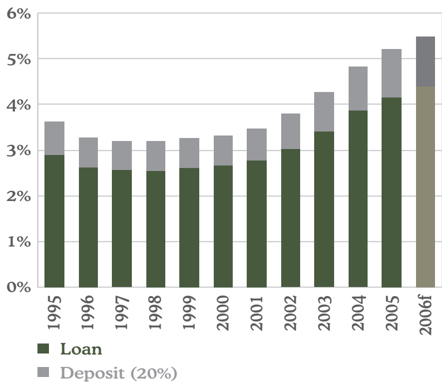
With respect to household income, the average price of a home in 2005 was equal to something more than five years of labour for an average family with gross weighted income of 1.65 salaries per year. This ratio is two years longer than that recorded in 2000 and will reach 5.5 times at the end of 2006.

In terms of monthly payments, the acquisition of an standard home with mortgage financing implies dedicating 25% of household income to mortgage payments, a percentage which declines to 20% taking into account the tax refunds applicable to the acquisition. In the last five years, this ratio has worsened by five percentage points and the trend indicates that there will be a deterioration of almost 3 percentage points by the close of 2006. This deterioration is the result of higher housing prices and slightly higher mortgage rates.

The increase in interest rates produced in the mortgage market in the second half of 2005 do not, however, imply any decrease in the financing capacity of households, which will continue to extend into 2006 given the expected, and positive, increase in household income and slightly longer amortization periods. At the close of 2005, an average family with income of 30,000 euros per year had financing capacity of almost 202,000 euros, a figure which will increase to 205,000 at the end of 2006 if the current trend holds.

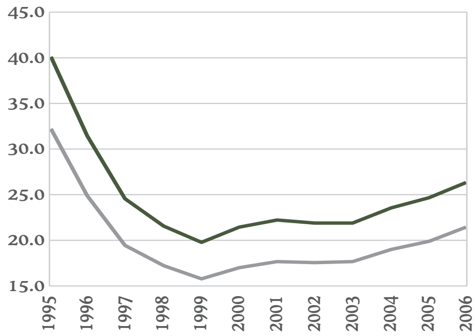
Observing the sensitivity of housing affordability ratios to changes in interest rates or amortization periods on loans, it can be seen that an increase of one point in mortgage rates would imply a deterioration of three percentage points in the effort needed to afford a home, and a reduction of just over 8% in the debt capacity of the household. However, for each year that the amortization period is extended, the decline in the mortgage payments would be equal to 1% thereof, while the debt capacity would increase by just over three percentage points. Currently, average amortization period on a new mortgage loans is around 25 years. An increase in the average maturity of the mortgage loan up to 28 years would result in an improvement in the debt capacity of around 10%, which would contribute to completely offsetting an increase of over 100 basis points in interest rates.

Chart 3.9.
Housing affordability
(Price of home/wage income)



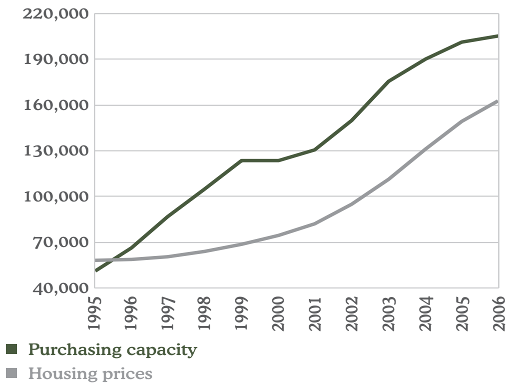
Source: BBVA

Chart 3.10.
Housing affordability in Spain
Effort to Weighted Income



Source: BBVA

Chart 3.11.
Housing prices and purchasing capacity Euros/m²



Source: Ministry of Public Works and BBVA

Table 3.1. Affordability indicators

						Loan				
		Wage-carners by household	Household income	Price of a 90m² home (1)	Price/ Wages	Interest rate	Maturity	Loan instalment household income	Affordable home (€)* (2)	BBVA indicator (2)/(1)
Average	1995-1999	1.36	19,916	65,710	3.30	7.7%	18	27.5	86,493	1.3
2000		1.51	23,835	79,220	3.32	5.8%	22	21.4	123,426	1.6
2001		1.54	25,038	87,030	3.48	5.8%	23	22.2	130,467	1.5
2002		1.58	26,548	100,719	3.79	4.9%	23	21.9	153,130	1.5
2003		1.58	27,740	118,465	4.27	3.7%	24	21.9	180,374	1.5
2004		1.59	28,801	139,136	4.83	3.4%	24	23.6	196,764	1.4
2005		1.64	30,420	158,490	5.21	3.4%	25	24.7	213,807	1.3
2006(e)		1.64	31,485	172,654	5.48	3.9%	27	26.4	218,340	1.3

* Affordable home is estimated by considering that one third of income goes to paying the loan instalment for 80% of the value of the home in the market conditions prevailing at each moment in time.
Source: BBVA

Housing demand in perspective

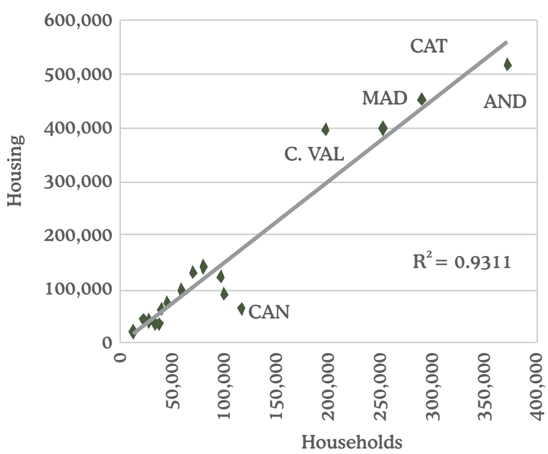
Introduction

The evolution of housing demand in Spain over the medium and long-term is one of the most widespread concerns in the real estate industry at this time given that it will impact on the evolution of supply and, foreseeably, on prices as well.

One of the most characteristic traits of housing investment is its cyclical nature over time. Shorter real estate cycles, more volatile and more sensitive to temporary conditions of supply and demand, occur within longer cycles determined by structural factors such as demographics, the evolution of the permanent income of households and relative pricing of real estate assets. Over the long term, if conditions allow, supply tends to adjust to demand.

The housing demand models developed in the 1990s, based on demographic data, anticipated relatively well the household formation process followed in Spain in the last decade, but they greatly underestimated the total number of housing units that would be built. The existence of a wider demand than that considered as specifically "necessary", the intense influx of immigrants and the acquisition by foreigners of holiday residences all help to explain this difference. At any rate, over a longer time period, the finished units have maintained a very direct relationship with the household formation process in all of the Regional Governments as can be seen from chart 1 below.

Chart 1.
Number of new households and finished housing
By region 1991-2001



Source: BBVA

At the close of 2005 the first estimates by the INE[1] indicated that the Spanish population had increased to 44.1 million inhabitants, forming a total of 15.1 million households with a total stock of 23.1 million housing units. Over the last four years, while the population has increased by 3.2 million people and the number of households by more than 1.5 million, the increase in the housing stock has surpassed 2.2 million units, which clearly demonstrates the intensity of the phenomenon of demand for tourist housing by both residents and non-residents.

Table 1.
Spain: Household and demographic variables

	Population	Number of households	Housing Stock	Persons/ Home	M²/ person
1960	30,582,936	7,028,651	7,726,423	4.35	23.4
1970	33,956,047	8,504,326	10,655,785	3.99	29.0
1981	37,742,561	10,153,895	14,726,859	3.72	36.1
1991	39,433,942	11,834,849	17,206,363	3.33	40.4
2001	40,847,371	13,591,000	20,823,369	3.01	47.2
2005*	44,108,530	15,115,000	23,077,828	2.92	48.4
2011	46,478,021	17,595,689	26,128,185	2.64	52.0

(*) INE estimates 2005 and BBVA
Source: INE census and EB

The goal of this box is to take an in-depth look at the evolution of the number of households in Spain over the medium and long-term and their potential impact on the real estate market. To this end, the following paragraphs will take a look at the household formation process followed by the Spanish population, the impact of immigration, and the arrival of new households associated with tourism.

Demographic evolution and immigration

As regards demographics, in the last decade there have been structural changes that have significantly conditioned the household formation process in Spain. Firstly there are a greater percentage of households per 100 inhabitants, a percentage which has increased across practically all age levels. This increase is coherent with the growth in the number of one-person households, both among the young and more mature adults, as well as with the greater rate of separations and divorces.

Secondly, there has been a very significant increase in the number of households with the woman declared as the head of the household: while in 1991 only 12% of women declared themselves to be the head of the family, in 2001 the proportion had increased to over 25%. In addition the increase has occurred across all age segments, although it has been more intense in the 22 to 40 year-old range. This evolution is the result of the greater participation of women in the labour pool, going from 25% of all women in the beginning of the 90s to the current ratio of almost 50%.

