

Real Estate Watch Spain

Economic Research Department
June 2009



The adjustments in the real estate sector in Spain and at a global level, will still take time...

...despite the improvement in housing affordability...

... and the countercyclical measures adopted

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Summary

Since the last edition of this publication, the global economy has continued to deteriorate. The first half of the year has been particularly difficult, marked by the persistence of tight financial markets and further falls in economic activity, although some recent indicators point to a stabilization in the rate of decline. With continuing financial tightness and an unprecedented recession in the world economy, governments have continued to increase the range of measures to tackle the crisis: public-private investment programs in financial assets, the acquisition of mortgage bonds, unconventional monetary policy, significant fiscal expansion, etc. Whilst these measures could have a positive impact on the economy, the likelihood of a recovery in 2010 is still uncertain, given the lack of precedents to forecast the effects of measures on this scale.

The adjustment will take time at a global level...

Against this background, there have been significant reductions in prices and volumes in the real estate markets of nearly all developed economies, and in some countries there will be major resizing of the sector. Although these corrections have already been taking place for several months, it will still be some time before normality is restored. The slow recovery in economic growth and the destruction of jobs mean that long-term investment plans are being postponed, limiting housing demand.

In addition to specific measures adopted by individual governments, the main support for the sector comes from the general fall in prices and from reduced interest rates. An analysis of indicators of house affordability internationally shows that the effort required for households to buy a home will be lower in the coming quarters.

...and in Spain...

Unlike other European real estate markets, in Spain the stabilization of the sector is characterized by a major imbalance in activity rather than in prices.

The rapid contraction in demand resulting from the deterioration in the macroeconomic climate has contributed to the accumulation of unsold houses in the market. According to BBVA ERD forecasts, this stock will begin to decrease starting in the first quarter of 2010, and will return to the levels seen in 2005 by the end of 2012.

The most recent official real estate price figures show a more rapid than expected adjustment process and this will help to speed up the absorption of the excess supply of housing in the market. The interaction between prices and demand in the sector is retroactively feeding the adjustment: the continuing falls in prices means that the potential housing demand, which continues to exist in the market, could take longer to be converted into purchases given the expectations that prices have further to fall. BBVA ERD forecasts that housing prices will fall by around -10% in 2009 and -12% in 2010 in nominal terms. In total, the fall in house prices from peak to trough is forecasted to be around 30%.

From the microeconomic point of view, we have analyzed the relationship between real estate ownership and employment for individuals. The figures show that a vicious circle can occur during times of recession: the deterioration in the economy increases unem-

ployment, which results in a decrease in the proportion of homeowners. Non-homeowners have lower incentives to search for employment as they do not have a mortgage to pay, and this in turn reinforces the deterioration in the economy. As a result, the cyclical effect on real estate prices and the destruction of employment could have been softened if measures had been employed before the current crisis to promote renting rather than buying.

An adequate policy response with uncertain effects

At an international level, in addition to the measures designed to stabilize financial markets, a number of specific support plans for the real estate sector have been adopted in the USA and Europe. With a few exceptions, these measures aim to help the most vulnerable families by providing help to first-time buyers and by promoting social housing, preferably through rental.

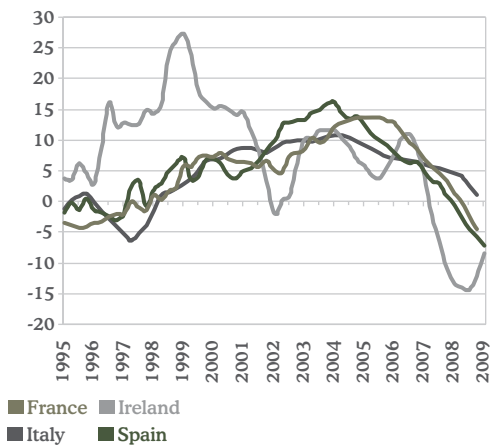
In Spain, the Government's recent measures have been important; these include eliminating tax deductions for buying property from 1 January 2011. This measure was demanded when the economy was expanding, as it generates distortions especially in real estate prices. The announcement that this deduction is to be abolished in the coming years could play an important role as a countercyclical measure. In addition, the package of measures implemented includes –for the first time- a certain degree of equality between the tax treatment of renting and buying. These measures seem to be heading in the right direction for rebalancing the rental market versus home ownership.. The rental market is a key element for absorbing the stock of unsold homes. In summary, these measures are headed in the right direction, although there is probably some scope for improvement in their design.

