

Real Estate Watch

Spain

Economic Research Department
January 2007



Housing market: a very soft landing
Demand cools down
Building at record highs
Public revenue and housing, a limited dependence

Index

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Editorial

After a long period of strong growth in activity, spending and price levels, the Spanish property sector is going through a phase of gradual and orderly adjustment which will continue in 2007. This will be the result of an ongoing environment of structural support factors in the market such as the demographic impulse, the increase in employment and demand for housing from non-residents, and less expansionary financial conditions.

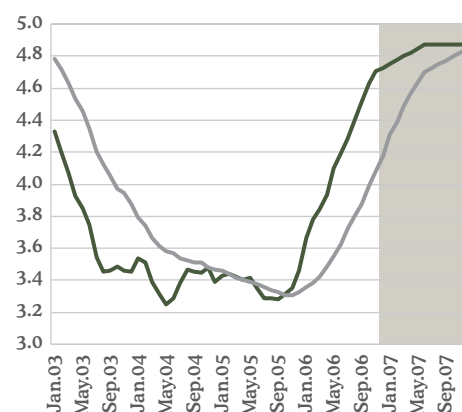
Gradual increases in interest rates by the ECB to 4% by the middle of 2007, along with further increases in prices have made access to the property market more difficult. Although mortgage rates already reflect most of the forecast rises in official rates, indebted households will feel the effect throughout 2007 as mortgage loan rates are revised upwards. The tightening of financing conditions, although relatively moderate, is already being reflected in an easing of demand for housing, which is translating into a lengthening of the period it takes to sell a property, an stagnation in the number of transactions, especially for existing homes, and a slowdown in demand by households for housing loans.

There are examples in other countries of orderly adjustments in the property market after sharp increases in prices and a moderate tightening of monetary policy. The common denominator which can be drawn from the experiences of Australia, the United Kingdom and the US is that the restrictive effect of interest rates on demand and property prices is of limited impact within a favourable economic environment, particularly if there is a sustained increase in employment, a fundamental factor in the growth of household disposable income. Therefore, given that the prospects for the evolution of the labour market in Spain remain positive, employment will continue to underpin a soft landing for the demand for housing. This will be the case in a situation in which, while growth in the Spanish economy in 2007 will be below that of 2006, it will remain at rates above 3% for the fifth year in a row.

In this context, it is to be expected that in consonance with the slowdown in demand for housing, residential construction will be less dynamic than in 2006 when activity reached record levels. This should help consolidate the slowdown in prices, with forecast increases for the end of the year of between 3% and 5% after a rise of 9% in 2006.

Lastly, this issue of Real Estate Watch includes, as a special study, an analysis of the relationship which exists between the property market and public finances, with the sector accounting directly for an estimated 9.5% of the total revenues of the public administrations. In addition, it is shown that the exposure of the agents involved to the property sector varies, and that although the municipalities are most exposed, about half of their revenues from property are recurrent.

Average interest rates for housing loans

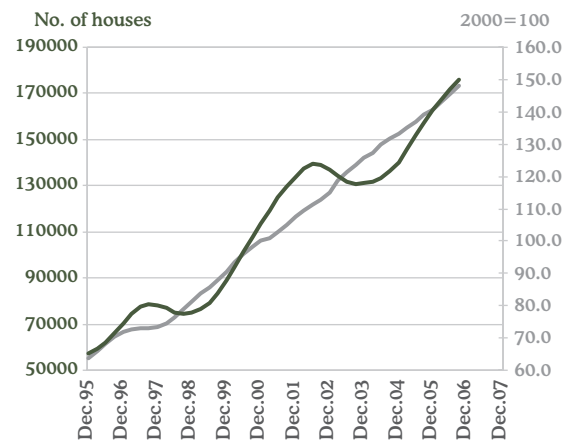


■ New business
■ Outstanding amounts

Source: Bank of Spain and BBVA Research Department

Housing activity

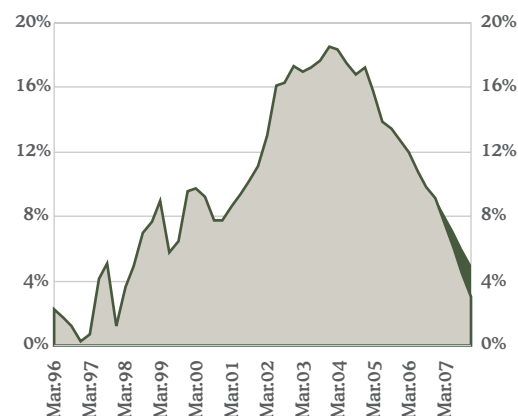
3-month moving average



■ Houses under construction (left)
■ Investment (right)

Source: BBVA Research Department

House prices



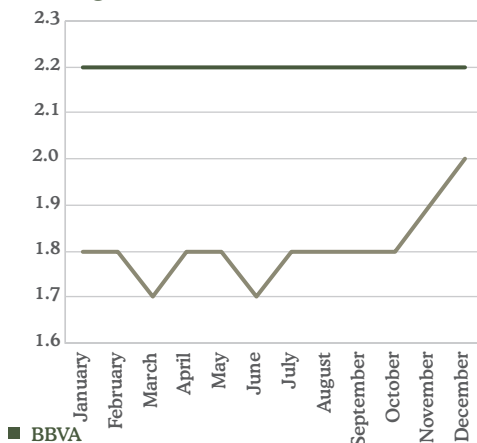
Source: Ministry of Housing and BBVA Research Department

Graph 1.
EMU: official rates and 12-month Euribor



Source: ECB

Graph 2.
EMU: growth forecasts for 2007



Source: BBVA Research Department and EZB

Table 1. EMU: macroeconomic data and forecasts

% oya	2005	2006	2007
Private consumption	1.4	1.9	2.0
Public consumption	1.3	2.1	2.0
Gross fixed capital formation	2.7	4.8	3.7
Inventories (*)	0.1	0.1	0.0
Domestic demand (*)	1.7	2.6	2.3
Exports	4.5	8.0	5.8
Imports	5.5	8.0	6.2
Net exports (*)	-0.3	0.1	-0.1
GDP	1.5	2.7	2.2
Inflation	2.2	2.2	1.8

Source: Eurostat and BBVA Research Department

Tightening of financial conditions

Less expansionary liquidity conditions for the Spanish economy will consolidate the process of a gradual and orderly adjustment in the property market after a number of years of sharp increases in prices.

The rises in interest rates have brought about the most significant deterioration in the affordability ratios of housing in the past 11 years, which has been reflected in a slowdown in demand for residential property.

In this sense, it is essential to begin by analysing the prospects for European Central Bank interest rates, their impact on affordability ratios, as well as the experience of other international economies which have gone through processes of rising interest rates after strong expansion in the property market.

During 2006, to the extent that doubts about the recovery were dispelled in an environment of strong money supply and credit growth, the ECB has raised interest rates to more neutral levels.

As the recovery in the European economy has strengthened, the ECB has raised interest rates gradually, first on a quarterly basis, and in the second half of the year every two months. Falls in oil prices allowed inflation in the euro zone to move below the target rate of the ECB after the summer, but the high level of liquidity in the system, strong growth in money supply and credit aggregates, confirmation of the healthy state of the economy, and reduced risks in the global environment convinced the ECB of the need to accelerate rises in interest rates to more neutral levels. In December, the bank raised its refinancing rate to 3.5%.

In an environment of a slight slowdown in global growth and less expansionary monetary policies, the European economy will maintain relatively strong growth in 2007 and 2008, although below the levels seen in 2006. For its part, inflation will remain under control.

Reduced risks in the international environment and confirmation of the strength of domestic demand in Europe have ended up convincing analysts and international organizations that the European economy will hold up relatively well in the face of a scenario of a slight slowdown in global growth and somewhat less accommodating demand policies. In fact, actual and forward-looking indicators point to the European economy continuing to grow at a good pace in 2007 and 2008, although below the strong growth seen in 2006. The slowdown in the world economy will result in a smaller contribution to growth from the external sector than was recorded in 2006. As regards demand policies in the area, it is true they will be less expansionary than in 2006 as is to be expected for an economy at a more mature point in the cycle. But this is not seen as a factor which could derail European growth. In the area of fiscal policy, it is likely that the results for 2006, which are likely to be better than initially forecast due to higher revenues, and the elections due in 2007 in many countries in the euro area could lead to less progress than initially expected in this area.

In the area of monetary policy, despite the accumulated increase in official rates of 150 basis points, the maintenance of long-term interest rates at low levels, and the favourable evolution of stock markets will help allow financial conditions to remain relaxed. The big uncertainty lies in the euro exchange rate, which if it were to continue appreciating against the dollar to around 1.35, could put a halt to further rises in interest rates. However, the most likely scenario is for the euro to remain at levels of around \$1.30.

Also, within this scenario, inflation should remain at moderate levels (1.8% in 2007 after 2.2% in 2006), a very favourable evolution if one takes into account that the figure for 2007 will reflect an increase of between three and five tenths of a point as a result of the increase in the VAT rate in Germany. The fall in energy prices is making a decisive contribution to the slowdown in inflation. However, the more stable components are also evolving favourably as can be gauged from the rate of inflation factoring out fresh food and energy prices, which has been relatively steady at around 1.5%. Other measures of underlying inflation also confirm this stability. In an environment in which energy and commodity prices are slowing, the main uncertainty as regards upward movement in inflation rests in to what extent salaries can be kept in check in a stronger cyclical position.

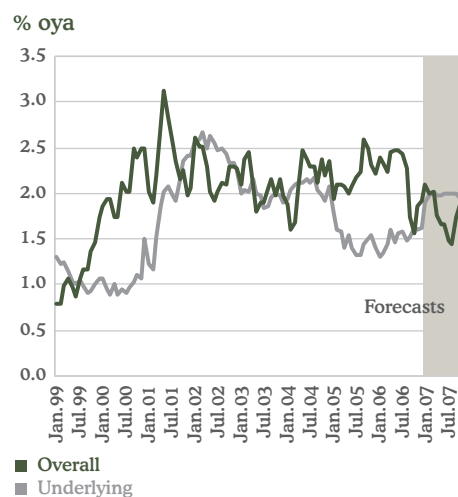
In this context, and as interest rates approach neutral levels, the ECB has again decided to spread out hikes in interest rates. It is therefore to be expected that the central bank will continue to raise rates to 4% in the first half of the year. At those levels, with no significant inflationary pressure, and with the economy growing at around its potential, the ECB is likely to keep rates on hold.

With the economy in full expansion, money supply and credit aggregates growing at a good pace and with monetary and financial conditions still relatively relaxed, it follows that the ECB is indicating that the upward movement in interest rates has yet to fully run its course. But as the refinancing rate approaches a neutral level, and in a context in which inflation appears under control, it is logical that the central bank has decided to spread out the pace of rate hikes, returning to an interval of three months. Thus, a 25bp increase is expected in March, and another 25bp hike in June, pushing the refinancing rate up to 4%. In the summer, with inflation below 2% and without signs of it picking up, the economy growing at around potential, and with a slowdown in growth in money supply and credit due to the impact of the accumulated increase in interest rates, it is to be expected that the ECB will reach the conclusion that the upward movement in rates has run its course.

In Spain, mortgage rates, which hit 4.71% in November, posted their biggest increase in 2006 in the past six years. The rises in 2007 will be of a lower magnitude since part of the expected hikes by the ECB have already been factored in.

The average Annual Percentage Rate of Charge (APRC) for new housing loans stood at 4.71% in November, up 142 basis points since the low reached in August 2005. This highlights the tightening of financial conditions in the demand for housing. However, the narrowing of the differential between mortgage rates and money-market rates points to a moderation in the extent to which rises in official rates are passed on due to the significant competition that exists in the Spanish banking system, which puts downward pressure on margins.

Graph 3.
EMU: HCPI



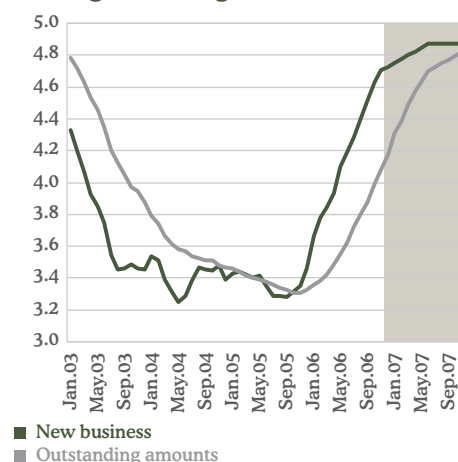
Source: Eurostat and BBVA Research Department

Table 2. EMU: financial market forecasts (end year)

	2005	2006	2007
Official rates	2.25	3.5	4.0
10-year rates	3.4	3.9	4.1
Dollar-euro rate	1.19	1.32	1.30

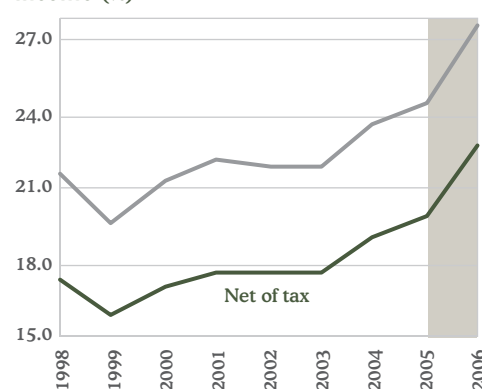
Source: BBVA Research Department

Graph 4.
Average housing loan interest rates



Source: Bank of Spain and BBVA Research Department

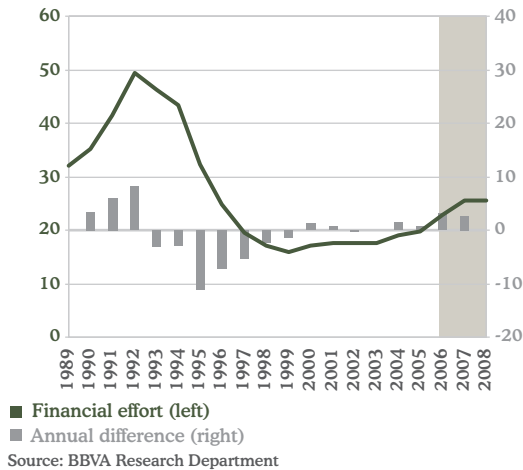
Graph 5.
Housing affordability in Spain
Financial effort as ratio of households weighted income (%)



Source: BBVA Research Department

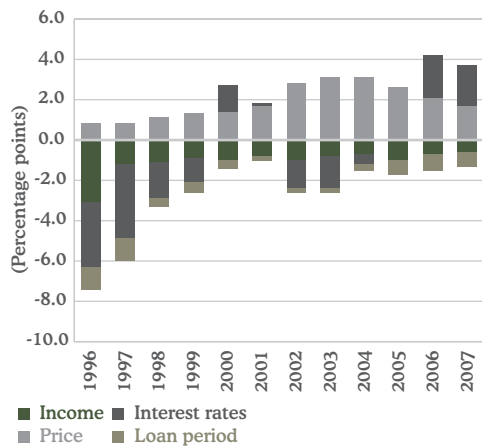
Graph 6.
Housing affordability in Spain

Financial effort as ratio of households weighted income adjusted for tax



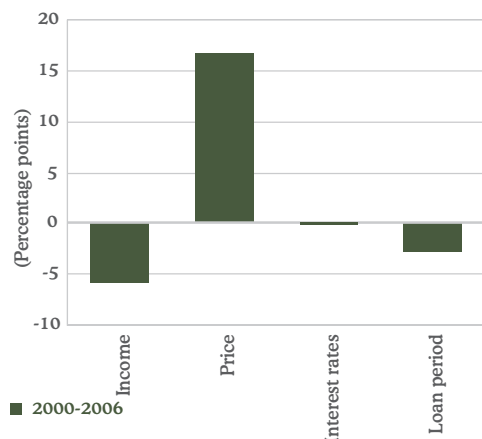
Source: BBVA Research Department

Graph 7.
Contribution to change in housing financial effort



Source: BBVA Research Department

Graph 8.
Accumulated contribution to the deterioration in the financial effort between 2000 and 2006



Source: BBVA Research Department

For its part, the implicit interest rate of the loan portfolio of credit institutions (which is an approximation of the interest rate supported by indebted households) stood at 4.1%, an accumulated increase of 78 basis points. This reflects the gap in interest rates between loan portfolios and market rates (about six months) due to the fact revisions to mortgage rates on housing loans are mainly carried out on an annual basis. Therefore, on the basis of the forecast scenario for interest rates, the biggest impact of increases in interest rates for households with mortgages will take place when mortgage rates are revised in the middle of 2007.