[1] National Institute of Statistics. INE: http://www.ine.es

Lastly, since the end of the last decade there has been a spectacular increase in the immigrant population, which has tripled its weight in the Spanish population and now accounts for 10% of the inhabitants of Spain, or 4.4 million people in 2005. The age structure of immigrant inhabitants differs greatly from the native population, with a greater weight of groups within the range for demanding housing: 60% of the immigrant population is concentrated in the ages between 20 and 44 years old, compared to 40% of the native population. The strong influx of immigrants has placed strong pressure on housing demand in Spain in recent years. Moreover, although in the initial stage demand was greater for rental property, in most cases shared, this demand is increasingly shifting to acquisition.

• The household formation process

In order to estimate the number of households that will be formed in Spain over the 2006-2011 period, we start with the age structure of existing population in the year 2004 and apply the head of household rates to obtain the number of households in each year analyzed. To this end, firstly, we estimate the head of household rate (number of heads of household in relationship to the total population) for each age range:

Considering: $T_i = n_i/N_i$
Were: Ti = Head of household rate
n_i = Number of heads of household
N_i = Total population
The subscript i refers to the age.

The interval of ages considered runs from 12 through 85 years of age, grouping the heads of household under the age of 12 and over the age of 85 in the first and last rates respectively. The head of household rate reflects primarily in the process of the formation of the nuclear family based on matrimonial unions, separations and divorces, and the single-parent households. The head of household rate for each stratum of the population and different moments in time, multiplied by the number of inhabitants, provides the number of homes associated to a group of ages:

Nit x Ti = nit = Hit

Where the subscript i and t refer to the ages and the year of analysis respectively.

Accordingly, the head of household rate (T_i) applied to the population of each year classified by ages (N_i), allows us to obtain the number of heads of household (n_i) for the year t and belong to the i-teenth cohort and, accordingly, the number of households that could be attributed to this segment of the population in the corresponding year (H_i).

This procedure allows for the analysis of the number of households existing in a determined period. Accordingly, the variation in the number of households as a result of applying the head of household rate corresponding to the variations produced in the existing population of each age range. The evolution of the population and the alterations in the head of household rates are the key variables in the analysis of demand potential arising from population pressures.

• Head of household rates and household forecasts.

Table 2 below shows the head of household rates for age cohorts obtained based on the 2001 census. From this we can deduce that the heads of household will equal 34.7% of the total population, accounting for 44.4% of the male population and 25.5% of the female. In addition, the weight of the heads of household increases in line with the progression of the age pyramid, reaching the maximum level at the 60 plus age range. The strongest growth in the flow of new households can be seen, logically, in the 20 to 34 age range.

Table 2.
Head of households rate
Distribution 2001

HoH AGE GROUPS	HEAD OF HOUSEHOLD RATE		
		GENDER DISTRIBUTION	
	TOTAL	MALE	FEMALE
Spain	34.7%	44.4%	25.5%
15 - 19 YEARS	1.5%	1.4%	1.6%
20 - 24 YEARS	7.6%	7.5%	7.6%
25 - 29 YEARS	21.7%	23.0%	20.4%
30 - 34 YEARS	38.2%	45.3%	30.9%
35 - 39 YEARS	46.2%	58.5%	33.7%
40 - 44 YEARS	49.7%	66.2%	33.3%
45 - 49 YEARS	51.7%	71.9%	31.8%
50 - 54 YEARS	52.8%	76.0%	30.1%
55 - 59 YEARS	54.1%	78.0%	31.2%
60 - 64 YEARS	54.1%	76.8%	33.1%
65 - 69 YEARS	52.4%	73.3%	34.2%
70 - 74 YEARS	57.0%	75.9%	41.6%
75 - 79 YEARS	60.5%	75.8%	49.5%
80 - 84 YEARS	61.2%	73.4%	54.1%

Source: BBVA

Looking at the next few years, there does not appear to be any weighty arguments pointing to a reversion of the above-mentioned processes. In an environment of economic stability as currently exists, the head of household rates can continue to grow, especially in the younger age ranges. Even maintaining the rates derived from the 2001 census and considering the INE projections for immigrant inflow, the estimates show that over the next seven years housing stock will grow by approximately 500,000 households per year, 360,000 of the gross corresponding to resident population and 140,000 to new immigrants. Without doubt, the demographic dynamic will continue to justify a truly significant level of housing demand.

Table 3.
Spain: Population and households
Forecasts 2005-2011

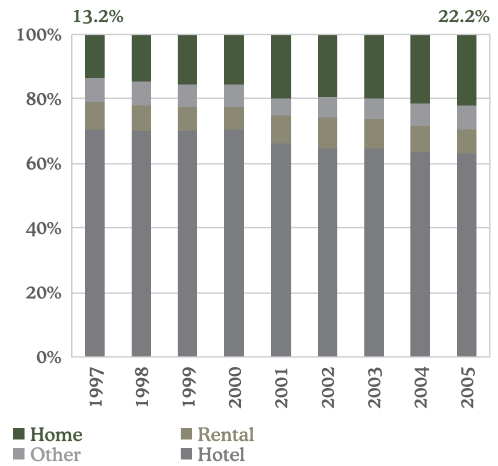
	Gross Flow of New Homes		
	Residents	Inmigrant	Combined
2005	354,793	180,000	534,793
2006	356,888	165,000	521,888
2007	359,618	150,000	509,618
2008	362,566	135,000	497,566
2009	364,988	120,000	484,988
2010	365,525	115,000	480,525
2011	363,661	110,000	473,661
Average 2005-2011	361,148	139,286	500,434

Source: BBVA

The arrival of tourist housing

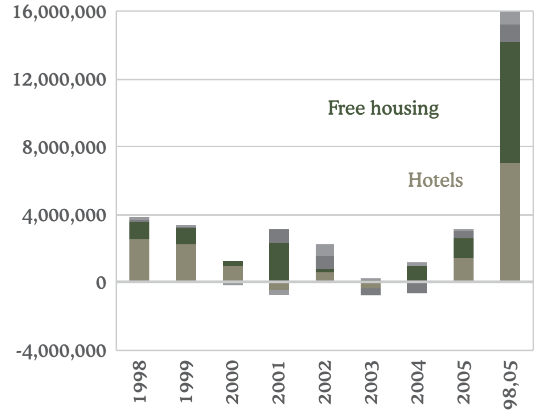
The stability derived from our economy belonging to a common monetary area had increased the confidence of foreign agents in the Spanish economy. The situation has had a faithful reflection in the clear modification of the habits of tourists visiting Spain as regards the method of lodging. While in 1997 13% of foreign tourists lodged in free housing (either owned or loaned), in 2005 this percentage has increased to 22% of the total according to the data of Frontur (chart 2). Over this period of time, the number of tourists visiting Spain has increased to 16 million. Of this total, somewhat less than half use free housing as the form of lodging (chart 3). Undoubtedly, this is a relevant factor given the evident implication in the real estate market.

Chart 2.
Method of lodging for foreign tourists



Stores: IET

Chart 3.
Destination of new tourists 1988-2005



Source: Frontur

In 2004, of the over 11 million tourists lodged in free housing, almost 4.4 million of which did so in their own residence. The number of people, weighted with the average size of the European households (primary issuer markets), leads us to the conclusion that there are a total of almost 2 million households that temporarily reside in their own home in Spain.

The number of households that will reside in a tourist housing unit in the future will depend on the capacity of Spain to attract new tourist flows, on the preferences of the tourists with regard of housing and the size of their household. Considering that the latter factor will not undergo any significant changes over the next few years, higher relevance would correspond to the first two elements.

In this regard, since the year 2000, the number of foreign tourists arriving in Spain has registered modest increases in comparison with the 90s. On average, the flows have grown at an average rate of almost 4% in recent years with the exception of a particular decline in 2003. Although Spanish tourism is losing market share on a global scale, there is still room for expansion in the industry. Accordingly, the trend of the future scenario would be in a range of between 2% and 3%. The range of forecasts for new foreign tourist arrivals per year is between 1,189,000 in the worst-case scenario and 1,818,800 in the best case scenario (under a central hypothesis of 2.5% growth, there would be 1.5 million new tourists per year on average over the period.).