There are major opportunities in Latin American real estate markets

There has been a sustained growth in Latin American real estate markets over the last decade, although with differences between countries. This was largely due to the better macroeconomic environment, with inflation at historically low levels, stable economic growth rates and favorable funding conditions. Furthermore, housing markets benefited from the positive effects of monetary policies which were more focused on controlling inflation and stabilizing economies.

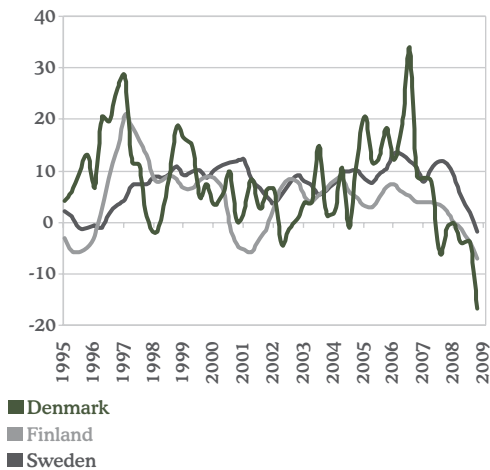
However, in comparison to advanced economies and other developing countries in Asia, the size of these markets is small, and there is still a high growth potential. Among the opportunities for the development of the mortgage market in the region, the most important, is the reduction in the high level of the informal economy that could permit to access to financial services a greater proportion of the population. Secondly, the reduction in volatility may have a limiting effect on the high costs of finance seen in the past. At this time, it is important that the greater risk aversion present in the market, would not act as a brake on this process. Finally, the development of new sources of funding, such as the securitization process which was beginning to be developed successfully in some countries before the crisis, could resume its activity once the crisis has been overcome.

Chart 1.
Real house price growth year-on-year



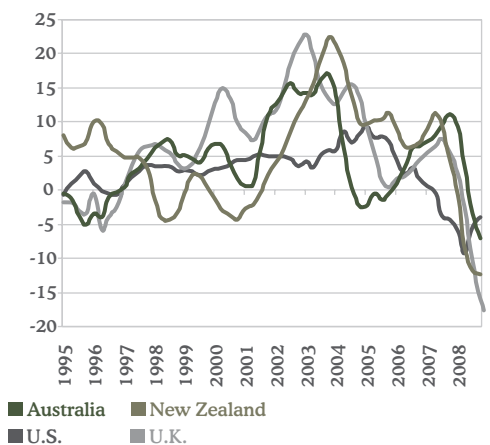
Sources: Datastream, national sources and BBVA ERD

Chart 2.
Real house price growth year-on-year



Sources: Datastream, national sources and BBVA ERD

Chart 3.
Real house price growth year-on-year



Sources: Datastream, national sources and BBVA ERD

1. International environment: synchronised falls in all advanced economies are continuing

Almost two years after the beginning of the international financial crisis, there have been significant reductions in prices and volumes in the real estate markets of nearly all developed economies, with major resizing of the sector in several of them. The first countries to record contractions in Europe were Denmark and Ireland, which started to report negative growth rates in nominal house prices in mid-2007. At the time of writing, all the countries in the Eurozone, with the exception of Germany, are experiencing reduced activity and real estate prices.

There are currently some similarities between countries, although over the longer term these will perform differently depending on the specific characteristics of the real estate sector in each country.

In this part we proceed to analyze the depth and the duration of the adjustment in the real estate markets of developed economies experienced so far. We identify the cases in which it is more probable that the resizing will be most drastic and long-lasting, and the extent to which improved levels of house affordability could help the recovery of the sector.