Affordability ratios reflect the tightening of financial conditions and stand at levels not seen since the first half of the 1990s.

The average mortgage payment involved in acquiring a home in 2006 accounted for 24% of weighted income, four points above the average in 2005 when adjusted for the prevailing tax treatment of home ownership. Forecasts for 2007 point to this ratio undergoing less of a deterioration in the first half of the year due to the lower impact of interest rates and house prices, with the ratio stabilising in the second half of the year.

The increase in mortgage rates will be the main contributing factor in 2006 and 2007 to the deterioration in the affordability of housing. Between 2000 and 2005, the main factor was house prices.

An analysis of the factors contributing to the change in the financial effort involved in buying a home shows the impact interest rates have had in the deterioration of affordability in 2006. After four years with negative contributions to affordability ratios, interest rates made the biggest contribution seen in the past ten years.

However, if we analyse the accumulated contribution of interest rates in the deterioration of the ratio of housing affordability since 2000, we can see the effect has been neutral, with house prices being the main factor behind the deterioration.

A slowdown in the demand for housing is being reflected in the fall in new credit flows for the acquisition of housing.

The balance of outstanding housing loans as of October was up 20.8% year-on-year, 3.5 percentage points below the level of growth seen at the end of 2005. Likewise, the figures published by the Bank of Spain are beginning to show a reaction on the part of demand for this type of financing to the increases in interest rates. Thus, the evolution of new business operations, as reflected in the increases in the loan portfolios of financial institutions, shows a significant slowdown since April 2006.

As can be seen in Graph 10, growth in new business accumulated in the year has fallen from rates of over 30% between September 2005 and March 2006 to below 15% in November. In addition, it can be seen that when comparing the last quarter with the same period a year earlier, flows have experienced a fall of 2.5%, indicating that the deceleration has been gathering pace.

This decline in demand is also apparent in the responses of credit institutions in the survey of bank lending. On aggregate, following several quarters of rising demand for lending for house purchase, in September 2006 credit institutions reported no changes from the previous quarter and anticipated a fall for the final quarter of the year.

Likewise, financial institutions acknowledged that conditions for granting mortgage credit had been tightened, with no improvement in this situation foreseen in the final three months of last year.

Higher interest rates increase the debt burden for households. The impact will be greatest in 2007 when interest payments reach 7% of household disposable income.

Monetary policy tightening is once again largely to blame for the worsening financial burden of households. Thus, when the financial burden is separated into principal and interest components, it can be seen that it is the latter which have experienced the greatest deterioration in 2006.

The sharp rise in the level of indebtedness, mainly in the form of floating-rate lending, has made household budgets more sensitive to the evolution of interest rates. This in turn has brought about a pronounced deterioration in the financial burden from this source.

As mentioned above, households with floating-rate loans feel the effects of changes in interest rates some time later since most mortgage loans are revised annually. The greatest impact from higher interest rates will therefore be felt during 2007. It should also be pointed out that because of the slowdown in growth in lending over this year and the expected lengthening of loan portfolios for households, the financial burden from principal is not expected to rise this year.

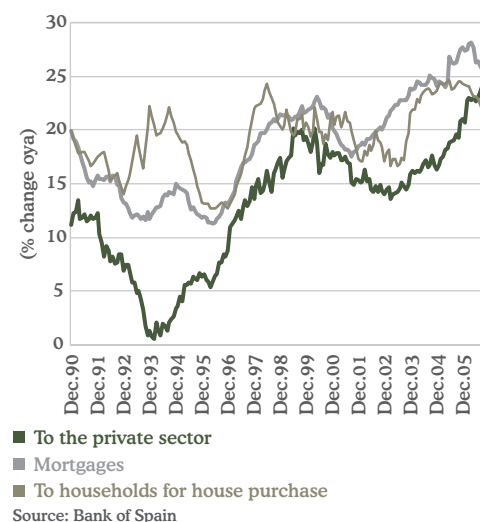
Monetary policy has also tightened in other economies...

Internationally, other countries have seen a similar tightening of financial conditions to that witnessed in the economies of the euro area. These economies were also registering strong rates of expansion in the housing market and are therefore a useful reference with regard to the effects of phases of rising mortgage interest rates on the housing market.

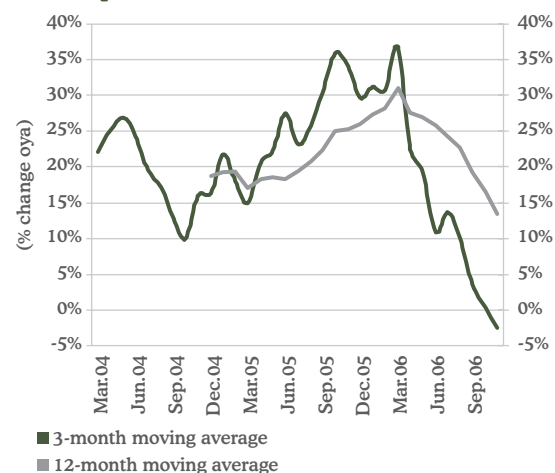
As Graph 12 shows, in Australia mortgage interest rates began to move up in the middle of 2002, gradually accumulating since then a rise of two percentage points. In the United Kingdom, interest rates began to rise at the end of 2003, in this case more steeply, so that by the beginning of 2005 they already stood 150 basis points higher. The Bank of England has over the past few years conducted the most active monetary policy management, with a succession of hikes and reductions in interest rates.

The final example is found in the United States, where the Fed changed its monetary policy bias in the middle of 2004, and has hiked official interest rates by 425 basis points. Despite such a pronounced rise, the pass-through of this change in monetary policy to the mortgage market has been more limited than in the other two countries. This is due to the high proportion of mortgages in the United States that are fixed rate, and because these are indexed to long-term rates, which have been much more stable over this period. Mortgage rates in the United States have risen by only 130 basis points.

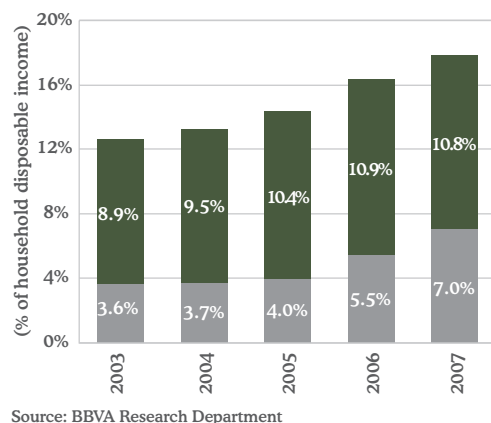
Graph 9. Evolution of lending



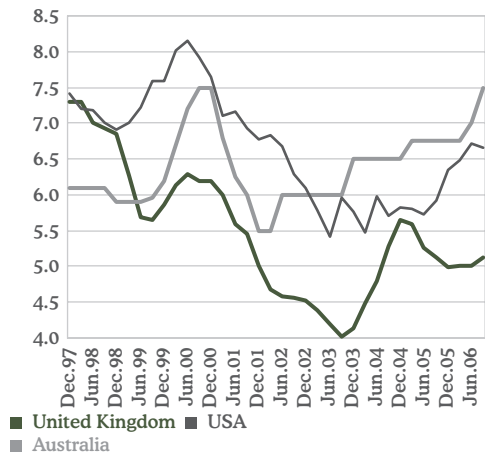
Graph 10. Evolution of new business lending for house purchase



Graph 11. Household debt burden service

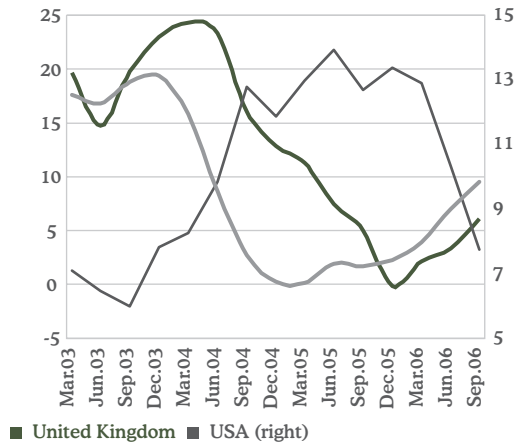


Graph 12.
Mortgage interest rates (%)



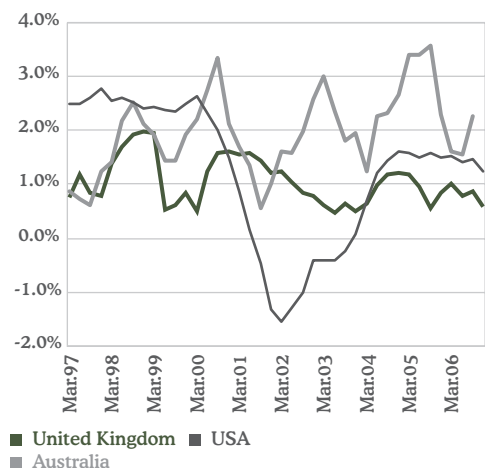
Source: CLM, FHFB, IRBA

Graph 13.
House prices in Australia, the United Kingdom and USA



Source: CLG, ABS, IOFHEO

Graph 14.
Evolution of employment



Source: ONS, BLS and RBA

...which, in the short term, has been reflected in house prices.

Financial conditions, which have been a key factor in the expansion in the housing market observed since the end of the 1990s¹, are exerting downward pressure on house prices. As shown in Graph 13, all of the economies have experienced a marked deceleration in the rate of house price increases.

Australia and the United Kingdom have seen the rate of price increases fall from close to 20% and 25%, respectively, to zero rates of growth in nominal terms. In the United States, meanwhile, price rises have slowed sharply over the past year, from rates of increase close to 14% to around 8%.

Despite the reaction of house prices to interest rate hikes, in the two countries where the slowdown first became apparent, it is striking that after one or two quarters of zero growth, the rate of price increases has again turned upwards. Thus, both Australia and the United Kingdom recorded rates of increase of 10% and 6%, respectively, in the third quarter of 2006.

The international experience shows the importance of employment as a support for less buoyant price rises after a tightening of financial conditions.

This renewed momentum of prices in a context of continuing tightening of financial conditions can only be explained by the favourable economic situation in both countries and in particular the evolution of employment.

In Australia, the unemployment rate has fallen to its lowest level for 30 years (4.6%), while in the United Kingdom, job creation has shown relatively stable growth since the beginning of this decade, the slight pick-up in the unemployment rate being largely the result of high levels of immigration.

Both economies have recorded strong growth in housing transactions, which shows that positive income developments have allowed home seekers to continue to enter the market despite steadily deteriorating financial conditions.

A further factor to bear in mind when explaining the behavior of the housing market is the easing of the uncertainties weighing on the world economy, such as the risk of a sharp rise in oil prices. Expectations of further rises in interest rates are gradually receding which, along with positive economic developments, particularly in employment, is encouraging households to invest in housing.

In the United States the positive labour market outlook will provide further support for the real estate market.

As we mentioned above, in the United States the move towards a more restrictive monetary policy, and lower expectations for economic growth, led to a significant decline in housing demand in 2006 and as a result a downturn in the property market.

¹ See Cubero, J and San Martin, I: "Housing prices in developed economies: evolution and important factors", BBVA, Real Estate Watch. November 2005.

In 2006, the number of housing starts fell to 1.8 million units. In parallel with this fall in construction, there has been an increase in the supply of houses for sale, which at the end of 2006 reached 3.5 million units. This volume of supply is equivalent to just under eight months of demand at current rates of house sales, a slightly longer period than the average over the past 10 years.

For their part, the monthly data show a slight upward trend in both the volume of sales and prices of newly-built houses in the final quarter of 2006. This points to a more positive outlook for 2007. The strong performance of the labour market, the arrival of growing numbers of new immigrants and an improvement in affordability ratios will help underpin this development.

Despite the fact that financial conditions and mortgage market developments have been determinants of the latest housing expansion, employment is still a key factor for the evolution of the residential market.

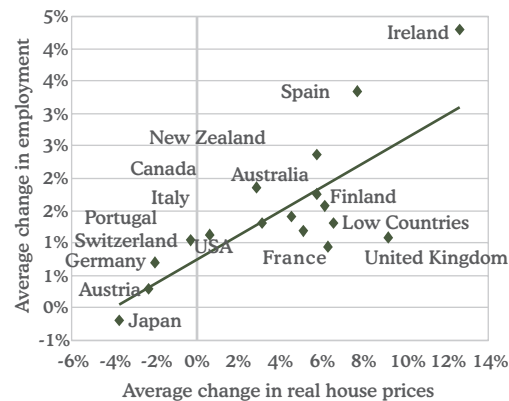
The behaviour of the housing market is highly correlated with the capacity of households to demand housing, that is to say, with their expectations for disposable income. In the end something which has a lot to do with employment developments. However, at the end of the 1990s, the structural fall in real interest rates gave a major boost to housing demand by significantly increasing, for the same levels of current income, the capacity of households to take on debt. In this way, the level of housing demand became less influenced by the evolution of employment and more by financial conditions. Currently, more restrictive monetary policies globally are having a significant impact on housing markets in most of the industrial countries, bringing to an end a period of intense expansion in activity, demand and prices.

Today, however, conditions for housing lending are more neutral. It is therefore to be expected that demand for housing will once again become more intensely supported by the evolution of employment than was the case in previous quarters. Fortunately, employment trends are positive, and this should help the current soft landing scenario in the housing market to continue.

Graph 15.

House prices and employment

(95-05)



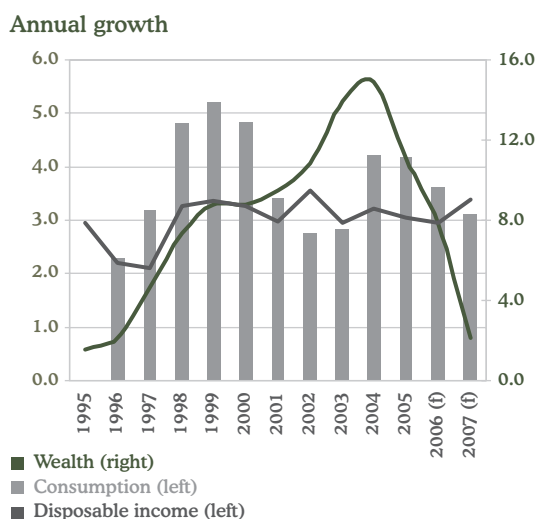
Source: BBVA Research Department

Graph 1.
Spain: BBVA-IA synthetic activity indicator



Source: BBVA Research Department

Graph 2.
Consumption, real income and wealth of households



Sources: INE, Bank of Spain and BBVA Research Department

Declining housing demand

Given the deterioration in affordability ratios, demand for housing will weaken further in 2007, though employment will continue to be a major support.