As regards tourist preferences, in recent years the percentage of tourists lodging in owned property ranged between 6 and 10% of the total. However, given the demographic processes currently existing in Spain, with a sharp tendency towards the aging of the population and a growing preference for ownership, it is estimated that it will reach 15% of new tourists; the range of arrivals of

Table 4.
Forecast of tourist arrivals

	Increase in Tourists		
	Δ2.0%	Δ2.5%	Δ3.0%
2006	1,317,163	1,595,046	1,872,928
2007	1,268,729	1,560,784	1,855,617
2008	1,221,411	1,527,041	1,838,457
2009	1,169,861	1,488,407	1,815,962
2010	1,108,132	1,438,724	1,781,753
2011	1,048,251	1,390,103	1,748,013
Average 2006-2011	1,188,925	1,500,017	1,818,789

Source: BBVA

Table 5.
Forecast of new tourist households

	Number of new households		
	Δ2.0%	Δ2.5%	Δ3.0%
2006	88,010	106,578	125,146
2007	88,811	109,255	129,893
2008	89,385	111,752	134,542
2009	91,196	116,028	141,563
2010	91,673	119,022	147,400
2011	91,722	121,634	152,951
Average 2006-2011	90,133	114,045	138,582

Source: BBVA

households would be between 90,000 and 140,000. In all, considering the different conditioning elements, tourist movements will attract an average of 114,000 new households in the coming years.

Net flows of households in Spain

In all, the gross flow of new households in Spain could be estimated at some point over 600,000 on average in coming years, with residents accounting for a half a million and non- residents accounting for somewhat over 100,000.

However, as result of the increased aging of the Spanish population, we can also see an increase in the flow of household disappearances. This process will intensify until reaching a total of 290,000 removals in 2011. In the final balance, in said year, Spain will have somewhat over 17.2 million households, which would equal in intercensal increase of more than 3.6 million households, more than double the growth in previous decades.

With regard to housing demand, both for primary and secondary homes, we can see that, by simplifying, two primary implications. The first would be the level of demand expected in coming years, although below that registered currently, will continue to be undoubtedly significant. Secondly, and tied to the foregoing, the deviation from the central scenario would be determined primarily by the degree of stability of the Spanish economy and, to a lesser

Table 6.
Households: gross and net flows. Forecasts 2006-2011

	Gross Flow Residents	New Households Inmigrant	Tourist	Removals	Total Households
2006	356,888	165,000	106,578	224,383	15,519,083
2007	359,618	150,000	109,255	237,131	15,900,825
2008	362,566	135,000	111,752	251,101	16,259,042
2009	364,988	120,000	116,028	265,464	16,594,593
2010	365,525	115,000	119,022	279,056	16,915,084
2011	363,661	110,000	121,634	290,001	17,220,379
Average 2005-2011	361,148	139,286	112,653	251,737	

Source: BBVA

extent, the economic performance of the primary countries demanding holiday housing (United Kingdom and Germany).

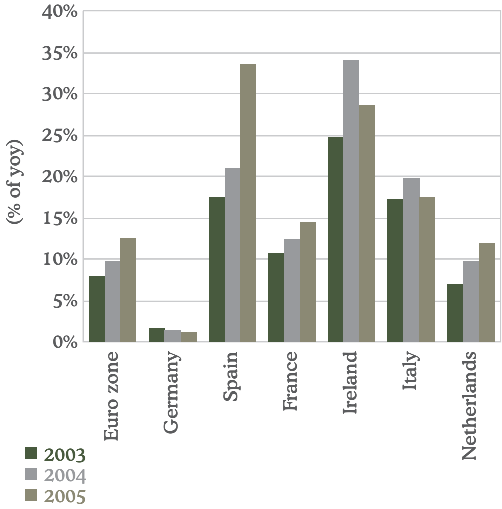
The performance of the labour market is important as well given that it conditions the greater or lesser occasional pressure on the real estate market and also affects the expectations of market agents. This could result in significant changes in the conditions of demand. Greater optimism in the ease of obtaining employment, the stability thereof, and the future possibilities for improvement, within an environment of easy access to financing, increases the propensity of a family to acquire a home. A similar reasoning can be applied to immigration, given that as positive expectations for job creation in Spain are maintained, the attractiveness of coming to our country to work would not be modified.

The growing rhythm of household removals should also be taken into account given that they generate an opportunity in the housing market through refurbishments. Although a large percentage of the aged population reside in rural zones, 30% of the population over 65 where housing demand is not very high, another part of the age group reside in an urban environment which allows for the possible obsolescence of the housing stock being converted into a deciding factor in the supply-demand pressure that the housing market would have to face in the future. In this regard, the factors that condition the recovery of removed households are the quality of the origin of the stock, its location, and the degree of spatial consolidation of the population.

Lastly, it can be expected that demand for second homes will continue to gain weight, specially among the non-residents. However, the economic conditions of the leading investor countries and the development of the Spanish tourism model will have an important role to play in the evolution of this segment of demand as can be seen from the topic of the quarter in this report.

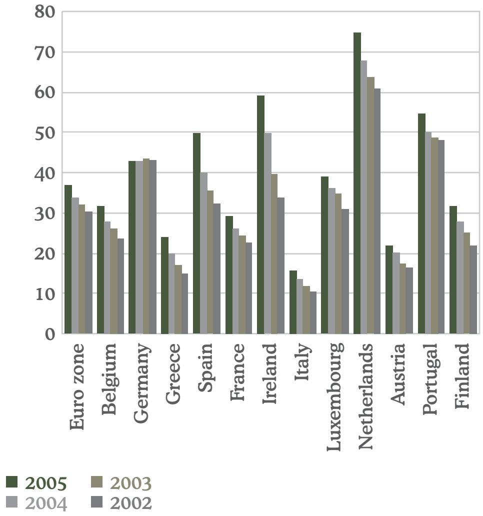
David Martínez, dmartinez@grupobbva.com
Tomás Riestra, riestra.giner@grupobbva.com
Ignacio San Martín, jisanmartin@grupobbva.com
BBVA Economic Research Department

Chart 4.1.
Growth of loans for house purchase



Source: Bank of Spain

Chart 4.2.
Loans for house purchase/GDP



Source: Bank of Spain and the European Commission

Chart 4.3.
APR on new business lending for house purchase within the EMU

Source: ECB

4. Real estate financing

The growth in loans for house purchase continues to accelerate in Europe.

The growth in private-sector loans within the EMU reached 9.1% in December 2005, 3 percentage points above that recorded in the previous year. The most dynamic segment of these loans is lending for house purchase, which closed the year with 12% growth, two percentage points above that recorded in the previous year. This translates into a greater weight of home financing among private sector loans, which, for the third consecutive year, has widened 1 percentage point to reach 35% at year end.

In analyzing the importance of lending to households for house purchase within GDP, we can see an increase of three percentage points in 2005, nearing 37% in the euro zone. This increase has been fairly generalised across EMU countries, with the exception of Germany, where housing loans declined in weight by six basis points during the year._In the other hand, there continues to be notable strength in the Irish and Spanish mortgage markets.

Following the all-time low registered in October 2005 (3.82%) in response to the low level of long-term and short-term interest rates and the growing weight of floating rate loans, the interest rate on loans for house purchase rebounded 17 basic points, partially absorbing the increase in official rates. Nonetheless, on average, interest rates during 2005 reached 3.92%, 31 basis points below the 2004 average.

To this we would also have to add the improved economic outlook within the euro zone, which has contributed to an increase in demand for housing loans. In fact, as can be seen from the last survey of bank loans, the fourth quarter of 2005 was the quarter in which more institutions noted in increase in demand for house purchase loans since the survey began with the closing data for 2002. According to the financial institutions, improved consumer confidence was the primary reason behind this increase. Nonetheless, most of the financial institutions bet on a slight deceleration in demand for these types of loans during the next quarter.

As regards loan standards, that is, the conditions applied by the financial institutions offering loans, there has been a slight tightening in terms but it is not expected to continue in coming months.

In Spain, loans continue to grow at rates above 24%.

In Spain, credit to the private-sector, including off-balance backed securities, continued to accelerate during the second half of 2005, registering a year-on-year increased through November of close to 20%, three percentage points above that registered in the previous year.

Despite the fact that real estate related loans continue to record the highest growth; there was a strong increase in the rest of the applications during 2005.

Loans managed for house purchase continued to grow at a rate of 24%. The positive performance of the economy and employment, the appearance on the market of a growing number of finished homes, and the maintenance of interest rates at low levels, allow for the credit institutions to continue increasing personal financing for house purchase. Despite the rebound of 60 basis points in the 12-month Euribor during the last quarter of 2005, the interest rate on new transactions remained at very low levels, passing on only part of the increase.

On average, the interest rates on new loan transactions for house purchase during 2005 was slightly less than that offered in the previous year (4 bp) coming back down at the close of the year to 3.37%.

This can be explained in part by the strong competition existing among the financial institutions in this market. According to the last bank loans survey, the financial institutions relaxed conditions for the first time since the survey of loan standards has been prepared for this type of financing, with the competition among financial institutions being the primary reason given by the institutions themselves.