Adjustments in prices and volumes

In the final quarters of 2008, the contraction in house prices, which was initially only registered in the USA and some European countries (Ireland, the UK and Denmark), spread to nearly all developed countries (Charts 1, 2 and 3). In real terms, property prices have fallen by 15% in Anglo-Saxon countries and over 5% in continental countries. Furthermore, activity has begun to contract in nearly every country.

The scale and duration of the fall in house prices is still difficult to predict and depends on a range of economic and financial factors which vary significantly from country to country. One useful measurement is the comparison of price falls during previous cycles. As can be seen from Chart 4, house price contractions, during the latest cycle, have been exceptional, and in some countries, larger than the average seen in previous cycles. We can identify at least two groups of countries from the behavior of prices during the latest property cycle. The first group consists of countries where house prices have boomed before beginning of the adjustment (over 150% during the last upward trend), and where the adjustment during this stage of the cycle is also substantial. For example, this is the case in Ireland, where prices have fallen by 23% in real terms, the UK (-18%) and the USA (-13% according to the OFHEO or -37% if the Case-Shiller index is used). In the majority of the other countries, including Spain, the adjustment is deeper, but is still lower than that seen during previous real estate market cycles (Chart 4).

It should be noted that housing market cycles tend to be very long lasting. It has been observed that historically the average duration is of around four and a half years, and never less than two and a half years¹. The differing degrees of persistence seen in the housing price indices are due, in part, to the nature of housing as a product (highly heteroge-

¹ Refer to "Spain Real Estate Watch", July 2008.

neous, which is difficult to capture in an index, and with very illiquid) and to factors which vary from country to country and which are specific to each market.

In Anglo-Saxon countries, the adjustments seem to be more significant and this could be due, among other things, to the comparatively lower transaction costs compared to other European countries, which would encourage families to acquire a home at a time of falling prices. As can be seen from Table 1, the total transaction cost of a house sale is higher in continental Europe than in Anglo-Saxon countries².

It is difficult to identify precisely the size of the price adjustment as it has still not finished. We analyzed long-term variations from the probable equilibrium level in a previous issue of this review (July 2008). The observation of the index of house prices over household disposable income (Chart 7) shows that this indicator has grown above its long-term level during the latest property cycle and it only began to slowdown in Spain at the end of 2008. In theory, any lasting deviation in this indicator from its long-term level cannot be justified without the existence of a lasting shock. Therefore, despite the adjustments which have occurred to date, the imbalance would appear to require further price falls of between 20% and 50% depending on the country.

In terms of real estate activity, there are also major corrections taking place in all the countries in the sample. In order to analyze what has happened to date, we compared the adjustments during this cycle with those during previous property investment cycles. Chart 6 shows how the fall in the ratio of residential investment to GDP has not yet reached the levels of contraction seen during earlier adjustments. Nevertheless, it should also be highlighted that there are significant differences between countries, and there is more significant adjustment in those countries where the construction sector has greatest weight.

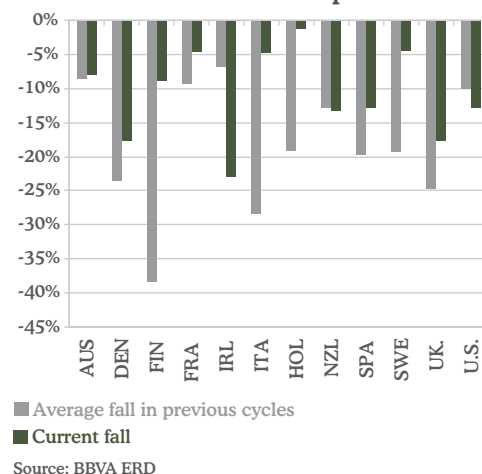
An analysis of quarterly data for Spain, Ireland, the UK and the USA shows that in the first two cases the rates of investment in residential property recorded extraordinary growth during the years when prices were rising strongly, reaching peaks of 14% and 7.5 % of GDP respectively. In the USA and UK, where there have also been sharp slowdowns in property prices, the ratio of housing investment to GDP stayed constant at around 5% even when prices were rising at their fastest pace.