Even though employment and, to a lesser extent, foreign investment will act as supports, the deterioration in affordability ratios as a result of higher interest rates and still high house price rises will continue to slow growth in demand. The number of transactions is therefore expected to fall in 2007, especially in the new housing segment as occurred in 2006.

Spain's economic growth strengthened in 2006 with rising external demand more than compensating for weaker domestic consumption. In 2007 GDP growth will remain above 3%.

The Spanish economy sustained a strengthening performance throughout 2006, underpinned by stronger growth in industry, while construction and non-market services posted growth rates close to those of 2005 and market services slowed. The BBVA-IA synthetic activity indicator, which reflects the state of the Spanish economy, recorded steadily improving estimates as new information emerged for most of last year. However, the latest data for different partial indicators for November and December have taken the previous estimates of the synthetic indicator lower. This is consistent with a levelling off in GDP growth in the fourth quarter of the year, at 3.8%, the same rate of growth as in the previous quarter. The Spanish economy therefore grew at a rate of 3.7% in 2006 as a whole, 2 tenths of a point more growth than in 2005. In this case a smaller external sector drag on growth more than compensated for the slowdown registered in domestic demand.

GDP growth is expected to slow gradually over the course of 2007 in response to weaker momentum in a number of the factors that determine household and corporate demand. Among these, financial conditions, which although expansionary at a global level, will continue to tighten in an environment in which indebtedness stands at higher levels than in the last interest rate tightening cycle in 2000. This slowdown in spending will outweigh the stimulus provided by rising

Table 1. Spain: GDP base 2000

% oya	2001	2002	2003	2004	2005	2006	2007
Household consumption	3.4	2.8	2.8	4.2	4.2	3.6	3.1
Public consumption	3.9	4.5	4.8	6.3	4.8	4.2	4.3
Gross fixed capital formation	4.8	3.4	5.9	5.0	7.0	6.3	5.1
Capital goods and other products	1.9	0.0	5.3	4.4	8.4	6.9	6.4
Construction	6.8	6.2	6.3	5.5	6.0	5.9	3.9
Housing	7.5	6.9	9.4	5.9	5.8	6.8	4.1
Rest	7.7	5.7	3.4	5.0	6.2	5.0	3.8
Inventories (*)	-0.1	0.0	-0.1	0.0	0.0	0.1	0.0
Domestic demand (*)	3.9	3.3	3.9	4.9	5.2	4.8	4.2
Exports	4.2	2.0	3.7	4.1	1.5	5.5	5.6
Imports	4.5	3.7	6.2	9.6	7.0	8.0	6.6
Net exports (*)	-0.2	-0.6	-0.9	-1.7	-1.7	-1.1	-0.9
GDP at market prices	3.6	2.7	3.0	3.2	3.5	3.7	3.3

(*) Contribution to GDP growth

Source: INE and BBVA Research Department forecasts

external demand to exports and capital goods investment, supported by a positive outlook for activity on the back of strong corporate earnings.

The increase in the debt burden service and a smaller wealth effect will act as a drag on household consumption, while disposable income will lend support.

Growth in household consumption has been trending downwards since the beginning of 2005, though perhaps somewhat more slowly in the latter part of 2006 given the slight pick-up in spending on non-durable consumer goods. The slowdown in household consumption, which is expected to continue in 2007, is due to both the evolution of household disposable income and wealth, fundamental determinants of household spending, as well as to changes in interest rates.

With regard to wealth, the slowdown has been particularly intense. It is estimated that real growth rates have fallen from 15% in 2004 to levels around 8% in 2006. This figure will be even lower in 2007 given the prospect of further deceleration in house prices, an asset that represents close to 80% of households' total wealth.

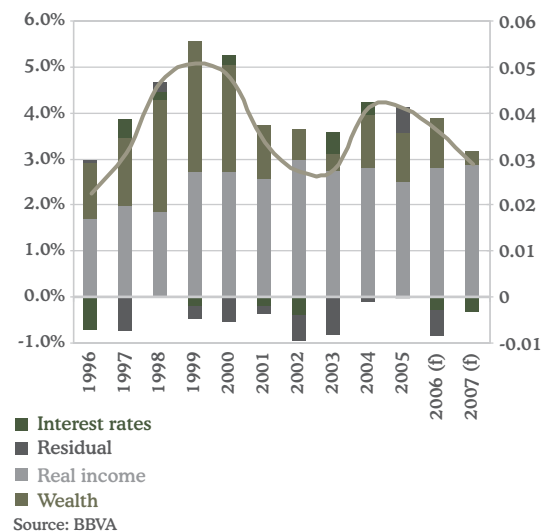
In nominal terms, growth in disposable income has been trending downwards to slight extent, which when we add inflation effects (more pronounced up to the third quarter of 2006) becomes more intense in real terms. The outlook in 2007 for household disposable income is for a slight increase in growth rates compared with those of 2006, mainly as a result of lower inflation, which is forecast to fall by 1.3 points to an average annual rate of 2.2%. Employment will remain the main support for household income, with a rate of growth of close to 3% in National Accounts terms. The personal income tax (IRPF) reform should also increase household disposable income by around 2.5 billion euros, approximately 0.4% of the total.

Job creation will continue to be the main support of household income.

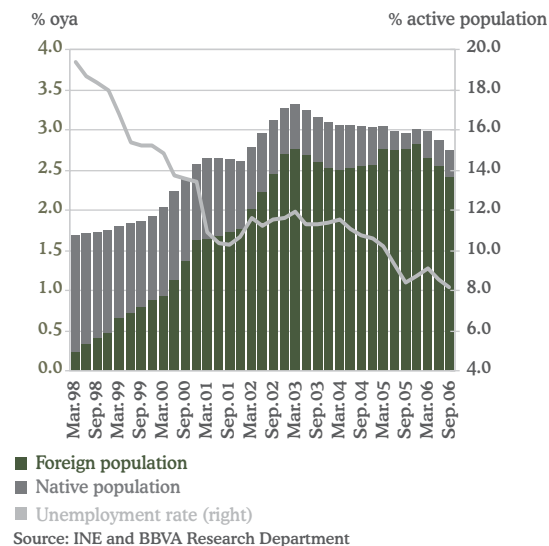
The steady increase in employment registered over the past few years, at a faster pace than the rate of expansion of the labour force despite high levels of immigration and rising numbers of women entering the labour market, has brought about a sharp fall in the unemployment rate. In fact, in some regional governments and for certain age groups, the rate of unemployment now stands at between 4% and 5% of the working population. As a result of this, wage costs accelerated considerably in the second half of 2006, at rates outstripping those negotiated in collective bargaining agreements. In this respect, the increase accumulated in collectively bargained wage agreements up to November stood at 3.2%, while wage costs as estimated by the Spanish Statistical Office's (INE) Quarterly Labour Costs Survey were up by 3.8% in cumulative terms. This rate of increase in the third quarter of 2006 was the highest for the past 10 years.

Supports for household spending have been weakening at a faster rate than the rate of slowing registered by consumption. This has led to a two-point fall in household saving rates over the past three years, down to 9.3% of disposable income in the third quarter of 2006, and an increased recourse to borrowing. At the same time, debt taken on for house purchase is rising more slowly, albeit at still high levels. In

Graph 3.
Estimated contribution to growth of household consumption



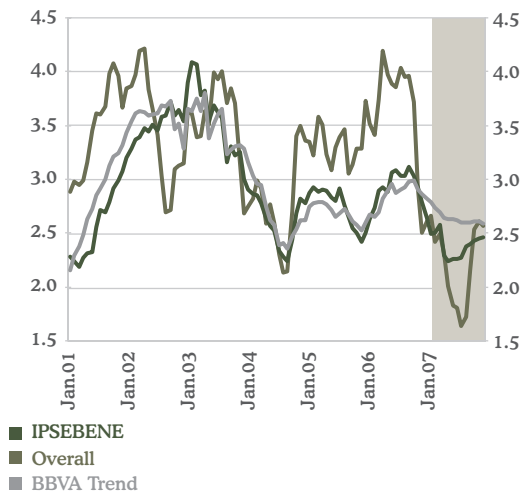
Graph 4.
Unemployment rate and growth in population older than 16 years



Graph 5.
Wages growth

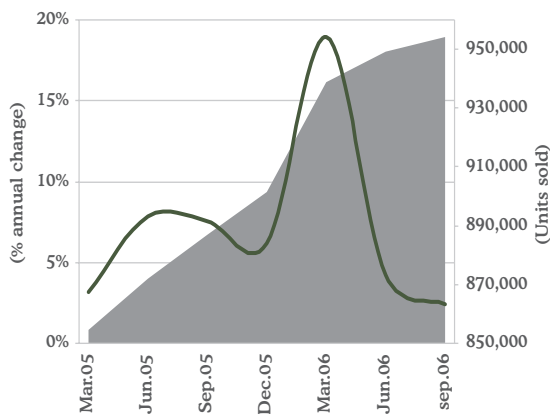


Graph 6.
Inflation



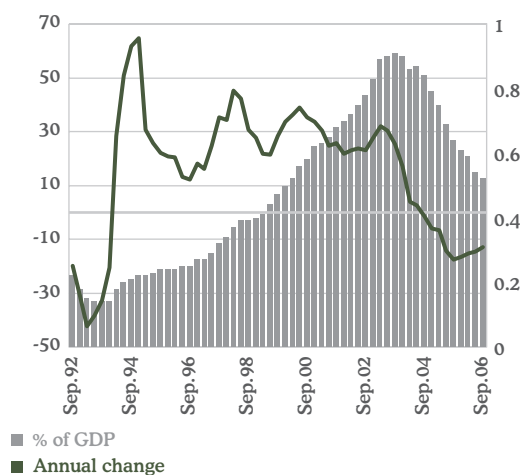
Source: INE and BBVA Research Department

Graph 7.
Housing transactions
(12-month total and annual rate of change of quarterly transactions)



Source: BBVA Research Department using Ministry of Housing data

Graph 8.
Foreign Direct Investment in Real Estate



Source: BBVA Research Department

this way, households continued to deepen their position as net borrowers in 2006, contributing 3 percentage points of GDP to the Spanish economy's net borrowing requirement (7.9 percentage points in the third quarter of last year).

This increase in the level of debt for consumption and investment in housing has been accompanied by an increase in the financial burden. In 2006, this recorded its fastest rate of increase for several years, rising to stand at around 14% of household disposable income. Given that changes in interest rates are transmitted to the financial burden with a lag of around 6 months, and assuming a gradual slowdown in total lending in 2007 (which is already being observed in new mortgage lending business) and an environment of somewhat higher interest rates in the euro area as a whole, this year debt-servicing costs will post a further rise. This will contribute to slow growth in household spending.

A lower inflation outlook.

The prospect of slower spending growth and a downward adjustment in certain commodity prices, particularly in oil prices, take projected inflation for 2007 down to 2.2%, over one point lower than average inflation in 2006. Less volatile indices such as IPSEBENE and BBVA Trend CPI, which more accurately reflect underlying inflation tensions in the economy, are expected to decelerate more slowly in the coming quarters. This reflects the rigidities that exist in the price formation process in those sectors least exposed to the globalisation of production and distribution or those that are most highly regulated, as in the case of services.

Despite the above, in a context of strong spending growth and very expansionary financial conditions, inflation in the past few years would have been higher had it not been for relatively low wages growth due to a sharp increase in the supply of labour. This increase has been based on both demographic growth as a result of immigration, as well as higher participations rates in the labour market, most notably in the rate for women. The recent pick-up in wages growth could put the declining inflation numbers at risk.

The evolution of housing market transactions, especially in the second-hand market, reflects falling demand.

Tighter financial conditions, the prospect of a period of weaker economic growth and the high level of house prices are increasingly reducing the level of demand with the capacity to purchase a house. This is particularly true in the case of first-time buyers. A clear reflection of these conditions is the longer time needed for sales and, consequently, the lower number of houses sold per property development and month. As a result of this, the number of houses sold in 2006 will be similar to year-earlier levels.

Between the fourth quarter of 2005 and the third quarter of 2006, the number of housing market transactions stood at 955,000, a rise of 7.6% from a year earlier. The quarterly data show clear deceleration over this period, since after strong growth in the first quarter of 2006¹

¹ This figure may be biased upwards because of seasonal factors linked to Easter and, in particular, the regularisation process for immigrants. The granting of legal papers in Spain to just over half a million immigrants may have given rise to the execution of a significant number of accumulated house transactions. In this sense, according to a Ministry of Housing study, approximately 12% of property transactions in Spain are carried out by immigrants, a figure close to their relative share of Spain's population.

(19%), the number of transactions slowed markedly, to a growth rate of 2% in the third quarter of the year. This marks a declining trend over the course of the past two years.

The second-hand housing market has also lost momentum, with relatively stable levels of transactions over the past 12 months, and falls of 3% in the last two quarters compared with the same quarter of the previous year. Second-hand housing developments are a more accurate barometer of the momentum of the market, since new housing transactions registered today when the house is finished generally correspond to decisions taken previously to buy a house off plan. In this sense, the share of new housing transactions in the total transaction figures has risen from 35% in 2004 to 41% in the third quarter of 2006.

Foreign investment in housing is starting to recover on the back of the positive economic situation in Germany and the United Kingdom and smaller rises in the relative prices of housing in Spain.

Foreign investment in housing continued to fall in the third quarter of 2006, but the rate of decline is slowing steadily. Inflows of investment accumulated in the 12 months to October of 2006 were down by 13% year-on-year, five points less than the rate of decline a year earlier. However, the share of housing investment inflows in the balance of payments is still falling, and in the third quarter of 2006 these represented 0.5% of GDP, 0.4 percentage points lower than the high point reached in 2003.

With the economic recovery now underway in Germany and the United Kingdom (the main sources of foreign demand for second homes in Spain) expected to continue, the reduction of the inflation spread and slower growth in relative prices of housing in Spain are factors contributing to a brighter outlook for housing demand in Spain in the medium term on the part of non-residents.

After several years of weak growth, Germany is building up cyclical momentum and corporate sector strength is beginning to be transmitted to consumers.

The German economy has finally turned the corner after the economic sluggishness of the past few years. German companies, encouraged by rising external demand and with their exports highly competitive after the progress made in strengthening profitability and balance sheets, have begun to invest more and gradually step up their hiring plans. Construction has pulled out of the slump of the past few years and household spending, although still lagging behind to some extent, is expected to rebound in line with the improving employment outlook. It is of course a fact that in 2007 monetary policy and particularly fiscal policy will be tighter than in previous years. However, as regards consumption, the component with the weakest growth so far, the strength of the economy, the improving labour market and rising consumer expectations, as well as the high levels of savings accumulated by German consumers in previous years, will help to mitigate the negative impact of the VAT hike.

Graph 9.

Germany: Consumer and business confidence



Graph 10.

United Kingdom: Utilization Capacity Rate



The United Kingdom is registering strong growth, with factors such as the buoyant international environment, very flexible markets and active demand management policies likely to continue to underpin the economy.

In the past 10 years, the United Kingdom has managed to sustain GDP growth rates of between 2% and 4%. The country's services sector is highly competitive, and employment and participation rates are very high. In addition, since the UK is not a member of the euro area, the country can set monetary policy itself, allowing it to smooth cyclical oscillations and mitigate the overheating risks associated with a real estate boom. The past few months have seen a further upturn in activity linked to the strength of the world economy. In a context with limited unused capacity for production and continuing strong growth in lending and the monetary aggregates, inflation has risen sharply and house price rises have again accelerated. In this situation, a further tightening of monetary policy is to be expected in an effort to stabilise the economic cycle and financial conditions and, as a result, reduce the risk of a hard landing in the future. The economy should nonetheless continue to clock up growth rates of around 2.5% over the next two years.