As regards the loans to the companies in the industry, it can be seen that growth was very strong during the third quarter of 2005. Loans for developments continued growing at rates of above 40%, while loans for construction accelerated to reach an all-time high of 25%. By items, the loans for residential construction, which rose 31%, were the leading contributors to this growth.

Households adapt to the new interest rates

The increase in loans has boosted the debt ratio of households up to 112% of gross disposable income, five percentage points above that recorded in 2004, with the interest expense of households reaching 14.2% of gross disposable income in the third quarter of 2005.

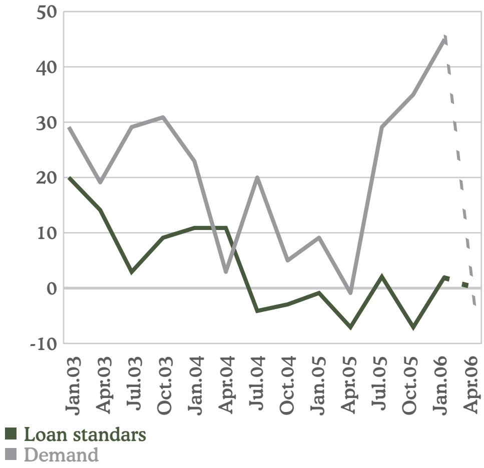
The increase in the leading reference rates for mortgages, the 12-month Euribor, seen in the second half of 2005 and the outlook for the continuation of the current biasof monetary policy, will result in an increase this year in the financial expense of most mortgage holders given that, as can be seen from Bank of Spain statistics, 93% of the loans granted for house purchase are referenced to a floating interest rate. The intensity of the impact will depend, primarily, on the outstanding time to maturity.

In this sense, we have performed a preliminary analysis of the disaggregated data of- the Spanish Survey of Household Finances with the goal of approximating the impact that the increase in interest rates would have on the economy of Spanish households. We have applied the interest rate to the portfolio of mortgage loans of households based on the profile of maturities for this type of debt existing in 2002.

The analysis of the results, shows that the current increase in interest rates (70 bp) will result in an increase in the mortgage instalment of 4% for the total of indebted households. Nonetheless, and including the outlook for the 12-month Euribor, we can see that the maximum annual differential for the revision of the interest rate on the mortgages would be 100 bp during the central months of 2006. If we assume that all of the loans are updated with this differential, we can see that the mortgage burden would increase by 6% for all of the households.

Chart 4.4.

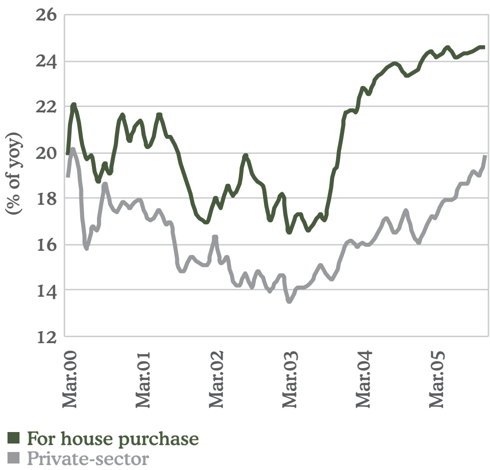
EMU - Survey on bank loans for house purchase



Source: ECB

Chart 4.5.

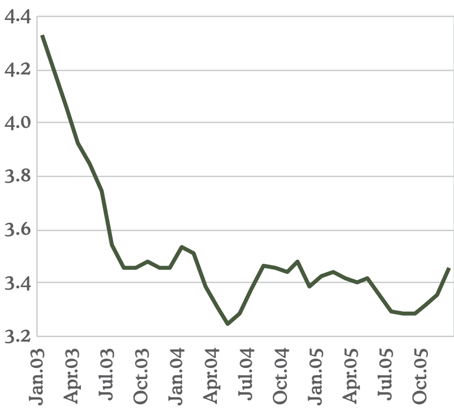
Evolution of credit in Spain



Source: Bank of Spain

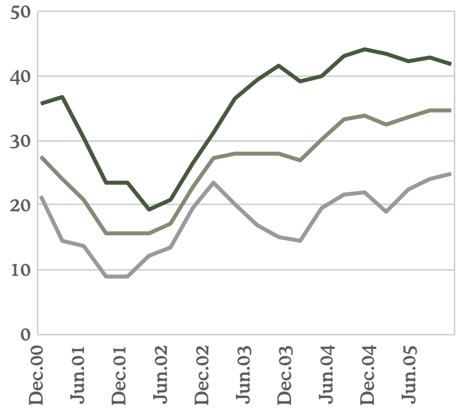
Chart 4.6.

Spain-APR: New business loans for house purchase



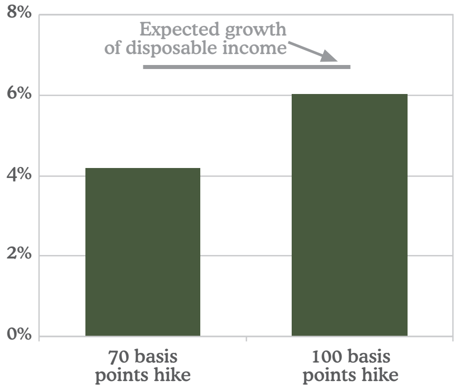
Source: Bank of Spain

Chart 4.7.
Lending to the real estate sector
(Construction + development)



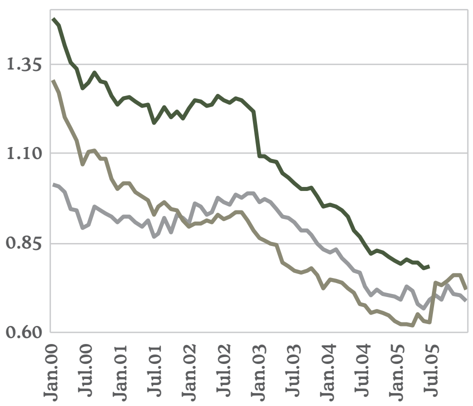
Source: Bank of Spain

Chart 4.8.
Estimated impact of an interest rate hike on mortgage instalments



Source: BBVA

Chart 4.9.
Non-performing loans



Source: Bank of Spain

However, this does not mean that there can not be occasional cases of households that have problems in absorbing the increase in interest rates (a household with a 50 year loan could see their instalment increased by 18.5% in the event of a one percent increase in interest rates). In aggregate terms, the increase in interest rates would result in a very moderate increase in the financial costs of the indebted households. In fact, on an aggregate level, even in the worst-case scenario the cost of the mortgage instalment would increase less than household disposable income did during 2006 (6.7%).

In addition, our forecast for interest rates points to a less intense impact from the increase in interest rates in 2007, so that, in principle, households should not have any problems in absorbing the gradual increase in rates and the financial institutions should not register any deterioration in their solvency.

The new rules for nonperforming mortgages continue to demonstrate the high level of solvency of the credit institutions.

Following the introduction of Bank of Spain circular 4/2004 there have been a series of changes in the Bank of Spain's databases indicating greater loan loss ratios on mortgages. The new data reflect a certain growth in mortgage delinquencies resulting from a change in the methodology and not in any deterioration in the loan market.

Under the new rules, both the series of Mortgage Non-performing loans and Secured Loans on Completed Housing Non-performing loans are no longer being published and have been replaced by a single series that includes the Delinquencies in house purchase with Mortgage Guarantees.

In addition, the new regulations increase the volume of delinquencies because it classifies as non-performing any amount on the debt with a past due payment of principal, interest or any other of agreed expenses by more than three months, or when the balances classified as non-performing equal greater than 25% of the outstanding balance. The result of this is that as from June 2005 the apparent values of non-performing loans increased inevitably.

This increase in non-performing loans should not be taken as the negative evolution of the quality of the loan portfolio, but rather as a simple accounting change that classifies as non-performing the full amount on a loan that has any payment at least three months delinquent.

Accordingly, in the third quarter 2005, according to the new data of the Bank of Spain, non-performing mortgages equalled 0.4%, 10 basis points above the ratio reflected in the old data. The forward data for the total portfolio point to an improvement in credit quality by the close of the year.

Despite "Circular 04/2004", the financial institutions continue to issue securitisation bonds.

The strong growth in loans has outstripped the growth in deposits in recent years, leading the financial institutions to look to the capital markets for financing. Over the last five years, the balance of covered bonds has grown at an average annual rate of 44%, while the balance of securitisation funds expanded at a rate of 61%.

During 2005 the enactment of circular 04/2004 provoked the reactivation of a large part of the assets which had been taken off the balance sheet because of the securitisation of the loans. Nonetheless, and although at a slower rate, the financial institutions continue to use these financial instruments for financing purposes, maintaining annual growth rates of above 40%.