A comparison of the current cycle with that of the early 90s reveals that the falls in the ratio of residential investment to GDP has a similar profile in different countries, and a level of depth and synchronization in the adjustment which is greater this time round (Charts 8 and 9). Whilst housing investment contracted in the quarters immediately after the change in the growth trend in the economy in both periods, we cannot see any slowdown in the contraction in residential investment in the figures so far available for the current cycle. In the case of Spain, the forecasts prepared by BBVA ERD show that investment will decrease perhaps beyond 2010 (Chart 9)- whereas in the USA it is possible to notice a pick up in activity at the end of the forecast period.

There are several reasons which can explain the greater contraction in investment in this economic cycle.

² Differences in legal systems between countries also amount for different transaction costs. Countries where the system is based on French commercial law (such as Spain, Italy, Belgium and Holland) tend to have higher costs that systems which are based on "Common law" (for example, USA, the UK and Ireland).

Chart 4.
Decreases in real house prices



Source: BBVA ERD

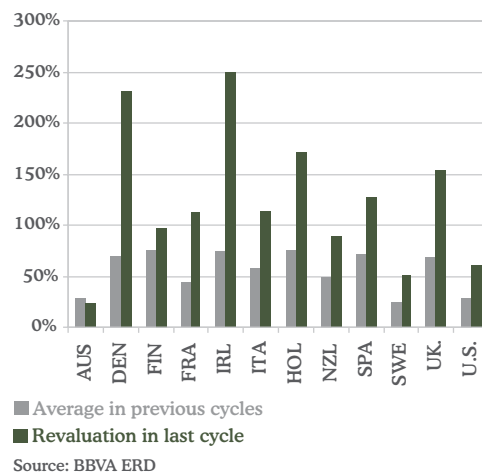
Table 1. Total transaction costs for a house

(% of value of property)

USA	9.1	Spain	12.2
UK	5.0	France	16.3
Ireland	7.0	Italy	17.0
Australia	5.9	Netherlands	11.0

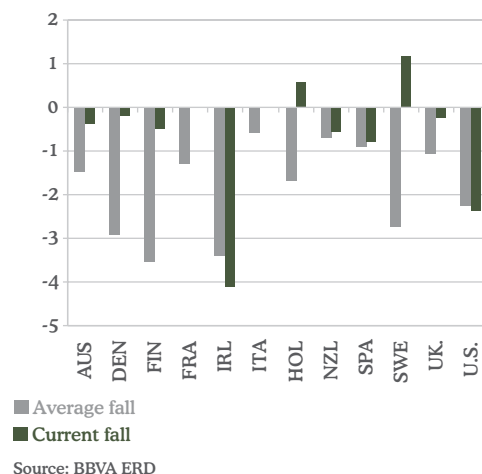
Source: Global Property Guide.