Real estate activity: is there no slowdown?

The soft landing scenario for the housing market implies that the deceleration in investment will be joined by a slowdown in activity.

Investment in housing in 2007 is expected to slow in line with weaker growth in housing demand. In this sense, a fall in housing starts would help finally to bring activity more in line with market conditions. This year housing starts are forecast at between 700,000 and 750,000 units, a considerably lower rate of house building than in 2006.

Permits for housing starts surged in the second half of the year, driven partly by the introduction of the Technical Building Code (CTE). This strength in activity contrasts with the fall-off in demand.

In the 12 months between November 2005 and October 2006, building permits were awarded for 923,934 housing units, an annual rise of 21%, the highest rate of growth since December 2003 and 13.5 percentage points higher than at the end of 2005.

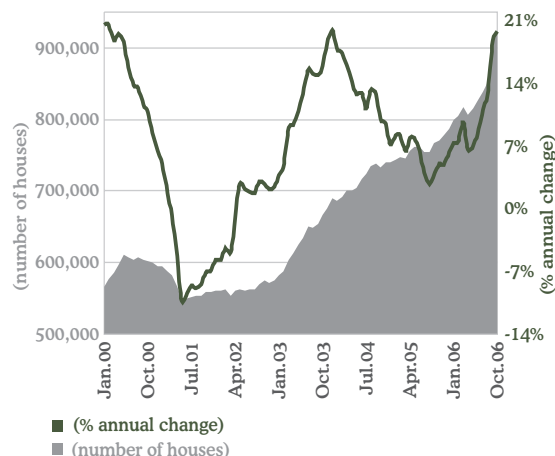
Following the sharp rise in building permits observed in September, the role of the CTE in accelerating the rate of housing approvals has weakened to some extent. However, the number of building permits nonetheless continues to rise slowly, so that at an aggregate level the impact of this one-off factor has yet to wear off. The reason for this may be that the CTE comes into force in two phases. In the first six months up to March 17, 2006, new building applications barely had to comply with the higher standards set out in the new code. During the next six months, building norms were tightened further, but continuing exemptions in the application of the code mean that it will be March 2007 before the CTE becomes fully mandatory.

The CTE also establishes that work on housing projects approved under Transitory Regulations must commence within 3 months of the date of approval. Failure to do so means the new requirements must be adhered to. Any upswing in activity because of this should therefore be concentrated in the short term. However, property developers could try to lengthen construction times for projects awarded approval ahead of the new code, which would explain the rush for permits in September.

However, the increase in the number of housing project approvals as a result of the new regulation is by itself not enough to explain all of the renewed momentum in housing starts in 2006. This strength contrasts with the more moderate trend in housing demand on the part of resident households, as reflected in both transactions and prices, as well as in demand for credit. The prospect of the consolidation of a soft landing in Spain's real estate sector therefore means that activity indicators should reflect, in the form of a deceleration, this slowdown in demand growth.

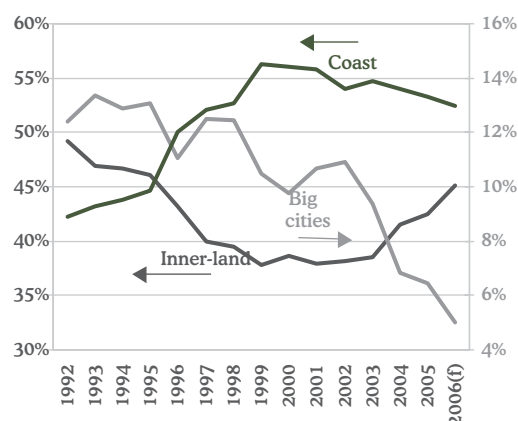
Finally, an analysis of the housing starts data at a national level shows the continuation of recent trends, with an increase in the relative share of housing starts in the interior of the country, compared with slowing activity in coastal areas and in the big cities, in particular.

Graph 1.
Housing starts
(12-month moving average and rate of change)



Source: Ministry of Development

Graph 2.
Housing starts
% of total



Source: BBVA

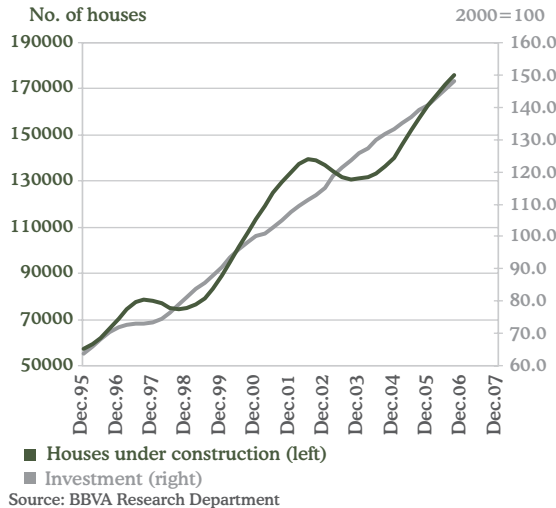
Graph 3.
Growth of lending to property developers



Source: Bank of Spain and BBVA Research Department

Graph 4.
Housing

4-quarter moving average



Lending continues to support real estate development.

The data on lending to the real estate sector still show strong rates of growth. Up to September, lending to real estate developers continued to grow at rates close to 50%, while growth in construction loans accelerated by 6 percentage points, to a rate of 35% year-on-year.

While these figures reflect the strength of activity in the real estate sector, it is also important to note the increasing levels of leverage of non-financial companies as a whole, a trend to which companies in the real estate sector are no exception. As the Bank of Spain's Financial Accounts of the Spanish economy show, the share of non-financial companies' assets funded by loans rose from 41% to 46% of the total between the end of 2004 and the first half of 2006.

Specifically, in the case of the real estate sector, again according to Bank of Spain statistics, lending to this sector currently accounts for 48% of the portfolio of corporate loans on the balance sheet of credit institutions, 22 points higher than in the year 2000.

Graph 5.
Housing

% oya

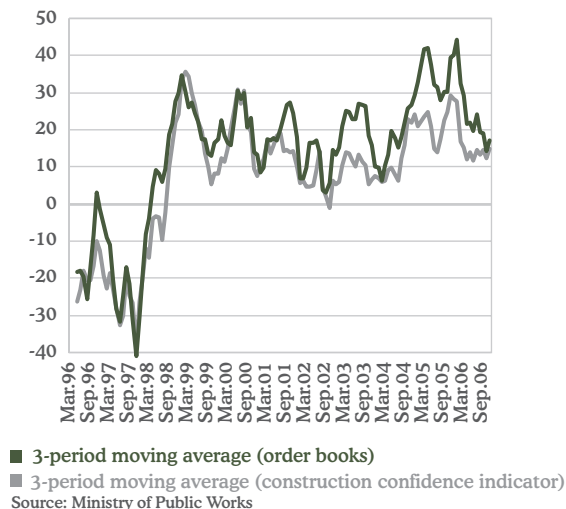


Estimates of housing activity based on the number of houses under construction reflect the existence of a lag between activity and demand which would partly explain the current strength of the sector.

To assess the relative development of housing demand and supply we need specific spending and activity indicators. As regards the share of housing in GDP, the information in question pertains to investment in new housing and value added specifically in housebuilding, respectively. The Quarterly National Accounts provides the first set of data but not the second, which must be estimated by means of the number of houses under construction at any moment in time. This figure is obtained from new housing starts and information on the time taken to construct houses, which is distributed around an average of 24 months.

As Graph 4 shows, the estimated number of houses under construction shows the same trend as investment in housing, although with more pronounced oscillations. This is consistent with a lagged response of activity to demand in the form of excesses that are then corrected in the reverse direction, always oscillating around a relatively less volatile demand for housing. Graph 5 shows rates of change for both series. It can be seen how demand leads new housing supply, which is logical given the inertia of activity to faster spending signals, basically by households. Supply has an incentive to overreact in situations of both rising and falling demand because of the risk of finding itself out of the market: when demand is rising from having no supply available for sale; and when demand is falling to avoid accumulating too much unsold stock.

Graph 6.
Survey of construction industry sentiment



It therefore seems reasonable to imagine that the recent strength of housebuilding in Spain is likely to be a response to a higher level of demand two years ago, a gap which activity would now be closing. As a result, in the coming months once this gap is closed and the slowdown in demand intensifies, one should see a fall in housebuilding in line with a soft landing scenario.

The peak in activity is also evident in confidence indicators, which have stayed steady at high levels.

Following the deterioration in the first few months of 2006, confidence indicators for construction as a whole were stable at levels close to the average observed in recent years. With regard to order books, the indicator continues to show a good reading concerning the outlook in the medium term but with none of the optimism of previous quarters. This is consistent with the levelling off in the indicator of guaranteed days of work, which, as shown in Graph 7, has been stable at record high levels since 2005, with a sharp slowdown in its rate of growth since the middle of 2004.

Cost pressures from both materials and labour may discourage real estate promotion, and help to bring housing starts more into line with demand.

As reflected in the Index of Construction Costs published by the Ministry of Development, housebuilding costs rose sharply during 2006, reaching a rate of growth in October of 7.1%, a much higher rate than inflation and up from 3.7% in 2005.

Labour costs rose slightly in 2006, but it is the costs of certain materials, mainly those associated with raw materials, which account for most of the acceleration in the overall index.

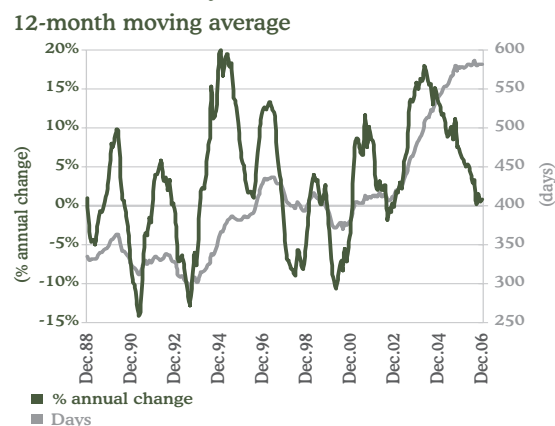
The sharp rise in the price of some raw materials such as copper and iron due to strong demand in Asia, temporary supply problems and the positions held by financial agents in some raw materials have pushed up production costs. However, it is to be expected that the slowdown in the world economy, albeit with growth remaining relatively strong, will ease pressure on the prices of these products, as reflected in the expectations of financial agents.

In public tendering, volumes are high but declining tenders awarded and the municipal electoral cycle will weaken the impact on activity.

Like house building, public tendering of civil works registered strong momentum in the second half of 2006, growing by 25%, a 13 percentage point rise over the previous year. However, it is important to note the differences between the Ministry of Development's tendering figures and SEOPAN's data on tenders awarded, which show that tendering is slowing (from a growth rate of 16% in 2005, to 12% in October 2006). This could indicate that either there are some offers that are not awarded or that the level of competition among companies bidding is such that tenders are being awarded at prices lower than budgeted.

It can also be seen that tendering by the Central Administration and the Regional governments is much more buoyant than in the case of the Local Administrations. This is a trend probably influenced by the forthcoming municipal elections.

Graph 7.
Guaranteed days of work



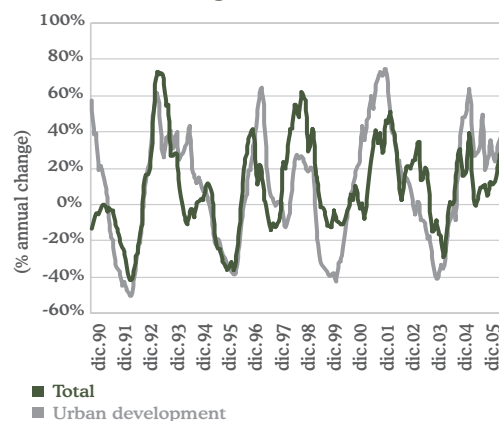
Source: Ministry of Industry, Tourism and Trade

Graph 8.
Housing:
index of housebuilding costs



Source: Ministry of Public Works

Graph 9.
Public tendering



Source: Ministry of Public Works

Table 1. Public tendering: civil engineering works. Millions of euros

	Total	Railways, roads and streets	Ports and airports	Hydraulic works and water supply	Urban development	Rest
2000	11,739,811	7,577,927	508,472	1,487,826	900,486	1,265,100
2001	16,340,638	9,612,257	835,376	1,894,958	1,557,370	2,440,677
2002	19,610,613	13,472,499	458,953	2,013,820	1,787,786	1,877,555
2003	16,706,348	9,665,804	1,086,387	3,129,979	1,268,329	1,555,849
2004	20,863,200	13,004,016	2,164,058	2,500,525	1,492,524	1,702,077
2005	23,088,313	15,127,087	1,170,638	3,348,381	1,788,919	1,653,288
2006(p)	28,838,833	16,515,603	807,352	6,235,260	2,617,086	2,663,533
Var. 06/05	25%	9%	-31%	86%	46%	61%

Source: Ministry of Public Works

Table 2.

	2004	2005	2006	2007
GDP	3.2	3.5	3.7	3.3
GFCF	5.0	7.0	6.2	5.1
Construction	5.5	6.0	5.6	3.9
Housing	5.9	5.8	6.9	4.1
Other	5.0	6.2	4.4	3.8

Source: Ministry of Public Works

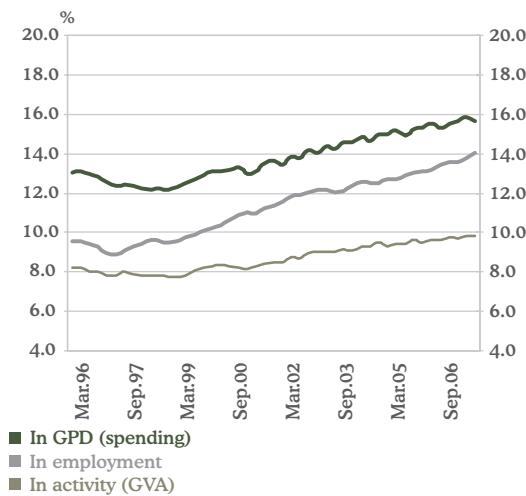
Differences can also be observed in the behaviour of the different types of public investment, with a slowdown in road and rail investment and ports, which has been easily offset by higher investment in civil works related to water supply. The execution of the Water Programme has led to major investment in desalination plants and water supply networks, as reflected in a rate of growth of the spending items in this heading of 86%.

Construction: share and contribution to growth of the Spanish economy

After the high growth rates registered in the past few years in the construction sector, its share in the Spanish economy has risen both in terms of spending, as well as in terms of value added and employment. In 2006, therefore, construction represented 16% of GDP, 10% of gross value added in the economy, and 14% of employment.

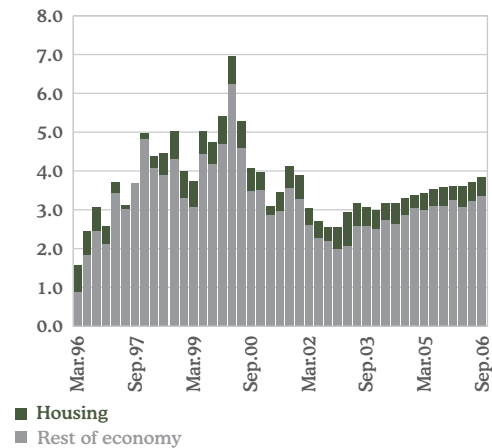
country where the relative increase in the share of housing in the economy has been most pronounced. However, in principle, this is not a sign of risk, since the changes registered in the Spanish economy in terms of population increase, structural decline in interest rates and development of the mortgage market have also been relatively more intense.