Similarly, the issue of covered bonds has continued to register strong growth in 2005, reaching a balance of 80,000 million euros, a 40% increase over the previous year. The gap between the growth in loans and in deposits continues to force financial institutions to look to the financial markets in 2006, although as the development of these financial products matures, the growth rates will start to slow to below the levels of the last two years.

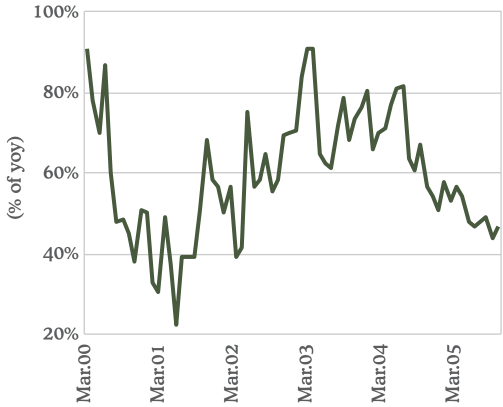
2006, a turning point in loan growth

As commented in the previous number, loans reflect the moderation in the market with a certain delay in the case of Spain due to the importance of new construction in housing and the delay between acquisition and delivery. Nonetheless, it is expected that the growth in loans for house purchase will begin to mellow, although gradually, and gently reflect the moderation in the market.

As regards the solvency of households, according to our interest-rate scenario, households should not have any problems absorbing the increase in interest rates seen. In addition, due to the fact that the Euribor already reflects part of the increases expected for the next few months, the impact will even be less than in 2007. Accordingly, in a favourable economic environment, households should not have any problems paying on their debts.

Chart 4.10.

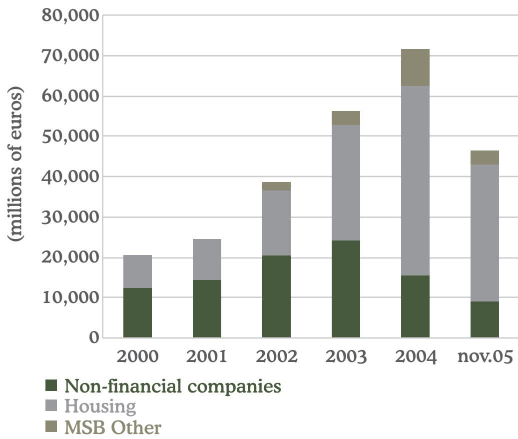
Growth in the balance of securitisation funds



Source: Bank of Spain

Chart 4.11.

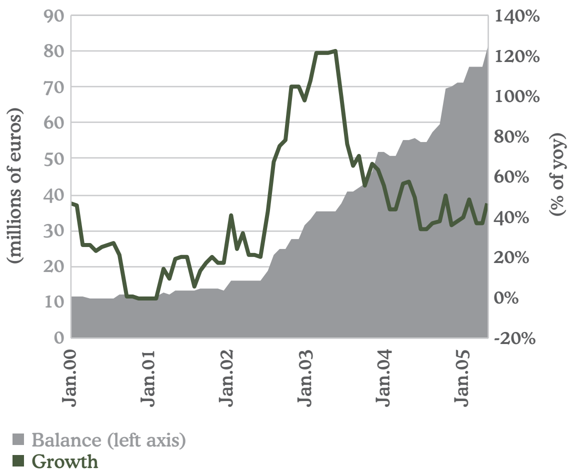
Off-balance-sheet backed-securities



Source: Bank of Spain

Chart 4.12.

Balance and growth in covered bonds



Source: Bank of Spain

European mortgage funding, the more diverse the better

The balance of credit that a financial institution concedes is in relation to the availability of resources to finance it. Traditionally, deposits have been the key source of bank funding, and this is still true in Europe where 60% of mortgage loans are backed by these funds. However, in the developed economies, the existence of mature capital markets has allowed for deposits to be partially, in some cases almost completely, substituted by new funding instruments. In Europe, 20% of mortgage loans are financed by covered bonds[1], while around 3% are backed by the issue of mortgage-backed securities. This diversity in funding mechanisms is a very positive aspect in that it allows banks to reduce the variability of their lending policies, which is specially important during low moments in the economic cycle. Nonetheless, this aggregated description is not very representative of the situation in each of the European countries. In the EU-15, various mortgage systems which are over 80% financed by deposits (Italy and Netherlands) coexist with other systems that are over 20% financed through covered bonds (Denmark and Sweden) as well as mixed models, such as in Spain. In this context, funding has become one of the key aspects for advancing towards the European goal of achieving greater integration of the mortgage markets.

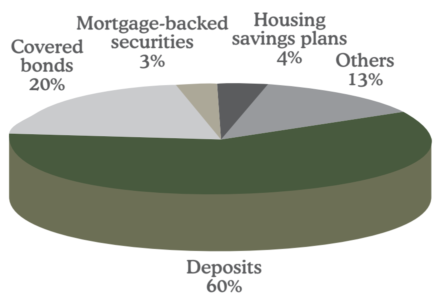
The different composition and design of the mortgage funding mechanisms have a direct influence on some of the fundamental characteristics of the most common mortgage loans in certain countries. One of the most representative cases is the German, where the bulk of mortgages are financed by issuing covered bonds known as “Pfandbrief”. Nonetheless, the commercialization of fixed-rate mortgages associated to this model carries a prepayment risk which the German financial institutions manage by including high prepayment fees. Meanwhile, in other countries such as Denmark and the United States, where the funding of fixed-rate mortgages is carried out on the capital markets, the mortgage bonds financing the loan include a prepayment option, so the risk is assumed by the bondholder.

In addition, in cases such as the German or the Danish mentioned above, participation in the mortgage markets was traditionally restricted to a limited number of authorised specialist institutions, an aspect that has also had a notable influence on the configuration in the distribution of risk in the banking sector. Accordingly, universal banks are dominant in a mortgage system funded to a large extent by deposits, while mortgage banks enjoy a very significant position in Denmark and Sweden, and somewhat less so in Germany. The uniformity of the banking systems is also important when considering alternative funding systems, given that the different banking structures can result in the appropriate funding mix varying from market to market.

[1] The covered bonds are debt securities issued by financial institutions that are secured by certain types of assets, in this case mortgages, which remain on the balance sheet of the issuer. The over-collateralisation of these issues and the strict criteria for issue give them very high credit quality.

Thusly, in Europe we start from a very heterogeneous situation as regards funding mechanisms. In some forums there have been calls[2] for the current system to be changed towards a mechanism oriented towards market creation for pan-European funding. This initiative boasts a very important role in the capital markets, and is perfectly consistent with a financial structure in which there is the increasing disintermediation of traditional products towards more sophisticated instruments such as equity and collective investment schemes. However, the selection of a determined system for mortgage funding for all of Europe would require reflection on which systems comply with a series of basic principles which must guide any reform process.

Mortgage funding systems in the EU



Source: CML

Firstly, it is necessary to oversee the development of the mortgage market. In many cases, the standardisation associated with some funding products results in the design of the mortgage financing system impeding easy access to credit by consumers if they do not meet the required characteristics or, when possible, they would opt for a formula which better adapts to their particular circumstances. As recognised in Frankel et al. (2004), in the case of Denmark, the standardization and uniform pricing on mortgages would lead to the mortgage market emptying through the rationing of loans rather than through price[3]

[2] Such as the from the Forum Group on Mortgage Credit

[3] Frankel et al (2004) The Danish mortgage market. BIS Quarterly Review. March 2004

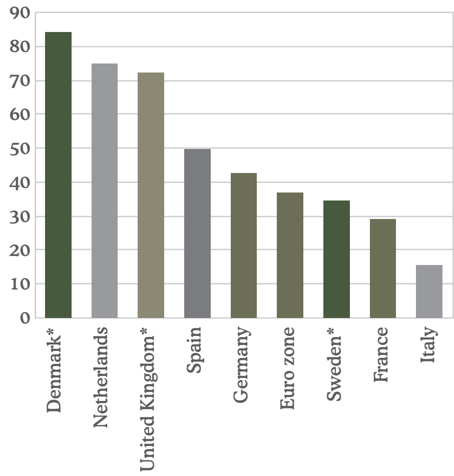
The flexibility of the mortgage systems is another key factor in its development[4]. As can be seen on the attached graph, there is no appreciable relationship between the predominant funding system in each country and the development of the mortgage markets. Banking systems with such different systems for attracting resources as the Dutch, Danish or British, all have highly developed mortgage loans and are relatively flexible.

The second objective is to achieve efficiency, understood as achieving a supply of mortgage loans at the lowest cost possible. The spread between mortgage rates in the European countries is around 1%, which is reduced when you consider the adjustments for the effects of the yield curve and credit risk. Accordingly, the type of funding system does not appear to be very relevant for explaining these differences. In this regard, it is more probable that aspects relating to the competitive environment of the banking system in the different countries would be much more appropriate in the determination of the costs of mortgages in Europe.