Chart 5.
Growth in real house prices



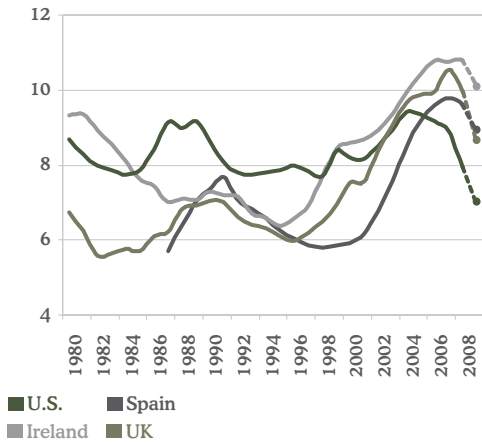
Source: BBVA ERD

Chart 6.
Cycles of decreases in residential investment as a % of GDP



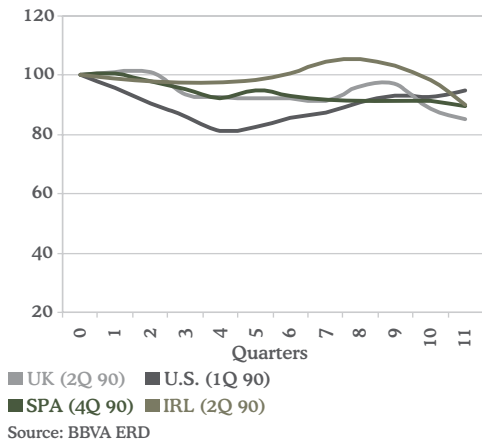
Source: BBVA ERD

Chart 7.
House prices/Disposable income *per capita*



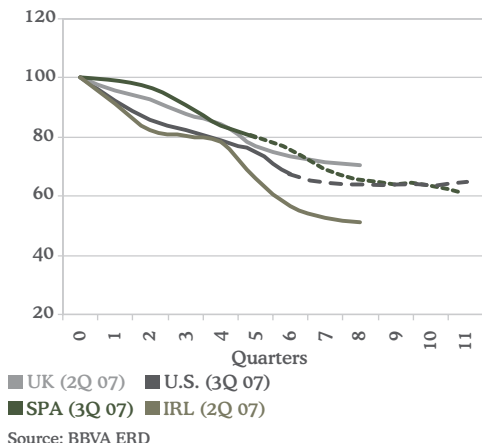
Source: BBVA ERD

Chart 8.
Changes in the rate of residential investment, early 1990s
(Base index 100 = GDP peak)



Source: BBVA ERD

Chart 9.
Changes in the rate of residential investment, current cycle
(Base index 100 = GDP peak)



Source: BBVA ERD

Firstly, the global economy, and developed countries in particular, is in a recession which will be both longer and more severe than in past cycles³. The slow recovery in economic growth and the destruction of jobs mean that household investment plans, particularly over the long horizon, are being postponed, in favour of higher saving rates.⁴

Secondly, the current crisis is also characterized by a significant contraction in credit. The latest Spanish Bank Lending Survey shows that in Spain, as in the rest of the Eurozone, the lending conditions for new loans became less favorable during the first quarter of 2009. Whilst tightness in global financial markets has slackened somewhat in recent months, the financial institutions still have limited access to capital markets, which is having a negative effect on the credit supply, particularly in the longer term. This scenario, together with the lower demand for credit and decisions by households to postpone their consumption of durable goods, represents a further obstacle to revive residential activity.

Finally, one factor which has supported the residential sector heavily in Spain has been investment from abroad. In the current economic environment, with a global crisis, it will be difficult for countries around us to contribute to a more rapid recovery of the sector.

In summary, real estate markets in advanced economies are adjusting at differing speed, and it will take some time before returning to a balanced condition.

Moreover, we should also take into account the role that might be played by the counter-cyclical measures implemented by authorities globally, in order to accelerate the recovery of their economies, particularly in the real estate sector (see point 3 of this review). Furthermore, housing demand may be partially reactivated by the improvement in its affordability which we are seeing both in Spain and in other countries.

Improved house affordability

The general adjustment in house prices and the fall in interest rates which have favored the development of the international financial crisis, will have a positive effect on future housing demand. An analysis of indicators of housing affordability internationally, show that households will have to make less effort to buy a home compared to the past.

The economic capacity to acquire a house may be measured in different ways. In general, the decision about which indicator to use is guided by the objective for which it is intended to be used. For example, repayment capacity indicators may be used by financial institutions as a way to evaluate the solvency of the person requesting the funding (for example, the Loan to Value –LTV- ratio is an indicator of this type); alternatively, an indicator which measures the economic effort required to purchase a house may be used (for example, the ratio of house price to household income). In this article we will use the second definition to evaluate how changes in price, interest rates and disposable income, will affect future homeownership demand in Spain and other countries.

³ For a comparison of the current economic cycle with past cycles in developed economies see WEO, Chapter 3, April 2009, IMF.

⁴ For an analysis of the impact of the housing cycle on savings rates see Consumption Watch, First Half 2009.

At present, there is no single formula to calculate affordability. This is due to the difficulty of summarizing the effort required to buy a house in one single number and the range of factors which need to be taken into account at the time of the house purchase. Furthermore, this indicator is limited in its capacity to measure the effort involved, as it does not take into account the savings required to make the initial deposit.