Graph 10.
Construction in Spain
Relative share



Source: INE and BBVA Research Department

Graph 11.
Housing
Contribution to economic growth



Source: INE and BBVA Research Department

In terms of the contribution to growth, on average in the period 2001-2006, construction accounted for 0.9 points of the 3.3 percentage points of annual growth, 0.5 points of the 3.1-point-rise in gross value added, and 0.8 points of the total rise of 2.8 points in employment.

When compared with other countries, the share of housing in GDP in Spain is at an average level. Ireland, with 8.9% on average for the period 1970-2005, is the country with the highest ratio, while the United Kingdom, with 4%, has the lowest figure. Looking at the developments of the past 10 years, we find that after the United States, Spain is the

Table 3. Share of housing in GDP

	1970-05	1970-1980	1980-94	1995-2005	2005
Spain	5.7	6.4	4.8	6.1	7.3
Germany	6.7	—	6.9	6.6	5.5
Holland	6.8	8.1	6.4	6.0	5.9
Ireland	8.9	10.7	8.4	8.7	10.1
United Kingdom	4.0	5.0	4.0	3.1	3.2
Australia	7.2	7.6	7.3	6.8	7.0
USA	5.0	5.8	4.6	4.8	5.4

Source: BBVA Research Department

Synthetic Indicator of Investment in Housing

Gross Fixed Capital Formation (GFCF) in Housing has been one of the most dynamic components of the macroeconomic table on the demand side in the past 10 years, with average growth of 8.2%. Its contribution to gross domestic product (GDP) was over 5% in the period 2000-2006. The growing need for information on the evolution of the economy requires an analysis of partial indicators on a more frequent basis (monthly) than provided for by the Spanish Statistical Office (INE) in the Quarterly National Accounts (QNA)¹, despite considerable efforts by the institute in the past few years to bring the publication date for the QNA forward to no more than two months after the end of the period in question. However, partial indicators usually reflect the situation of concrete parts of investment spending and employment, and it is up to the analyst to synthesize and calibrate the impact of each of these parts in the GFCF in Housing. In an attempt to combine the information of different partial indicators into a single indicator, synthetic indicators (SI) are designed and drawn up.

The methodology² used in the design and construction of the Housing SI for the Spanish economy (SI-Hou-Spa) consists of: (i) classifying the partial indicators into coincident, leading, and lagging according to the historical sequence of highs and lows in the growth cycle of the reference indicator (in our case GFCF for housing); (ii) choosing those which have a greater correlation with the growth cycle of the reference indicator, and (iii) aggregating these according to their statistical characteristics, and their representativeness of the different parts of spending. The ideal characteristics³ of this indicator are: length, economic significance, statistical quality, historical reference, chronological consistency, smooth profile, monthly frequency and ready availability.

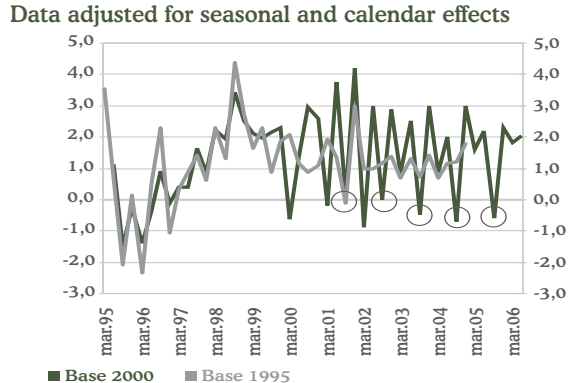
The available historical series for GFCF in Housing reference 2000 starts in the first quarter of 1995. Given that since then this component has experienced practically continued growth, and the fact it is necessary to have at least one complete growth cycle with phases of expansion and recession, the series has been extended back to 1980 with growth figures for the corresponding QNA with base 1995. However, there have been significant changes to the GFCF for Construction in the new QNA with base 2000, compared with the 1995 base. The quarterly rates of the series adjusted for seasonal and calendar effects reference 2000 show a significant increase in volatility from 2000 onwards with respect to the old 1995 base, with a marked seasonal behaviour in the third quarter of every year (see Graph 1).

¹ In Spain, the National Accounts System is released on an annual basis (ANA). The need for estimates of greater frequency led to the creation of the Quarterly National Accounts (QNA). The methodology of the QNA is based on the estimate of models which relate the evolution of every aggregate of the QNA with the whole of the quarterly indicators of the variable in question in order to allow both its disaggregation over time as well as its extrapolation.

² Fernández Macho F.J. (1991): "Synthetic indicators for accelerations and slowdowns in economic activity", *Revista Española de Economía*. Vol 8. No. 1.

³ According to a pioneering study by Mitchell W.C. and Burns A.F. (1938): "Statistical indicators of cyclical revivals", *Bulletin* 69, NBER.

Graph 1.
Spain: GFCF in Construction
% quarterly change
Data adjusted for seasonal and calendar effects



Source: INE and BBVA Research Department

The Housing-SI Spain mirrors the cycle of the GFCF in housing

We have grouped the partial indicators which best reflect both the economic and statistical characteristics mentioned above into two groups⁴: coincident and leading based on the criteria of the maximum correlation between the quarterly rates of the GFCF in Housing and the corresponding rates of the partial indicators. Thus, the coincident indicators chosen are: apparent consumption of cement (CEMEN), social security members who work in the construction sector (AFILSSC), Registered Unemployment in the construction sector (PAREGC), and the IPI of metal products (IPIMETAL). On the other hand, the leading indicators are: the survey on the level of production in the sector (ICIPROD), the number of square meters of permits for new housing (VISAVIV), the number of housing starts (VIVINI), and the IPI of non-metallic minerals (IPIMNM). Table 1 shows the lag and maximum correlation of each partial indicator chosen with the GFCF in Housing. In the case of some of the coincident indicators, the series of correlations are distributed through time in a uniform manner without showing a clear maximum lag, as is the case for cement, and in others shows two highs, such as the case of registered unemployment in the lags 0 and 4. This relates to the time distribution which the INE carries out for what is considered investment in housing. Thus, these two groups have allowed three SI to be compiled: a coincident SI-Hou, a leading SI-Hou and an overall SI which combines the previous two. In addition, all of these have been previously corrected for seasonal and calendar variations by means of the statistical procedure used in TRAMO/SEATS with the Demetra interface⁵, which also allows monthly forecasts for the indicators to be obtained.

⁴ The lagging indicators have been discarded since their use is confined to confirming information provided by the leading and coincident indicators.
⁵ Demetra 2.0 May 2002 Seasonal Adjustment interface for Tramo/Seats and X-12-Arima. Eurostat, Statistical Office of the European Communities, based on: Tramo/Seats by Victor Gómez and Agustín Maravall, and X-12-Arima by the US Bureau of Census.

Tabla 1.
Maximum correlation of the quarterly rate of GFCF in Housing (*)

	CEMEN	AFILSSC	PAREGC	IPIMETAL	ICIPROD	VISAVIV	VIVINI	IPIMNM
Lag k	0	0	0	0	2	5	4	7
Max R	0.22	0.38	-0.35	0.28	0.25	0.43	0.31	0.33

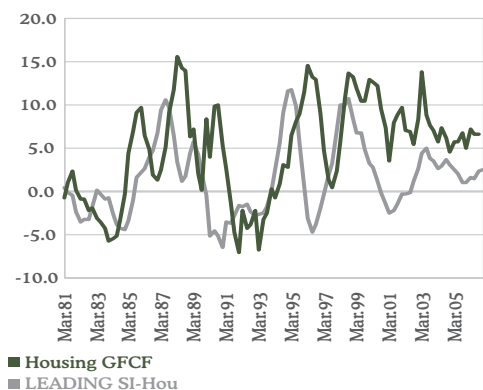
(*) period 1980-2004
Source: INE and BBVA Research Department

The result of the aggregation of the standardised quarterly growth rates for each indicator according to their correlation with the GFCF in Housing can be seen in Graphs 2 and 3.

QNA reference 2000, as has been stated, is more volatile and somewhat seasonal from 2000 onwards. To partly avoid this behaviour affecting the fit in the past few years and the forecasts, we will proceed to establish a relationship in terms of annual rates instead of quarterly⁶.

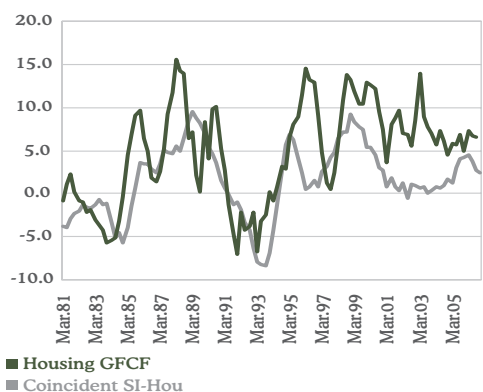
Graph 2.
Spain: Housing GFCF and Leading SI-Hou

% annual change



Graph 3.
Spain: Housing GFCF and coincident SI-Hou

% annual change



Source: INE and BBVA Research Department

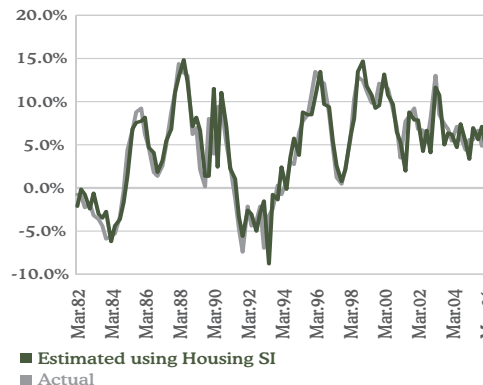
One can see from a simple observation of Graph 2 that the leading SI-Hou is capable of mirroring with a certain degree of anticipation the main phases of acceleration and deceleration in growth in the GFCF in Housing, particularly from 1986. Graph 3 which represents the coincident SI-Hou also conforms to the main phases of expansion and depression, although it could be said on some occasions it anticipates the turning points. This is due to the fact that the partial indicators of which it is composed contain certain leading properties or are distributed uniformly through time.

Estimating and forecasting the GFCF in Housing from the Total Housing-SI.

Therefore, if we combine the leading and coincident indicators into a single indicator we obtain the Total SI-Hou, which will retain the explanatory characteristics of the previous Housing SI. In this situation, using econometric techniques one can establish a stochastic relationship which links growth in the SI-Hou and growth in the GFCF in Housing. However, the quarterly behaviour shown by the GFCF in Housing in the

Graph 4.
Spain: Housing GFCF and estimated Total SI-Hou

% annual change



Source: BBVA Research Department

As can be seen in Graph 4, the GFCF in Housing estimated from the Total SI-Hou appropriately fits the pattern of its reference growth rates for all of the sample period (1980-2005).

On the other hand, and taking into account the current situation, the estimate for growth in the GFCF in Housing for the fourth quarter of 2006 with the partial information of the indicators (four of these to November, three to October, and the rest to June) but also supplemented with forecasts, leads to an estimation that the rate of growth will be maintained at an annual 6.6%. This is in line with the combined evolution of the synthetic indicators: the coincident points to growth drying up after the acceleration seen in 2005, while according to the leading indicator, growth appears to have accelerated slightly since the start of 2006. Lower growth rates are expected in 2007, compared with 2006 due to the gradual tightening of financial conditions in an environment of a strong increase in household debt.

⁶ The estimated formula linking the GFCF in Housing and the SI-Hou is: $\Delta_4 \log(\text{GFCF Hou}_t) = \alpha + \omega(L) \Delta_4 \log(\text{Total SI-Hou}_t) + N_t$; with N_t being a stationary stochastic structure, and $\omega(L)$ a dynamic filter of lags. With $R^2 = 0.94$ and a Box-Ljung statistic $Q(4)=7.7$ and $\sigma=.0169$.

Tabla 2.
Growth of Housing GFCF
% annual change

		Actual	Estimated
2005	III	6.8	5.7
	IV	5.0	7.3
2006	I	7.2	4.2
	II	6.6	8.4
	III	6.6	6.1
	IV		6.6

Source: BBVA Research Department

House prices continue to adjust very gradually

After ending 2006 up 9%, house prices will continue to slow this year, with rises of between 3% and 5%.

A weakening in demand in 2006 was reflected in the evolution of prices, growth in which was four percentage points below that in 2005.

House prices in the open market increased 9.1% year-on-year in the fourth quarter of 2006 to €1,990 per square metre. The slowdown in prices was most felt in existing homes, which were up 8.5% last year, a reduction in growth of almost six percentage points in the period. Prices of new housing performed in a more stable fashion, and were up 9.6%.

An analysis of the trend in the aggregate series shows a slowdown of a lesser magnitude than in the previous quarter. However, as can be seen from the graph on forecasting errors, most of the figures surprised on the downside, remaining within confidence intervals, with the exception of Aragon.

The slowdown in prices was generalized across the regions, but was less intense than in the previous quarter. In all, only two regions showed average annual growth in prices above the rates for 2005 (when there were nine).

In addition, as can be seen in the average prices for the year, the price of housing in Spain slowed by four percentage points in 2006, compared with three points in 2005, which shows a pick-up in the slowdown of prices initiated in 2003. This is also seen from a territorial point of view. Thus, prices accelerated only in Cantabria and Galicia in 2006.

This behaviour can also be seen if one analyses the contributions from the main areas of the market. As can be seen in Graph 3, all the main markets saw a reduction in their contribution to growth in price trends. Andalusia, Valencia and Madrid together have gone from a situation of contributing 10 percentage points to growth in prices in 2004 to four points in 2006.

Prospects remain in place for a gradual slowdown in house prices, which should end 2007 up by between 3% and 5%.

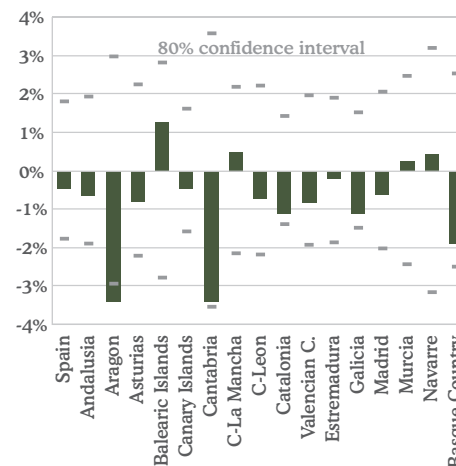
House price figures for the fourth quarter of 2006 showed a slight break in the slowdown. Despite this, the figures for the year show a more generalized and stronger slowdown than in the previous year. In addition, the transaction figures confirm a weakening in demand as a result of tighter financing conditions, and the subsequent deterioration in housing affordability ratios.