A third factor to take into account is that the system or systems proposed must also have the objective of promoting the stability of the financial system. From this perspective, a model that is supported by a greater number of alternative funding sources is, a priori, more appropriate given that it reduces the liquidity risk and systemic risk. In this regard, the advantages of a system primarily based on deposits or another based on the financial markets would not lean the balance decisively toward either of the two options. The funding of mortgage loans through deposits has the advantage of limiting the interest rate risk for the financial entity when issuing floating-rate loans. However this option is not advisable for funding significant amounts with longer maturities. Recourse to the markets for funding does not eliminate interest rate risk, but rather transfers the risk to the holders of the securities. In addition it has the disadvantage of access to the capital markets requiring that issues and, consequently, the issuers, be of a large relative size, which acts as a barrier to use by smaller institutions[5].

Accordingly, in light of the analysis performed, we cannot say that any particular funding system is superior to the rest. Moreover, the standardisation of the funding model would lead to a sub-optimal solution in economic terms that would lead to a market less complete than the current. Promoting the markets selection of the most appropriate formulas in each case, reflecting the current diversity of the banking structures in Europe, appears, within this context, as the most widely accepted and approachable option. This does not necessarily go against the internationalisation of mortgage loans, funding, which could come from the capturing of deposits derived from the establishment of financial institutions in other European countries and the diversification of the investor base in mortgage bonds. In this last case, the experience of the Spanish mortgage bonds is noteworthy. They have achieved notable acceptance among international investors, demonstrating that the lack of a single European figure for covered bonds is no barrier to Spanish credit institutions accessing pan-European liquidity.

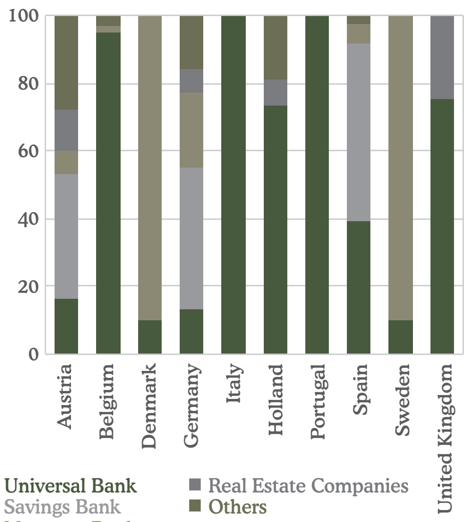
Mortgage loans over GDP (2005)



* 2004 data

Source: Bank of Spain and the European Commission

Market share of the new mortgage loan operations by type of institution



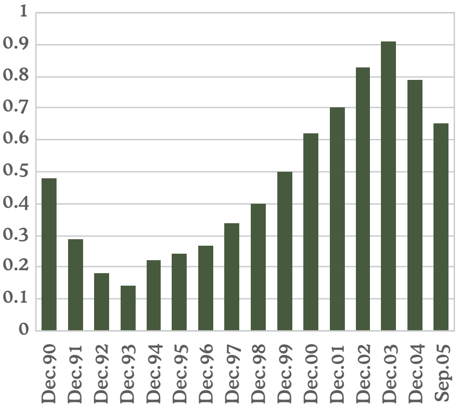
Source: Bank of England

Carmen Hernansanz, Chief Economist Sector Research
BBVA Economic Research Department

[4] See the section "The European mortgage market: less regulation for more integration" in our November 2005 report

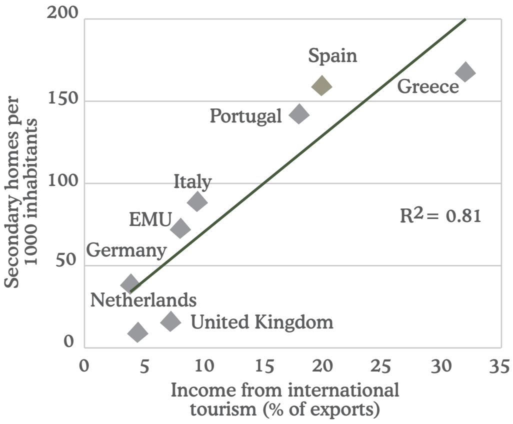
[5] This disadvantage could be mitigated using different formulas, for example in Spain the smaller savings banks have grouped together to issue covered bonds-backed securities

Chart 5.1.
The weight of foreign investment in real estate in the economy



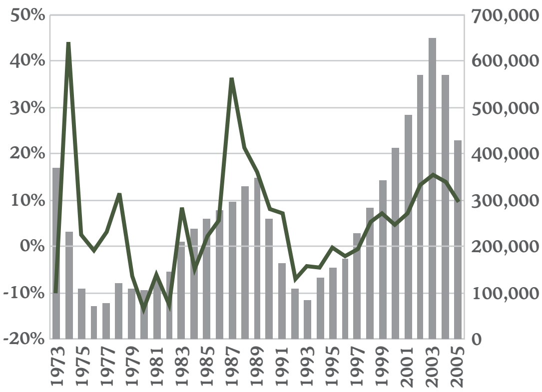
Source: Bank of Spain

Chart 5.2.
Secondary homes and tourism



Source: BBVA

Chart 5.3.
Foreign investment in real estate (FIRE) and housing prices in real terms



Source: Sastre (2002) and BBVA

5. Drivers and outlook for foreign investment in residential real estate

Tomás Riestra

BBVA Economic Research Department

Foreign investment in real estate (FIRE) in residential housing has expanded strongly in the last decade. Spain's entrance into the European Union and the strong investment in infrastructure have allowed for the intensification of the development of ample tourist areas, attracting a growing number of both national and foreign tourists on the Mediterranean coast and the Spanish islands.

In addition the introduction of the euro considerably limited exchange risk on foreign investment for residents in the euro zone. Moreover, Spain entered into the EMU with a very competitive exchange rate against its leading European partners, conditions which, despite having lost weight over time, has been another important factor in attracting tourism and investment.

Spain offers a clear tourist attraction derived from its geographic location, climate and culture, which has allowed the tourism industry to record significant development. As can be seen on the attached chart, the weight of tourism is tightly linked to the development of the holiday real estate market. Accordingly, the weight of second homes in countries such as Greece, Spain and Portugal is well above that of the rest of Europe.

However, in addition to these factors of attraction, other determining factors of demand for holiday housing are the economic drivers, such as the evolution of the income of the potential investor, the level of income in comparison with the investment to be made, that is, the affordability for the specific investor, and other economic factors such as relative cost of living in the destination country compared with the country of origin.

In addition there are series of structural factors which have also affected the level of investment such as the legal security and the socio-political and macroeconomic stability, which determine, in part, the level of risk that the investor must assume regarding the future value of the potential investment.

During the last decade, apart from the role played by cyclical factors, there has been a progressive strengthening of the structural factors combined with the growing process of financial globalisation and greater and better access to the information needed to make these types of investments. Accordingly, the strong expansion in real estate during this period was accompanied by an important entrance of foreign capital into the Spanish real estate sector. In fact, the weight of FIRE in the Spanish economy multiplied by seven between 1993 in 2003 to reach 0.9% of GDP. Since then, foreign investment has decelerated, although in 2005 they continue to represent 0.6% of GDP.

Another phenomenon that has been gradually appearing is the growing role of the Spanish coast as a destination for permanent residence by European citizens, primarily retirees. In fact, according to the List of Inhabitants (Padrón), there are 600,000 non-Spaniards residing in Spain from other European Union (EU-15) nations, 94% of which live on the coast.

During the last two years, the lacklustre economic performance of the leading investor countries and the loss of competitiveness of real property throughout the last decade has resulted in a decline in the net flow of foreign investment.

In this document we analyse the historical evolution and recent performance of foreign investment in real estate and study the determining factors using an econometric model and try to provide an advance look at the short and medium term outlook based on these factors and the structural changes being experienced in the Spanish tourist industry.

Determining factors in foreign investment in real estate in housing.

Foreign investment in real estate has historically followed, like the real estate market itself, a markedly cyclical behaviour. In fact, in the last 30 years we can clearly see two periods of expansion as evidenced on the attached chart. The first was between 1981 and 1989, and the second between 1994 and 2003. In addition it can be said that the cycles of foreign investment in real estate have been linked to the evolution of housing prices, even moving slightly in advance of the changes in trend. Accordingly the strong deceleration in the real estate market in the beginning of the 90s was anticipated by FIRE with a sharp reduction in investment.