However, even with these limitations, several industrialized countries publish official indicators which measure this capacity, and which usually anticipate developments in the market⁵. These indicators are useful for evaluating the situation in each country, but they are not directly comparable with each other due to the different real estate and finance systems in each country (for example, different types of appraisal methods or tax systems). Besides, real estate is by its nature not tradable, and its value depends significantly on its location.

Of the various indicators of affordability which can be calculated, we will use the ratio between annual payments (including capital and interest) for a mortgage that finance 80% of the value of a medium-sized house over an average repayment period, and the gross disposable income of an average household (or median, depending on the data available for each country).

Chart 10 displays the results for the four countries we are interested in. As can be seen from the Chart, this indicator has performed in a similar way in all of the countries. In the three European countries analyzed, the level of affordability improved during the second half of the 90s, and began to increase again from 2001. In the USA the dynamics were similar to the European countries, but the levels were significantly lower than in the European cases. House affordability reached its lowest level in 1998, when it stood at just 23%, much lower than the lowest levels seen in Spain (29% in 1999), Ireland (42% in 1999) and the UK (29% in 2001). More recently, the levels of affordability for the sample deteriorated over the last decade, reaching 28% in the USA in 2006 and 50% in Spain in 2007 for example.

Lower interest rates and house prices are the main factors in improving affordability

There are three basic factors involved in any calculation of affordability: household disposable income; mortgage interest rates and house prices. There are also many other important factors, such as the tax system for real estate, size, etc, but we will focus on the first three in order to carry out an international comparison.

Charts 11 to 14 isolate the contributions of changes in the ratio of affordability during the latest cycle in order to identify which elements play the most important roles.

As a result, in the UK, the greater effort required to buy a house between 2001 and 2007 was due to the rapid increase in house prices. The forecast improvement in affordability is due mostly to lower interest rates and, secondly, to the correction in property prices. A similar trend is observed in Spain (Chart 14), where affordability has been deteriorating since the end of the 90s, mostly due to increasing house prices. In coming years, the significant cuts in mortgage interest rates should enable a significant improvement. In the case of the USA (Chart

⁵ For example, in Spain BBVA's weighted affordability indicator and the theoretic effort indicator published by the Bank of Spain. In USA, the National Association of Realtors' affordability index.

Chart 10. **Housing affordability share of gross salary**

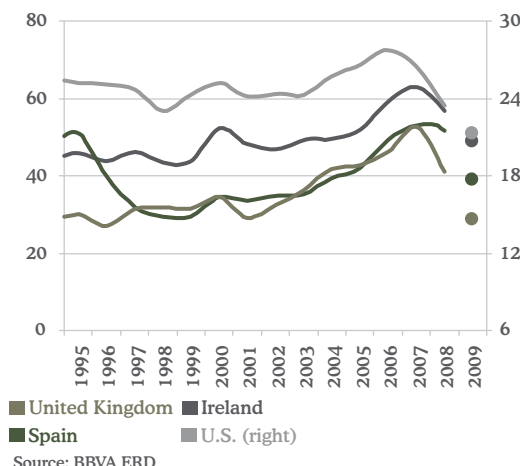


Chart 11. **UK: Factors which contribute to changes in affordability levels**

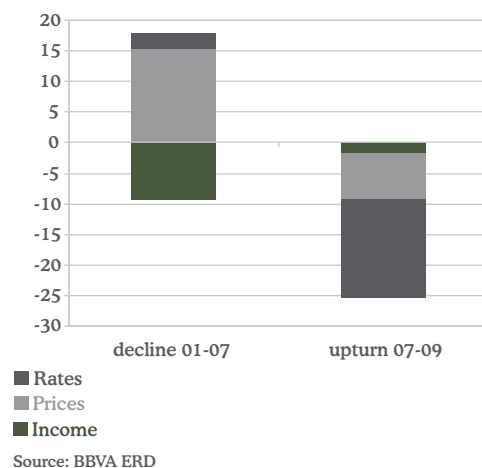


Chart 12. **Ireland: Factors which contribute to changes in affordability levels**