Graph 1.
House price growth



Sources: Ministry of Housing and BBVA Research Department

Graph 2.
Forecasting error in fourth quarter of 2006



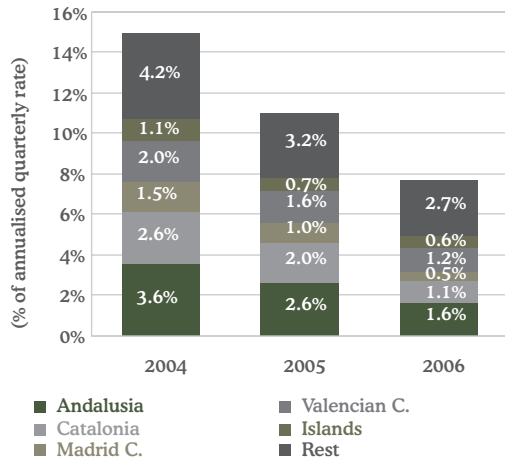
Source: BBVA Research Department

Table 1. Average annual growth in open-market house prices

	2004	2005	2006
Andalusia	21%	15%	11%
Aragon	16%	15%	14%
Asturias	13%	11%	10%
Balearic Islands	10%	13%	12%
Canary Islands	10%	11%	8%
Cantabria	11%	12%	13%
C-Leon	13%	11%	10%
C-La Mancha	18%	20%	10%
Catalonia	17%	12%	12%
Valencian C.	14%	18%	10%
Extremadura	15%	14%	9%
Galicia	13%	14%	15%
Madrid	17%	12%	8%
Murcia	26%	15%	9%
Navarre	7%	10%	7%
Basque Country	9%	11%	10%
La Rioja	8%	13%	12%
Spain	17%	14%	10%

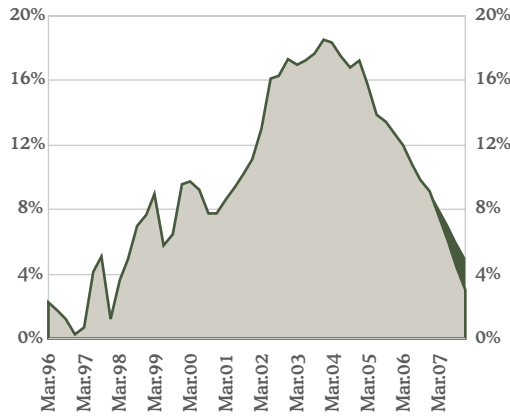
Source: Ministry of Housing

Graph 3.
Contribution to house price trend



Source: BBVA Research Department

Graph 4.
House prices



Source: Ministry of Housing

The strength of property activity, with a record number of building permits in October 2006, is perhaps the main area of uncertainty regarding the evolution of house prices in the medium term. However, it is to be expected that the supply of housing will adjust to the new demand conditions during this year, which would help support a soft landing for house prices, with year-on-year growth at the end of 2007 of between 3% and 5%.

The US house price futures market

Traditionally, the bulk of the wealth of US households (about two thirds) is held in financial assets, mainly bonds and shares. The last two types of assets are traded in organized markets with ample liquidity, and with the option of covering for the risk of adverse price movements by hedging with financial derivative products. The remaining third of the wealth of households is held in property assets, which have had no access to a derivatives market until May 2006.

An official market where future house prices are negotiated is not a new idea. It is one which has been taking form throughout the years from the definition itself of the concept of a futures contract on the price of housing to the possibility of establishing different markets for different geographical areas¹. New impetus to putting these theoretical models into practise was given by the sharp increases in house prices which have taken place in the US. In a favourable economic environment with low interest rates and strong growth in income, property asset prices have increased by 45% since 2001.

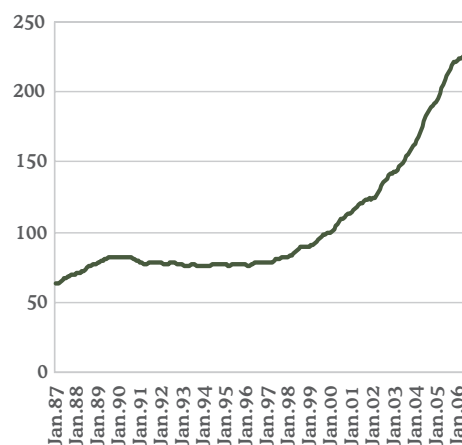
The new market aims to provide an easy form of hedging for institutional and individual investors against the risk of changes in house prices, thereby allowing them an effective means of diversifying their portfolios. These financial products are referenced to an index which measures changes in the price of housing in such a way that if one wants to hedge against an increase in price, one can buy futures on the index. In the other way around, if you believe the price of housing is going to fall, you can sell futures. The contract is settled by the profit or loss accrued as indicated by comparison with the change in the value of the index over time.

The underlying asset upon which the financial derivatives market is based is a reference index for the market price of housing. This index is the S&P/Case-Shiller Home Price Index, which is widely acknowledged as the most reliable indicator of the movements in the price of housing in the US. The index is compiled on the basis of the transactions recorded for a group of residential properties during a specific period of time². The index is drawn up for different geographical areas distributed throughout the US and categorized according to the type of property and price level. There are ten indicators for cities representative of the national market such as Washington, New York and San Diego, and a national aggregate drawn up on the basis of these.

¹ Case, Shiller and Weiss, "Index-based Futures and Options Markets in Real Estate", Cowles Foundation Discussion paper 106, 1992.

² This guarantees the homogeneity of the sample of prices.

S&P/Case-Shiller aggregate house price index



Source: Chicago Mercantile Exchange

These financial instruments can be used to hedge against possible changes in the property market, that is to say as a risk-management tool. But as in the case of any derivative, these financial instruments also provide a vehicle with which to speculate on the prospects for the property market. They are, therefore, aimed at a wide range of potential users.

The primary use, hedging, is directed at those institutions which are major players in the property sector such as building companies, intermediaries, and financial institutions. Given the macroeconomic and financial conditions in the past few years, these have increased their exposure to the property sector. These agents are interested in having coverage in place against the risks of future adverse movements in the market, and in doing so transfer risk to a wide range of investors.

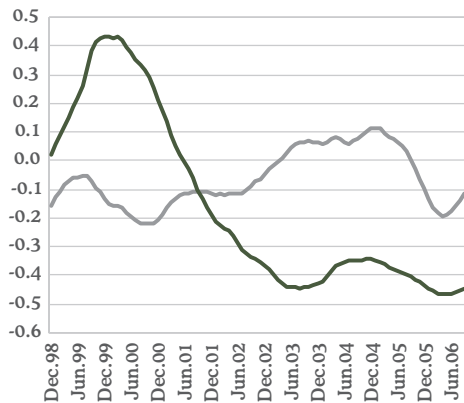
The other segment of potential users of these products comprises agents who buy or sell futures to benefit from market volatility, whether it be in the property market or otherwise. Such is the case of institutional investors, hedge funds, etc..., who gain exposure to the housing market without directly owning property, and as a result with considerably lower transaction costs than those incurred in the purchase or sale of a "real" home. These agents can also use the property futures market as a means of diversifying their portfolios, incorporating to a certain extent the "property option" in a more liquid and negotiable form.

In this sense, one has to bear in mind that property assets have different characteristics from other traditional financial assets. The volatility observed in home prices is much less than that seen in the bond and stock markets. One should also take into account that since housing has tended to be a

safe-haven asset, compared with what are strictly speaking financial assets, its correlation with these is negative, which makes it an ideal asset for diversifying portfolios.

Correlation between house prices and the stock and bond markets

10-year moving average



■ Correlation with bonds
■ Correlation with shares

Bonds: 10-year US generic bond
Shares: S&P500
Source: Bloomberg

Finally, the creation of a financial derivatives market for house prices provides benefits for the market of the underlying asset itself and for financial markets in general. It adds transparency and quality of information to the evolution of the price of housing in the residential property market itself, since it requires a reliable index which accurately reflects changes in the prices of this market. In addition, this new form of risk transfer enriches the financial markets as a whole given that it makes available new products for investors with which to diversify their portfolios. It also lowers the costs of property and financial transactions since the purchase or sale of the actual property is not required. In this way, the derivatives market

can become basically a leading indicator for the underlying market, providing forward information about the evolution of the cycle, and making residential property prices more stable.

However, for this to work correctly and for the benefits derived to be seen requires time. Time for the market to function as it should do, and meet certain conditions. Firstly, the derivatives market needs to be liquid and deep, which is to say that it attracts the same number of buyers and sellers in order for transactions to be carried out rapidly. In addition, one has to take into account that it takes time to create a critical mass which allows trading to take place fluidly, something, for example, which has yet to be achieved by the US market. Secondly, the derivatives market needs to be wider in the sense that it is capable of handling large trading volumes³.

For all of this, in order to gauge the viability of these derivatives in other economies such as the EMU, we will have to see how they operate in a country as financially developed as the US.

³ In the first seven months of the existence of this market, trading volumes have been very low, with the number of daily contracts exchanging hands varying from between nine in San Francisco to four in Chicago. In addition, if one bears in mind the price of each contract is low (between 35,000 and 70,000 dollars), it can be seen that currently very few homes are hedged against price movements in the US. Also, the scant liquidity of the market is seen in the big differences between buying and selling positions, which means that the costs of hedging are high.

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Focus: The impact of the property market on public finances

Virginia Pou

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1. Introduction

The Spanish public administrations have seen a significant improvement in their accounts since the middle of the 1990s. The deficit has fallen progressively to the point of becoming a surplus of 1.1% of GDP in 2005, a figure which is likely to stand at 1.5% in 2006. This process of fiscal consolidation has been supported by sustained growth in activity, spending and employment, which have driven revenues and limited certain aspects of expenditure. The budget revenues of the public administrations have gone from representing 37.6% of GDP in the middle of the 1990s to an expected figure of close to 40% in 2006. At the same time, there has been a fall in unemployment-related public expenditure, as well as debt-servicing payments. This has helped bring about a situation in which total expenditure in 2006 was about 38.4% of GDP, almost three percentage points lower than in the mid-1990s.

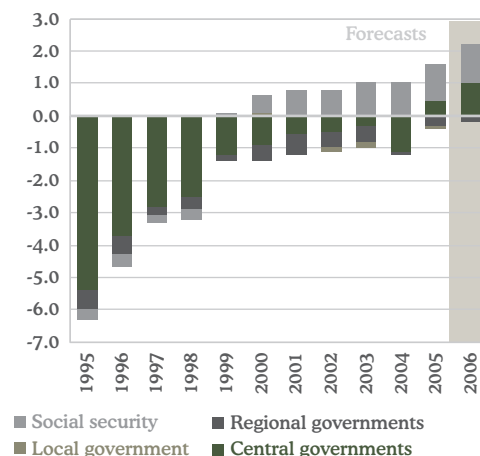
In this situation of strong economic activity, there has been a significant contribution from growth in the property market as evidenced by the 2,262,000 houses completed between 2001 and 2005, annual nominal growth in prices of an average 15%, and an increasing number of property transactions, which totalled almost 1,200,000 in 2005.

All of this has had a positive impact on the revenues of the public administrations, given that there are a number of forms of taxation on housing and property activities in the Spanish tax system. Some of these are levied directly on construction activity such as municipal building permits and the tax on construction, installations and works (ICIO). Other forms of taxation are levied on the purchase of property such as VAT, the tax on capital transfers (ITP) and documented legal acts (AJD), and capital gains included in personal income tax (IRPF). Lastly, there are other taxes which are less dependent on levels of activity at any one moment or on demand, and which are of a more recurrent nature such as the real estate tax (IBI), local charges for the provision of municipal services (such as rubbish collection and cleaning) and the levy on second and subsequent homes as part of the IRPF.

In addition, there are other types of revenues derived from property activities which although extraordinary and non-recurrent are becoming increasingly important, particularly in the case of local governments. These include the sale of land owned by municipalities and the benefits accrued from urban planning gains¹ and other arrangements which involve lower public expenditures through agreements for the provision of municipal infrastructures.

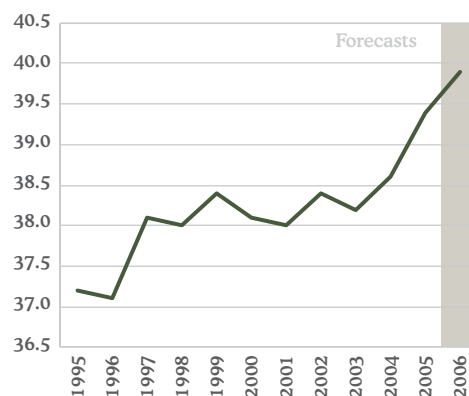
¹ In line with the constitutional principle of the right of society to have a share of the benefits generated by urban works, the law establishes the mandatory transfer to municipalities of 10% of the value of a plot of land covered by partial plans as identified in the Municipal Urban Planning Regulation.

Graph 1.
Net lending (+) or borrowing (-) of the general government
By sector (% of GDP)



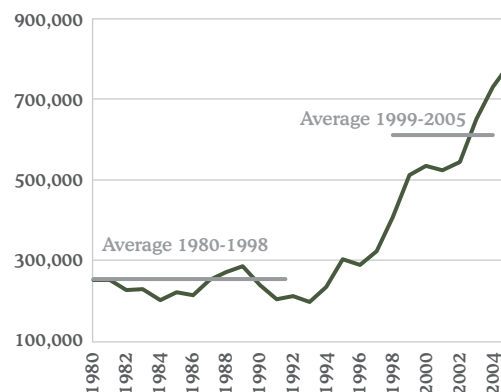
Sources: Eurostat and BBVA Research Department (forecast 2006)

Graph 2.
Tax revenues of the public administrations
(% of GDP)



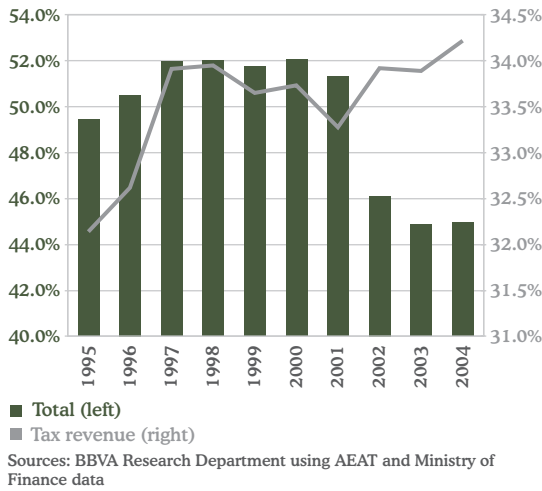
Sources: Eurostat and BBVA Research Department (forecast 2006)

Graph 3.
Spain: housing starts



Source: Ministry of Public Works and BBVA Research Department

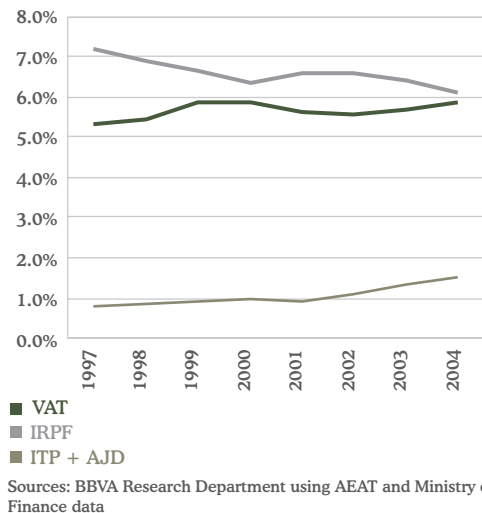
Graph 4.
Non-financial revenue of the public administrations
(% of GDP)



Graph 5.
Tax revenue of the public administrations
(% of GDP)



Graph 6.
IRPF, VAT and ITP + AJD
(% of GDP)



In this context it is worthwhile analysing the impact a correction in the property sector would have on the revenues of the public administrations, particularly in a situation in which economic growth is expected to slow in general terms, and more so in a scenario in which demand for housing is already showing signs of decelerating. In addition to the direct impact on public revenues, there is also in a more general manner the impact of the economic cycle on corporate earnings and wages in this sector.

This study focuses on the characteristics of the specific contribution of the property sector to the tax revenues of the public administrations, whilst also distinguishing between the different impact on the different types of public bodies: the central government, the regional governments and local governments. Lastly, this study does not cover operations which, since they do not involve real revenue inflows, are not reflected in public budgets, such as discretionary decisions regarding modifications to the use of land and its urban development.