The lack of detailed statistics represents a first problem when analysing the drivers of foreign investment in residential real estate. The fact that this factor is relevant in very few economies, one of which is Spain, can be one of the primary reasons why the publication of such statistics is not very common. Accordingly, in Spain we can only study these effects through the series of foreign investments in real estate in the Balance of Payments, which also includes corporate investment in real estate. Similarly, economic literature on the determining factors for foreign investment in real estate is scarce[1]

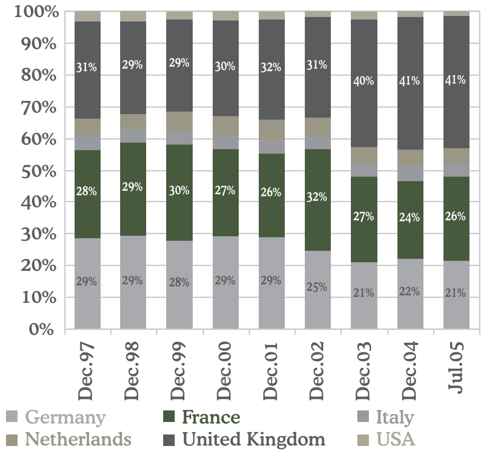
In order to analyze determining factors for the entrance of foreign capital over the short to medium term we have used a set of quantifiable indicators with which we have prepared an econometric model that allows for an approximation of the quarterly evolution of FIRE since 1990.

The first determining factor of FIRE is the evolution of income in the investor countries. In order to evaluate the effect that this variable would have we have prepared a weighted index of income of the primary countries of origin of free housing tourists (owned, family, or friends). We have selected six countries among the primary issuers[2] which represent an average of 70% of tourists entering Spain, and have calculated the weight of each country based on the long-term total. These weights have been used for the calculation of a weighted income index. Due to limitations of the statistical data on tourists and

[1] An exception is the contribution of Sastre (1993 and 2002) in the research on this subject. Sastre analyses FIRE between 1967 and 2000 with the formulation of a model that explains foreign investment in real estate through tourist income, a competitiveness Index for tourist services, energy prices, and income in the country of origin of the emigrants.

[2] The countries included are the United Kingdom, Germany, France, Italy, and Netherlands as the representative of Benelux and the United States as the representative of the OECD.

Chart 5.4.
Weight of free housing



Source: BBVA based on Frontur

Chart 5.5.
Index of GDP and FIRE

Source: BBVA

Chart 5.6.
FIRE and relative housing prices

Source: BBVA

Chart 5.7.
Competitiveness and FIRE

■ FREI (right axis)
■ Competitiveness

Source: Bank of Spain and BBVA

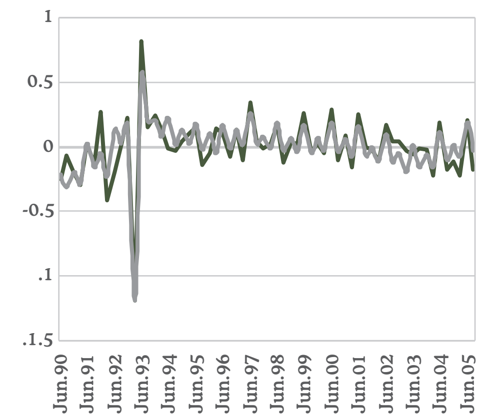
Table 5.1.

Variable	Coefficient	Std. Error	t-Statistic	Prob.
LIEI(-1)	-0.26	0.06	-4.17	0.00
LPIB(-1)	2.24	0.48	4.71	0.00
LPRVIVREL(-1)	-0.50	0.17	-2.89	0.01
DLCOMP	-4.43	2.46	-1.80	0.08
DMAR	-0.07	0.02	-3.81	0.00
DJUN	0.05	0.02	2.83	0.01
DSEP	-0.01	0.02	-0.35	0.73
E9301	-1.17	0.13	-8.95	0.00
C	-7.56	1.64	-4.62	0.00

R-squared	0.78	Mean dependent var	0.0
Adjusted R-squared	0.74	S.D. dependent var	0.2
S.E. of regression	0.12	Akaike info criterion	-1.2
Sum squared resid	0.80	Schwarz criterion	-0.9
Log likelihood	46.93	F-statistic	23.2
Durbin-Watson stat	2.00	Prob(F-statistic)	0.0

Dependent Variable: DLIEI
Method: Least Squares
Date: 02/06/06 Time: 19:02
Sample (adjusted): 1990Q2 2005Q3
Included observations: 62 after adjustments
Source: BBVA

Chart 5.8.
Fitted versus observed serie Adjustment



■ Observed serie
■ Estimated serie

Source: BBVA

free housing for periods before 1997, we have used a weighting based on the entrance of tourists[3]. As can be seen for the chart, the relationship between the income index and FIRE is positive. In other words, increases in GDP in the investor country lead to an increase in the investment in real estate in Spain.

The second factor analyzed is the evolution of relative housing prices. when making an investment in real property in another country, The first reference specially for holiday purposes, is the value of the own house, which reflects the level of household income in each economy. Accordingly, we have used an index relating the price of housing in the European Economic and Monetary Union and the price in Spain. In this case the statistical relationship should be negative so that when the increase in real estate prices in Spain is superior to that in the issuer countries, the FIRE would tend to contract.

Lastly, we have introduced a competitiveness index prepared by the Bank of Spain in the short-term of the model which relates Spanish consumer prices with that for the EU-15, attempting to capture the dynamics of the prices in the two regions. Also in this case, the expected relationship would be negative, so that a decline in the index would result in a relative increase in the cost of life in Spain, losing attractiveness for European investors.

Contribution of the determinants to the evolution of foreign investment in real estate

Using the variables explained above, we have prepared an error correction model which will analyse the contribution of each of the determining factors for FIRE at each moment in time.

As can be seen on the table, the variation in foreign investment in real estate depends on the long-term evolution of income in the country of origin of the investor and the relative pricing of housing in Spain, while in the short-term it depends on the evolution of the competitiveness index of the Spanish economy in comparison with the European Union. The seasonal nature of the series is corrected though a series of dummy variables. Despite the few variables used, the model is capable of explaining 78% of the variance in the series.

Chart 5.9 identifies the contributions of each variable to the variation in foreign investment in real estate. Firstly, we can observe that the income index is the most important variable, always having a positive contribution to growth in FIRE which has been compensated in part by the deterioration in relative pricing. The competitiveness index, meanwhile, in entering into the short-term, has an oscillating behaviour, although its weight is very inferior to that of the other two variables.

We can also see that the model has better performance in the past. That is, the adjustment of the model for prior stages is much better, while in the final part of the sample, as from 2002, it does not capture the evolution of the variable as well. This could indicate that there has been a structural change in the evolution of FIRE associated to profound changes in the Spanish economy such as the adoption of the euro.

During the next two years, the evolution of the factors considered will support a slight improvement in foreign investment in real estate.

[3] Up until 1997 we have used the income index for issuer countries prepared by the work of Izquierdo, J.F. and Pereira, E. Determinación del sector turístico en la Balanza de Pagos" Situación España. March 2006.

On the one hand, a recovery is expected in the GDP index for the investor countries, which in 2007 will reach the highest growth of the last seven years. Also, the continuation of the process of deceleration observed in Spanish housing prices since the close of 2003 will continue in upcoming years. This together with a foreseeable improvement in the evolution of the real estate market in some European economies, such as Germany, will result in a significant reduction in the deterioration of relative housing prices. Similarly, it does not appear that the inflation spread will continue to widen, so that everything points to the evolution of the factors justifying an improvement in FIRE over the short term.

Other structural factors which will affect demand for housing by foreigners

As commented in the beginning, real estate investment has not been ignored by the financial globalisation process experienced over the last decade. A growing number of investments made in Europe in the real estate sector are being made through cross-border operations (between countries). In fact, between 2000 and 2003, cross-border real estate investment increased 60% in Europe. This highlights the growing access to the information needed to enter into these types of investments, as well as to the financial instruments themselves, although the development of the latter is still scarce. In addition, despite the fact that a large part of these investments are made by real estate investment trusts, according to the data of Jones Lang LaSalle close to 19% of cross-border investments in 2002 were made by private investors.

In addition there have been important developments in communications, which facilitate the decision –making process when investing in real estate abroad. On the one hand, Spain has made major investments in transportation infrastructure and has made substantial improvements to the communications between provinces as well as in access to the tourist zones.

In addition, the strong growth seen in low-cost airlines has sharply reduced transportation costs between European countries and will act as a motivator for investment in a second home abroad. In 2005, more than 15 million passengers entered Spain using low-cost airlines, which represents 30% of all airline passengers. This demonstrates the relevance that the development of these companies is having on tourism.