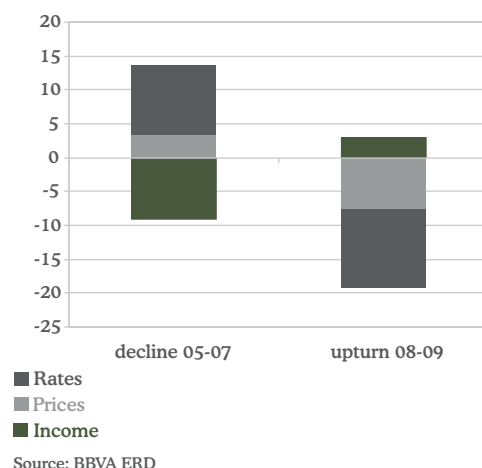
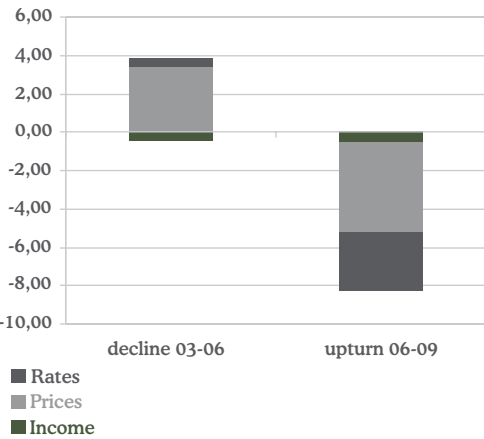
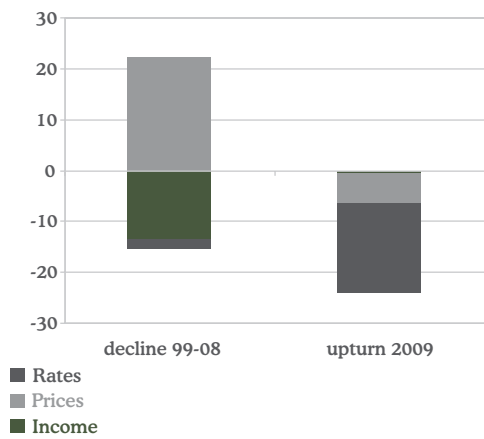


Chart 13.
USA: Factors which contribute to changes in affordability levels



Source: BBVA ERD

Chart 14.
Spain: Factors which contribute to changes in affordability levels



Source: BBVA ERD

13), the reduction in the effort required to purchase a house is due, above all, to lower real estate prices, but also to lower mortgage interest rates.

In conclusion, when house prices were rising rapidly, affordability deteriorated, despite improvements in disposable income and interest rates. When the effort required to purchase a house has been falling, this has been due to both the decrease in real estate prices and lower mortgage rates. If recent monetary policy actions promote an improvement in real estate affordability indices, then this would accelerate the recovery.

The extent to which better affordability conditions for housing is converted into actual purchases depends to a large degree on the future macroeconomic performance of each country; the confidence of home buyers; and the availability of credit. For example, increased concerns about the danger of losing a job could delay entry into the housing market for the most vulnerable purchasers.

Box 1: In search of stability in the US real estate market

In the longer term, real estate investment depends on the need for homes, but in the short-term it is more dependent on economic variables.

Over the longer term, the supply of homes tends to balance with demand. The latter basically depends on two factors: the formation of new households and renewal of the stock of obsolete housing. With regard to the former, between 1950 and 2008, the number of households in the USA increased at an annual rate of 1.4 million per year, whilst the construction of new homes was 1.6 million per year. In the last forty years, both the number of households and the number of homes have doubled, with the estimated totals¹ now being 118 million households and 130 homes.

In the short- and medium-term, residential construction, also, responds to changes in economic factors such as employment, interest rates, the availability of credit and expectations. The volatility of these factors means that in the short- and medium-term there may be imbalance between housing demand and supply. Both construction activity and real estate prices are directly affected by these imbalances.