2. Public revenues

In the past ten years non-financial public revenues have undergone continued growth reaching a situation in which they have doubled. Despite this, the rate of growth has been slightly below the nominal growth of the economy, particularly in the past few years, and as a result, their ratio to GDP has fallen four percentage points to stand at 45% in 2004.

The revenues which have shown the most dynamism are tax revenues, which unlike total public revenues, have grown at an annual rate of above 8%, above the average annual rate of growth in nominal GDP. As a result, they represented over 34% of GDP at the end of 2004, although still below the average for the EU-15 of 39.5%.

The performance has varied according to the type of tax. While direct taxes, which account for the biggest percentage of revenues, have increased by 1.9 times since 1995, the increase for indirect taxes was 2.3 times. As a result, they went from representing 20.9% and 9.0% of GDP in 1995, respectively, to 21.3% and 10.9% in 2004.

By type of tax, personal income tax collections have increased by 1.4 times since 1997², and despite having lost relative weight in tax revenues as a whole remain the major contributor to these. The tax which is the second biggest contributor to collections is VAT, which has grown on average 1.4 percentage points more than average year-on-year growth in GDP, in a way more similar to the evolution of household spending and imports of goods and services as a whole.

However, the type of tax which has increased the most is the regional tax on capital transfers and documented legal acts, which has grown at an annual average rate of over 18% since 1997 to represent at the end of 2004 an amount equivalent to 1.4% of GDP, compared with 0.8% at the start of the period under study.

Besides these, there are other local taxes, which despite significant growth, represent barely as a whole 1.1% of GDP. Among the best performing are the tax on construction, installations and works (ICIO), with an average annual rate of growth of 14%, the tax on the increase

² The first year for which information on each of the taxes studied was available.

in the value of urban land, which has doubled the amount it takes in despite its performance being uneven throughout the period under study. The real estate tax, despite being less dependent on the level of property activity than the taxes mentioned above, has shown continued growth both as a result of the increase in cadastral units as well as an increase in the average tax rate. In addition, the municipalities receive income related to urban development, for example, rate on the private use of public land.

2.1 How much is due to property activity?

The tax revenues of the public administrations have grown significantly, on many occasions more so than the economy as a whole. Given that about 7% of GDP derives from demand for new homes, we have analysed in detail the different types of taxes in the Spanish tax system which are levied in some form on the activity and demand for housing, and more generally, property activity as a whole (see annex "The Tax Treatment of Housing"³). Adding up all the revenues from these taxes, the property sector contributed more than 27 billion euros in 2004, which represents 9.5% of total non-financial public revenues, and 3.2% of GDP.

Table 1. Resources of Spain's public administrations⁽¹⁾
Fiscal year 2004. In millions of euros and % of total non-financial revenues

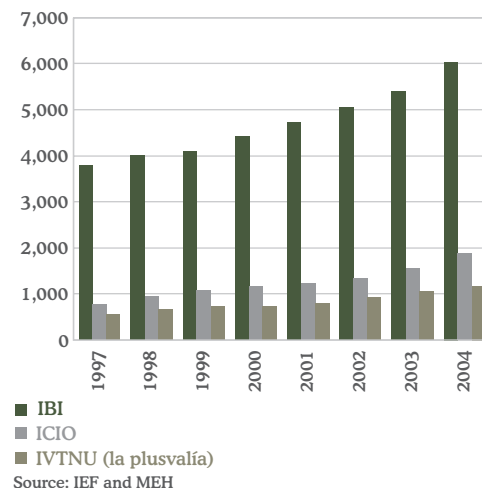
Recognised rights	Total	%	Derived from housing	
			Amount	%
IRPF	50,988.6	17.6	2,692.4	0.9
VAT	49,754.0	17.2	6,313.8	2.2
Capital transfers	7,528.3	2.6	5,387.8	1.9
Documented legal acts	5,435.7	1.9	1,360.7	0.5
ICIO	1,872.7	0.6	1,872.7	0.6
IVTNU	1,176.4	0.4	1,176.4	0.4
IBI	6,029.1	2.1	6,029.1	2.1
Special contributions	245.4	0.1	245.4	0.1
Tax revenues	204,451.9	70.8	25,078.3	8.7
Rental income from real estate	121.8	0.0	121.8	0.0
Land sales	1,809.0	0.6	1,809.0	0.6
Non-financial revenues	288,934.6	100.0	27,009.1	9.3

⁽¹⁾ Social security resources are excluded from the analysis
Source: BBVA Research Department

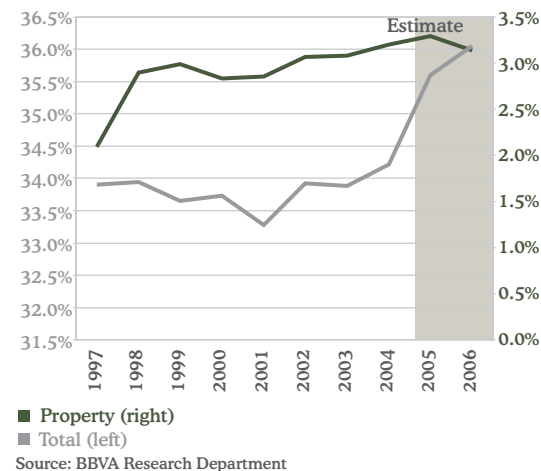
Taxes linked to the property sector do not perform in a way which is very different from tax revenues as a whole, although given that they have come off a very low base, up to 2004 have seen an increase in their ratio to GDP of 1.1 percentage points, compared with an increase of 0.3 points for total tax revenues. However, growth in property revenues is concentrated between 1997 and 1998 and in collections of VAT, in part due a recovery in public works activity after the Maastricht requirements were met.

If you estimate the impact of the property sector on tax collections for 2005 and 2006 on the basis of their historical correlation with the number of transactions (which is taken as the reference variable for the performance of the property sector), a slowdown in the growth of taxes related to this market is forecast in line with the ongoing slowdown in

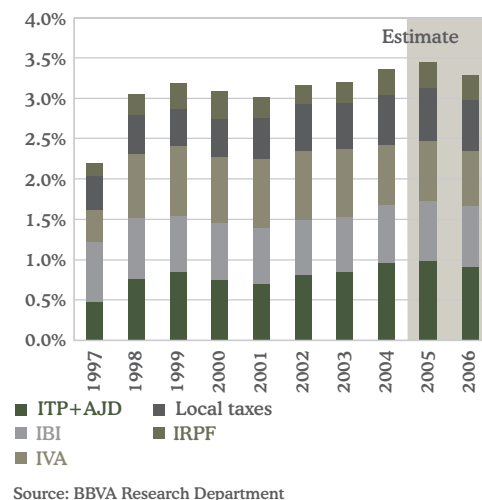
Graph 7.
ICIO, IVTNU and IBI
(Million of euros, recognised rights)



Graph 8.
Tax revenues
(% of GDP)



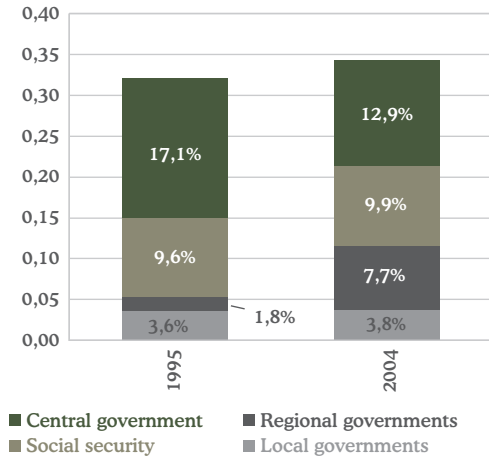
Graph 9.
Tax revenues linked to real estate activity
(% of GDP)



³ We list and identify the different taxes which are levied in some form on property sector activity, in each case providing an estimate for the part of their collections derived directly from the sector.

Graph 10.
Tax revenues by sector

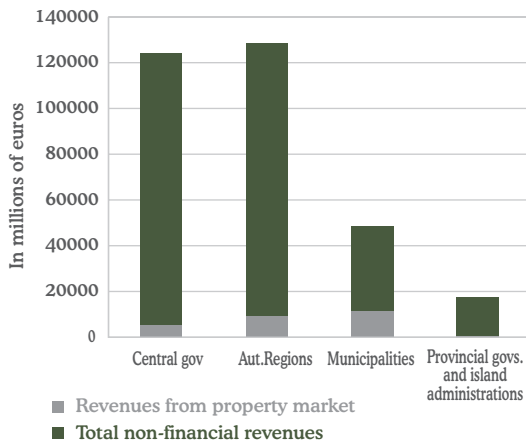
(% of GDP)



Sources: BBVA Research Department using MEH

Graph 11.
Non-financial revenues by public administration

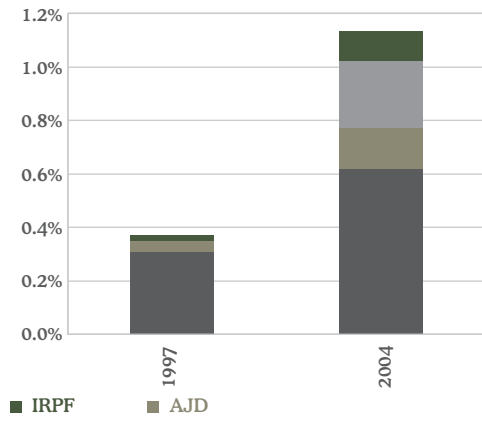
(according to recognised rights)



Sources: BBVA Research Department

Graph 12.
Regional governments: revenues linked to property sector

(% of GDP)



Source: BBVA Research Department

the number of transactions. The performance meanwhile of the other tax revenues remains very dynamic.

Of the taxes levied on housing and the property sector, the one which has shown most sensitivity to the evolution of the sector, and as a result most growth, is the tax on capital transfers and documented legal acts, whose property revenues, according to the estimates made, have gone from representing 0.3% of GDP to an expected 0.8% for 2006. In any case, it should be borne in mind that the increase in collections of this tax is also due to the increase in tax rates, which have increased in all regions from 6% to 7% for the tax on capital transfers and from 0.5% to 1% for documented legal acts.

After this regional tax, VAT revenues deriving from the construction and property services sector have made a bigger contribution to the dynamism of revenues, above all since the start of the period under study, with a slowdown observed in the past few years. In all, the amount of revenues deriving from “property” is seen constant at about 0.7% of GDP since 2004.

The rest of the revenues deriving from the property market have grown at rates similar to those for the economy, and have as a result remained practically at the same level of about 1.7% of GDP, more than half of which comes from the tax on ownership of property.

2.2 The impact of tax collections deriving from property activities by sub-sectors of the public administrations: look out for the municipalities

The evolution of tax revenues is uneven with respect to the sectors to which the tax collections apply, in part due to the transfer of part of tax collections from the central government to the regions⁴. Tax revenues have become the main source of financing for the sub-sectors of the public administrations as a whole, given the tremendous growth they have experienced. The central government and the Social Security System source almost all of their financing needs from tax revenues (91.4% and 93.6% respectively in 2004, compared with 88.0% and 68.7% in 1995). Separately, tax revenues bring in more than half of the non-financial revenues of the territorial administrations (54.2% in the case of the regional governments and 61.6% in the case of local governments), although in the case of local bodies the increase has been barely 1.5 points.

In this context, the exposure to a slowdown in property activity varies according to the sub-sector of the public administration and the returns from each of the types of taxes they are entitled to levy. In order to analyse the impact on each of the sub-sectors, the tax revenues directly derived from the property sector are separated out in the same proportion to their share of total revenues, also including revenues of a non-tax nature (the sale of land or rental income from real estate).

The outcome of this shows that the administrations most exposed to the evolution of housing and the property market are the local governments which obtain about 1.4% of GDP directly (about 22% of their revenues) from property activities. However, while in the case of the municipalities such revenues represented 1.3% of GDP in 2004, (accounting for about one third of municipal revenues), in the case of the provincial governments, and the island administrations they barely account for 0.1%.

⁴ In this process of fiscal decentralization, there are two years which mark a change in direction: 1996, with the transfer of 15% of personal income tax collections, and 2002 when the regions' share of personal income tax was increased to 33%, along with the transfer of part of VAT collections and collections of special manufacturing taxes.

After the municipalities, the regional governments are the public administrations which have received a greater volume of revenues derived from the property market. They have also experienced the biggest increase in revenues, moving from 0.4% in 1997 to 1.1% in 2004. Of this increase, 0.4 percentage points are due basically to the process of tax decentralization through which the regions have had a share in practically all the different types of taxes in the Spanish tax system since 2002. However, revenues from property do not account for more than 8% of the regions' non-financial revenues.

Finally, in the case of the State the revenues derived directly from property activity represent 4.5% of its total revenues, which was equivalent to 0.6% of GDP in 2004, representing an increase of 0.1 percentage points since 1997.

In principle, the municipalities are the public administrations most exposed to property activity, and as such we have carried out a more detailed analysis of their situation at three points in time (1992, 1997 and 2004)⁵. It can be seen that total revenues derived from property moved from representing 22.8% of total revenues in 1992 to 31.9% in 2004, equivalent to 0.9% and 1.3% of GDP respectively.

The different sources of revenues derived from the property sector can be classified as more recurrent (less dependent on the current level of activity: the IBI and the IRPF – capital gains –, and income from property) and revenues of a more one-off nature (more directly linked to the level of activity, transactions and urban development: the ICIO, the IVTNU, the VAT, and special contributions or revenues from the sale of land). In this way, it is shown that it has been precisely revenues of an extraordinary nature which have undergone the biggest rise, increasing their relative contribution to total municipal revenues by 6.2 percentage points since 1992 to 14.3% in 2004. On the other hand, revenues of a more recurrent nature have remained stable since 1997 at around 17.5 points of the total, with the IBI the main source of financing.

⁵ 1992 was a year of crisis in the property sector; 1997 was the year in which the property market started to pick up; and 2004 is the latest year for which complete information is available.