Medium-term outlook: the resident tourists

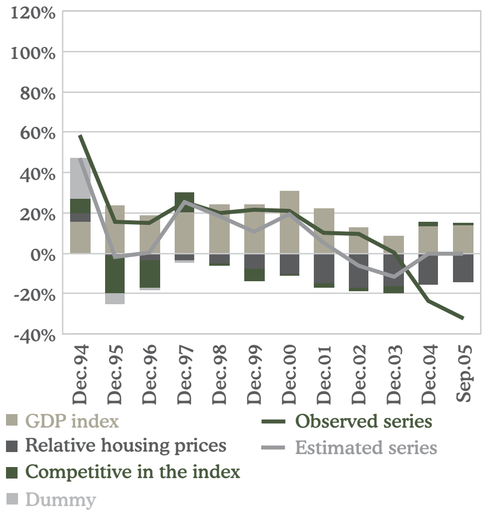
Another factor that has supported the strong increase in FIRE is the growing proportion of foreign tourists that come to Spain and decide to acquire a house rather than stay in a hotel or rent[4]. In addition, there is another phenomena observed in the last decade, the growing number of Europeans that decide to make the Spanish tourist areas their permanent homes.

Despite the statistical disparity observed between the registries and the official census of foreigners of the Ministry of the Interior, in both cases there is a clear and growing uptrend in the number of Europeans establishing their residence on the Spanish coasts.

This move is being led primarily by British and German citizens, which represent 61% of this collective. Nonetheless, the strength of other

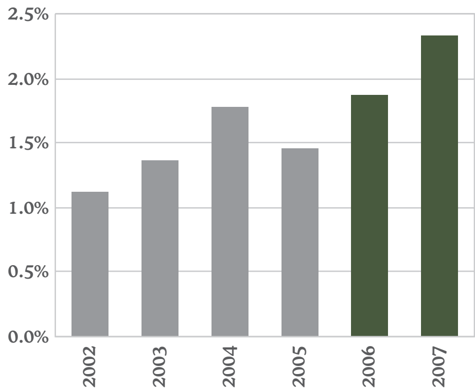
[4] For more information see the section in this report titled "Housing Demand in Perspective"

Chart 5.9.
Contribution to the growth of foreign investment in real estate



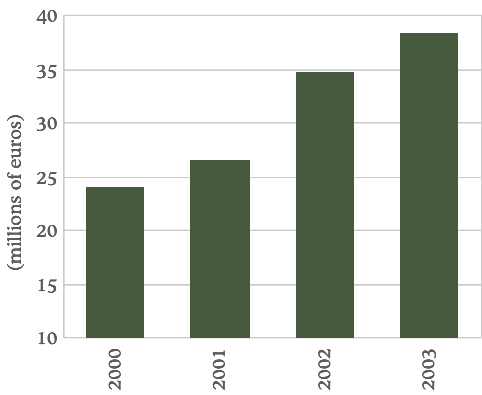
Source: BBVA

Chart 5.10.
GDP index in investor nations



Source: BBVA

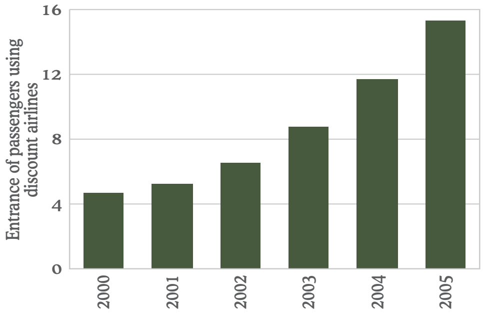
Chart 5.11.
Volume of cross-border investment in real estate in Europe



Source: Jones Lang LaSalle

Chart 5.12.

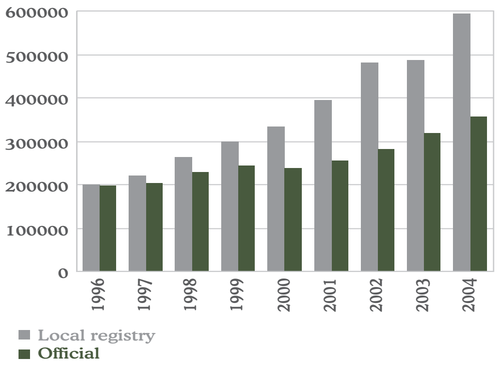
Entrance of passengers using discount airlines



Source: IET

Chart 5.13.

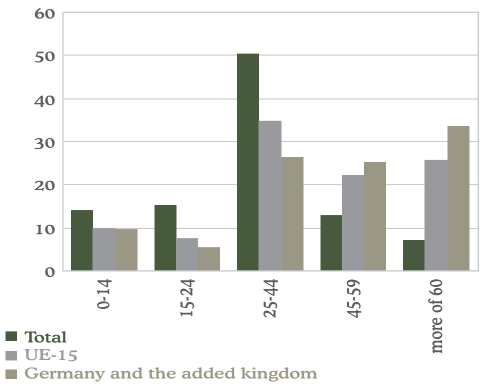
Resident Tourists



Source: INE

Chart 5.14.

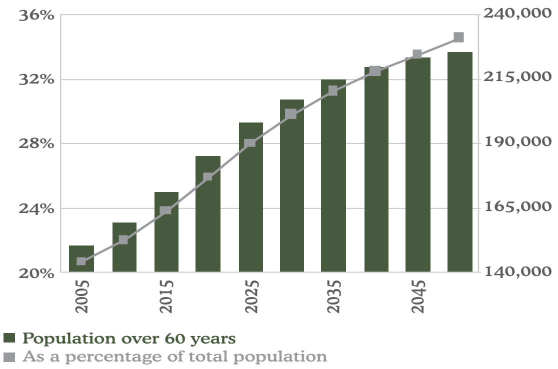
Age structure of foreign residents



Source: INE

Chart 5.15.

Over 60 years European populations forecasts



Source: Eurostat

nationalities is also noteworthy, such as Italian citizens who have tripled their presence over the last five years.

In addition, differences exist between the immigration patterns of citizens from different countries. Accordingly, while French and Italian citizens fix their residence in Spain between the ages of 30 and 40, the British and German predominately do so when they are of retirement age, over 60 years of age.

The Spanish coast is increasingly becoming the primary destination for residents by the European population of retirees, which also appear to opt for purchase when they do not find any options for long-term letting.

If the residential option is consolidated among European retirees, the growth potential for FIRE would be very important. The forecasts for European population point to the number of people over 60 years of age to double over the next 30 years to account for one third of the total European population.

Accordingly, despite expectations that new holiday options will be developed in Europe and the need for some limits in order to apply sustainable urban development, the Spanish coasts continues to have significant growth potential over the medium-term.

Conclusions

Foreign investment in real estate has been gaining weight in the Spanish economy over the last decade as a result of the notable development of the tourist zones and the strengthening of structural factors which reduce the risk from the point of view of a foreign investor.

Nonetheless, FIRE, like the real estate market itself, continues to have a markedly cyclical nature, which explains the deceleration experienced in investment in the last two years. This demonstrates the growing importance for the Spanish economy of the evolution of income in the leading investor countries, the competitiveness of the economy and of the Spanish holiday residence market.

The outlook over the short-term points to a recovery in the economies of the leading countries of origin of residential tourists, a lesser deterioration of the competitiveness of the real estate market, and the tightening of the consumer price spread , which will all support an improvement in the entrance of foreign investment in real estate.

In addition, the financial globalisation process and the reduction in air transportation costs will help boost the weight of FIRE in the Spanish economy. Moreover, the aging of the European population, and the resulting growth in the number of Europeans close to retirement age, highlight the potential of the Spanish coast, provided that it can consolidate its position as the residential destination of choice for this collective.

References

Carrascosa, A., Sastre, L. (1992) “Evolución y determinantes de la inversión extranjera en inmuebles en España” *Moneda y Crédito, 245-276.*

Instituto de Estudios Turísticos “Los pasajeros de compañias aéreas de bajo coste. December 2005”.

Instituto de Estudios Turísticos “Informe de Compañias Aéreas de Bajo Coste. Año 2004”. Jones Lang Lasalle: “Global Real Estate Transparency Index 2004”.

Sastre, L. (2002) “Simultaneidad e interdependencia entre los flujos de ingresos por turismo e inversión extranjera en inmuebles en España” *Boletín ICE Nº 802. October 2002.*

BBVA

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

Legal Deposit: M-3479-1994

Economic Research Department:

Director:
José Luis Escrivá

Subdirector:
David Taguas

Chief Economists:
Sector Research: Carmen Hernansanz

Europe: Manuel Balmaseda

North America: Jorge Sicilia
United States: Nathaniel Karp
Mexico: Adolfo Albo

Latam and Emerging Markets: Luis Carranza
Argentina: Ernesto Gaba
Chile: Joaquín Vial
Colombia: Daniel Castellanos
Peru: David Tuesta
Venezuela: Giovanni di Placido

Financial Scenarios: Maite Ledo
Financial Flows: Sonsoles Castillo

other publications