Graph 13.
Local governments: revenues directly linked to property activity
(% of GDP)

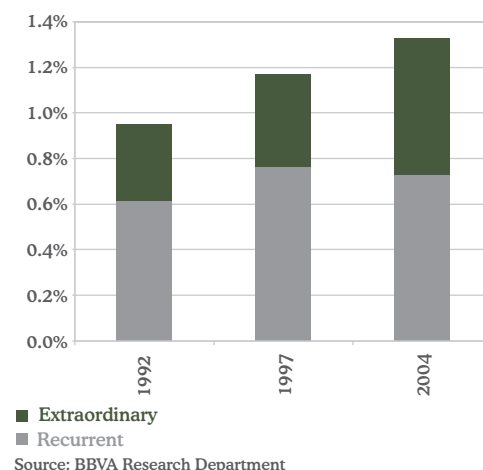


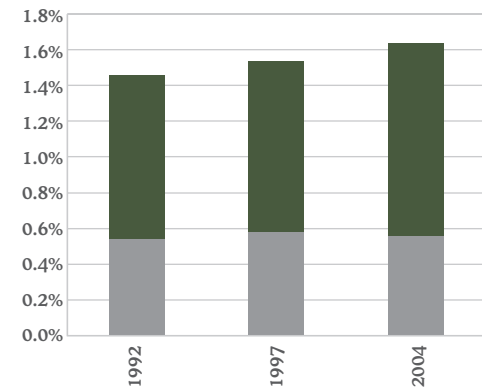
Table 2. Consolidated budget revenues of municipalities

Recognised rights. Millions of euros and % of non-financial revenues

	1992	%	1997	%	2004	%
Direct taxes	4,700	29.9	7,077	32.2	10,746	29.1
- IRPF	-	-	-	-	373	1.0
- IBI	2,271	14.4	3,776	17.2	6,029	16.3
- IIVTNU	320	2.0	549	2.5	1,176	3.2
Indirect taxes	585	3.7	766	3.5	2,206	6.0
- IVA	-	-	-	-	226	0.6
- ICIO	510	3.2	756	3.4	1,873	5.1
Duties and other income	3,072	19.5	4,092	18.6	6,977	18.9
- from services					3,399	9.2
- from private use of land					660	1.8
- special contributions	156	1.0	172	0.8	235	0.6
- other revenues	540	3.4	782	3.6	1,909	5.2
Current transfers	5,364	34.1	7,067	32.2	11,260	30.5
Property income	357	2.3	658	3.0	788	2.1
- Rental income real estate	45	0.3	77	0.4	110	0.3
CURRENT REVENUES	14,077	89.5	19,661	89.4	31,977	86.5
Disposal of real investments	339	2.2	683	3.1	2,072	5.6
- Land	283	1.8	559	2.5	1,766	4.8
Capital transfers	1,310	8.3	1,638	7.5	2,924	7.9
CAPITAL REVENUES	1,649	10.5	2,321	10.6	4,995	13.5
NON-FINANCIAL REVENUES	15,726	100.0	21,982	100.0	36,972	100.0

Source: IEF (Badajoz) y D.G. Coordinación Financiera con las Entidades Locales. MEH

Graph 14.
Local governments: spending directly linked to property activity (% of GDP)



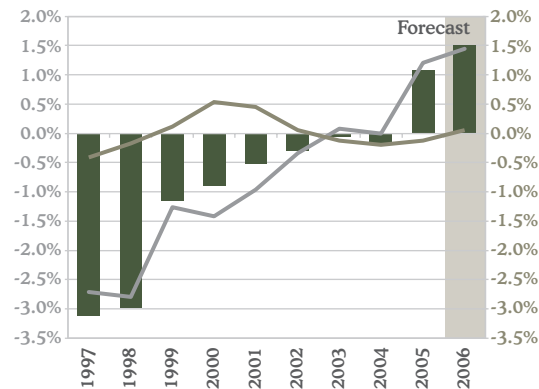
■ Extraordinary
■ Recurrent
Source: BBVA Research Department

Table 3. Municipal revenues and expenditures linked to urban development According to recognised obligations and rights As % of total revenues and expenditure

	1992	1997	2004
Revenues	22.8	26.8	31.9
Recurrent	14.7	17.5	17.6
Extraordinary	8.1	9.3	14.3
Expenditures	31.0	33.8	35.9
Recurrent	11.5	12.8	12.3
Extraordinary	19.5	21.0	23.7

Source: BBVA Research Department

Graph 15.
Structural and cyclical component of budget balance (% of GDP)



■ Budget balance (right)
— Structural balance (left)
— Cyclical balance (left)
Source: BBVA Research Department

In any case, the impact on municipal finances urban development is varied. On the one hand, as mentioned above, revenues are generated from the different types of taxes levied on this activity. On the other, urban development of the municipalities is linked to population growth, which as defined by the current funding model for the local governments, brings with it higher revenues through the share of the state tax system (revenues which are outside the scope of this article's study).

However, population growth also brings with it more responsibilities for the municipalities such as greater obligations associated with the provision of services such as public transport, rubbish collection, street cleaning and public lighting.

Carrying out an analysis parallel to that for revenues for a classification of expenditure by function, it turns out that expenditure directly related to urbanization has increased by 0.1 percentage points of GDP since 1992 to 1.6% in 2004, with its percentage of total municipal expenditure rising from 31.0% to 35.9%. If we distinguish between expenses of a more recurrent nature and that of a more one-off nature⁶, it is the latter which has accounted for practically all of the increase, while the former has remained stable.

Comparing municipal revenues and expenditures deriving from the property sector, it turns out that the sector accounts for 32% of municipal revenues, while generating expenditures equivalent to 36% of total municipal expenditure. The gap reverses when only revenues and expenses of a recurrent nature are considered, with these representing respectively 17.6% and 12.3% of total revenues and expenditure.

However, it should be taken into account that due to the limitations of the information available, a few components of recurrent expenditure such as public transport and street lighting have been included in extraordinary expenditures. These could in some cases involve large amounts which could change the direction of the gap between revenues and recurrent expenses.

In any case, this result should be treated with caution, given that although we are dealing with partial withdrawals, the principle of a joint fund which governs the economic management of the public administrations implies that all revenues go towards financing any type of expenses. One cannot, therefore, speak about a "deficit" in property activity.

However, it does appear true that given the inevitable link of municipal economic management to the electoral cycle, in some cases extraordinary benefits from property activity are being used to solve current funding problems without taking into account the effects such measures have on future obligations.

3. What effect does the economic cycle have?

In order to determine the exposure of fiscal policy to the economic cycle, the public budget balance is divided into its structural and cyclical components⁷. One can see that in the case of the cyclical

⁶ On the basis of a functional classification of expenditure, and given the limitations of the information available, which is only detailed down to the level of sub-function, only expenditures included in the sub-function community welfare is considered as recurrent, while expenses included in the sub-functions housing and urbanization and basic infrastructure and transport are considered to be extraordinary items.

⁷ To divide the public budget balance, we have calculated the elasticities of public revenues with respect to the variables that determine the different tax bases for the main taxes: salaried-employee compensation for the IRPF and social security contributions, the gross operating surplus for corporate tax, consumption for the VAT, and real investment in housing as a proxy for analysing the sensitivity of tax revenues directly derived from the property market. Otherwise, the methodology used is the same as that explained in the box, "Public balance and the economic cycle", October 2006 edition of the magazine Situación Spain.

component of the budget balance, exposure is low since GDP is at a level close to its potential. In this way, as an initial assessment, it can be gauged that the exposure of public finances to a slowdown in the economy is not very high.

The process of fiscal consolidation undergone by the Spanish public administrations is due in large part to the good performance of tax revenues, within which those deriving from types of taxes levied directly on property activity have increased their contribution to total revenues to 9.5%, although they remained at about 3.2% of GDP between 1998 and 2004.

Dividing revenues into structural and cyclical revenues, one can see that in the case of the latter, the performance of revenues deriving from property shows the same pattern as that for total revenues. However, this does not imply a similar performance within a situation of an economic slowdown, in which the deceleration in the property sector is more acute. Under such a scenario, the estimates carried out on the basis of the analysis in the section above show a slowdown in growth in public revenues, although the tax burden would remain at around 36% of GDP.

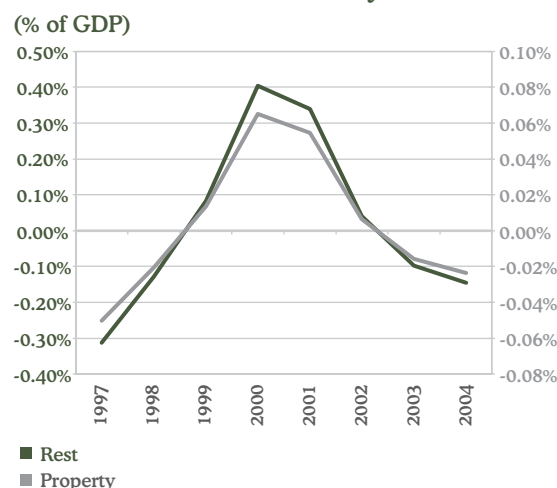
Given that a correction in the property market is expected, with a fall in the number of transactions of over 12% to about 1,200,000 in 2010 (the estimated long-term equilibrium level in line with the potential demand for housing), the slowdown would be felt more in tax collections deriving from this sector. It is estimated that without changes to tax regulations, the contribution of revenues deriving from the property sector could fall by one percentage point to levels of around 2% of GDP. If this were the case, however, the impact of the correction in the property sector on total public revenues would continue to be relatively low.

However, it should be taken into account that a large part of tax revenues from the construction sector and from the property sector in general are channelled through corporate earnings, employment creation, and the increase in the total payroll. To the extent that a slowdown in the construction sector checks economic growth, overall tax collections from personal and corporate income and social security contributions could be undermined, thereby, reducing the strength of total public revenues in all of the sub-sectors of the public administration.

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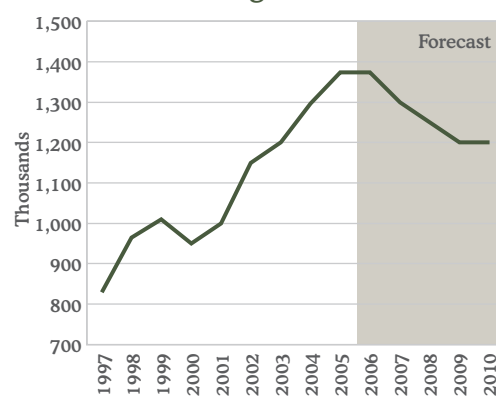
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Graph 16.
Public revenues linked to cycle



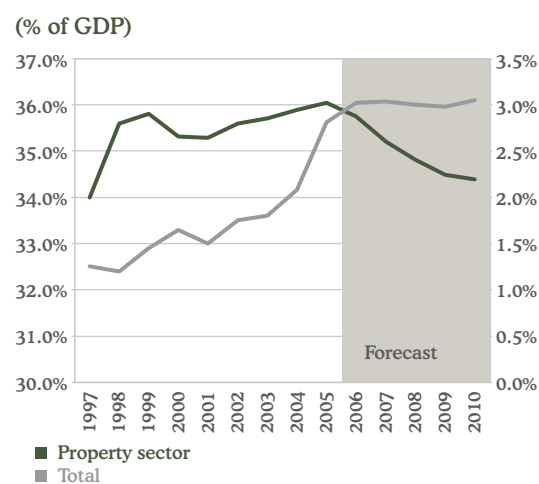
Source: BBVA Research Department

Graph 17.
Number of housing transactions



Source: BBVA Research Department

Graph 18.
Tax revenues of the public administrations



Source: BBVA Research Department

Annex: Tax treatment of housing⁸

Personal income tax (IRPF)

This is taxed in two ways for property activities and housing. On the one hand, increases or decreases in wealth are recorded in the **transfer or sale of property assets**. The resulting difference between the value of the acquisition and the transfer of wealth components is integrated into the base for the personal income tax in two different ways:

- When the acquisition and transfer of the property occurs within one year or less, the difference is treated as part of the general tax base of personal income and subject to the IRPF in the same way as any other form of income.
- When the transaction takes place more than a year after the initial purchase of the property, the capital gain⁹ is taxed at a special rate of 15%.

With the approval of the reform of the IRPF, from 2007 all capital gains, including those deriving from property transactions, will be taxed at the special rate of 18%¹⁰.

Separately, in the case of **second homes or property assets** which do not generate income nor involve land which has not been built on, the imputed income in the general tax base is equivalent to 2% of the cadastral value of the property. In cases in which the cadastral value has been revised, the rate applied is 1.1% of the cadastral value.

The IRPF accounts for about 17% of total public non-financial revenues. Of these, collections derived from profits from property activity account for 4.2% of total revenues from the tax, although it should be pointed out that these were previously at much lower levels (2.5% in 1997). Practically all of the increase has been due to gains in wealth.

Valued added tax (VAT)

A reduced rate of 7% is levied by the real-estate developer on the purchaser of a new home as part of normal business activity. However, there are super-reduced levels of 4% in the case of the purchase of subsidised housing.

This is the second most important tax in terms of the revenues it brings in. According to an analysis of VAT figures carried out by the Tax Office, the construction and real-estate sector increased its contribution to total

⁸ Note on methodology: in order to determine the amount of revenues deriving from property activity, social security revenues have been excluded from the study since these involve almost entirely social security contributions which are not specifically connected to the property market. It should also be taken into account that due to statistical limitations the information required to estimate the effect of property market activity on IRPF and VAT collections in the special tax regimes in place in Navarre and the Basque Country was not available, and this effect is, therefore, not taken into account.

⁹ In carrying out the study, it should also be borne in mind that the value of capital gains or losses also includes returns from the transfer of other assets such as shares and stakes in the share capital of property companies. In addition, gains from the sale of property which is the usual place of residence are exempt from tax when the proceeds from the sale are reinvested in a new home of usual residence, and as a result the returns from property transfers are lower than seen.

¹⁰ There is a special case which has applied since January 1, 2006 under which in determining capital gains from the sale of property which was acquired before December 31, 1994, depending on how long the property has been held for, a part of the gain is exempt from tax, with a rate of 18% applied to the balance as part of the special tax base.

VAT receipts from 7.4% in 1997 to 12.7% at the end of 2004, reaching a maximum of 15.4% in 2001, probably due to the fact that the slowdown in the economy was felt more in other sectors than in construction.

Tax on capital transfers and documented legal acts

The tax on capital transfers (ITP) applies to second and subsequent transfers of property at a general rate of 7% in all of the regional governments, with the exception of the Canary Islands where the rate is 6.5%. The **documented legal acts (AJD) tax** applies to certain notarial, commercial and administrative documents such as title deeds and bills of exchange. The rate applied for notarial documents is 1% in all of the regions with the exception of the Canary Islands where it is 0.75%.

In addition, most of the regions have lower rates, normally 3% for the ITP and 0.3% for the AJD, in the case of the acquisition of protected housing or homes of usual residence according to certain personal circumstances such as the case of large families, young people and handicapped people etc.

Revenues from the ITP tax barely represent 2.6% of total non-financial public revenues, but account for 6.3% of the non-financial revenues of the regions. A basic calculation of the average base for the tax based on the number of transactions for existing properties, the average price per square metre and the average size of housing shows that an estimated 71% of revenues in 2004 were derived from property market activities¹¹. A similar calculation for the AJD shows that property market activity accounted for approximately 25% of receipts for this tax in 2004, barely 0.5% of total non-financial resources.

Real estate tax (IBI)

This is an obligatory local tax levied on the cadastral value of real estate. The tax rate in the case of urban property varies between 0.4% and 1.10%.

Despite the fact that IBI receipts represent only 2.1% of total non-financial revenues, it is after VAT on construction the second biggest source of revenues deriving from the sector.

Tax on construction, installations and works (ICIO)

This is a local, discretionary tax levied on the real, effective cost of any construction, installation or building work which requires a permit. The rate is fixed by each municipality but cannot exceed 4%.

At the end of 2005, 6,233 municipalities had exercised the statutory right to levy this tax, with the average rate imposed 3.34%.

¹¹ For the tax on capital transfers, we have used an average rate of 7% which is applied to the number of transactions for existing properties multiplied by the average price of existing homes, and the average surface area of existing homes. In the case of the documented legal acts tax, we have applied a rate of 1% to the total number of property transactions multiplied by the average price and by the average surface area.

Tax on the increase in the value of urban land (IIVTNU)

This is also a discretionary local tax which is levied on the increase in the value of land deriving from the transfer of ownership of the land. The rate is fixed by each municipality but cannot exceed 30%.

Other local taxes

Municipalities can also set a series of other taxes levied on construction activity within their municipalities, such as taxes for granting a **building permit** and **special contributions**¹².

Revenues derived from the above local taxes, the ICIO, IVTNU and special contributions, account for only a small proportion of total public revenues (1.8%), but are acquiring increasing importance in the financing of the municipalities.

Alongside these, the municipalities are obtaining increasing revenues from building permits and the sale of developed land¹³, which account for an estimated 0.2% of total public revenues.

¹² Revenues which local administrations receive in consideration for the special benefit obtained or an increase in the value of certain assets as a consequence of carrying out public works or increasing municipal services.

¹³ It is estimated they represent about 3.5% of total revenues deriving from rates and other revenues of the public administrations as a whole.

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