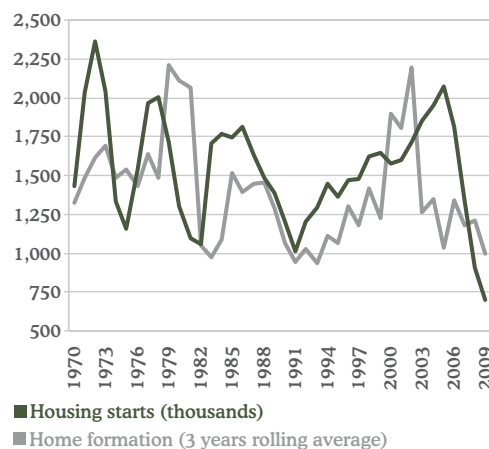
Since 1975 there have been three periods in which house building, and therefore residential investment, has fallen sharply. The first of these periods began in the 4th quarter of 1977 and ended 16 quarters later, in the 4th quarter of 1981, with a fall of 58%. The second period began in the 4th quarter of 1985 and ended in the 1st quarter of 1991, lasting 17 quarters, with a decline in house building of 53%. The third of these periods began in the 3rd quarter of 2005 and continues to the present; in the 14 quarters that this period has so far lasted, housing starts have fallen by 75%.

In the case of residential prices, there have also been three periods of readjustment since 1975, which coincide with the periods of falling house building detailed above. The first period lasted 14 quarters, from the 1st quarter of 1979 to the 3rd quarter of 1982, when the annual rate of house price growth slowed from 15.1% to 1.8%. The second period lasted 15 quarters from the 1st quarter of 1987, when prices were increasing at an annual rate of 7.6%, and ended in the 4th quarter of 1990, when house prices were almost static, with an annual increase of 0.6%. The last of these three periods started in the 2nd quarter of 2005 and continues to the present; during this period house prices have changed from a year-on-year rate of 12.1% to a decline of 4.5% in the 4th quarter of 2008, according to OFHEO figures² (the price index prepared by Standard & Poors recorded a high of 15.1% in the 2nd quarter of 2005 and a year-on-year fall of 17.4% in the 4th quarter of 2008).

¹ Total population (305.4 million in 2008) divided by average household size (2.6 members).

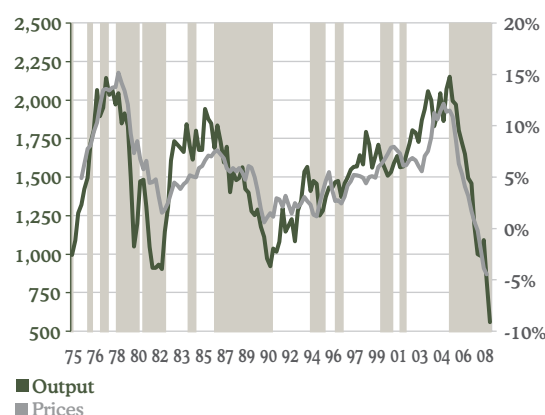
²OFHEO: Office of Federal Housing Enterprise Oversight.

Chart 1.
USA household formation and home starts



Source: Census and BBVA ERD

Chart 2.
USA Housing: production and prices
(In thousands of units and % annual change %)



Source: Census, OFHEO and BEA

Note: The shaded area represents falls in residential investment

Table 1.
USA. Periods of housing adjustment, 1975-2008
Production and prices

	Period 1	Period 2	Period 3
Production			
Max quarter	4Q77	4Q85	3Q05
Min quarter	4Q81	1Q91	4Q08
Number of quarters	16	17	14
Max homes (thousand)	2,142	1,942	2,151
Min homes (thousand)	910	921	558
Difference	1,232	1,021	1,593
% fall	-58%	-53%	-74%
Prices			
Max quarter	1Q79	1Q87	2Q05
Min quarter	3Q82	4Q90	4Q08
Number of quarters	14	15	14
Max variation (OFHEO)	15.1%	7.6%	12.1%
Min variation (OFHEO)	1.5%	0.6%	-4.5%
Difference (OFHEO)	13.6%	7.0%	16.6%
Max variation (S&P)		8.0%	15.6%
Min variation (S&P)		-1.0%	-17.4%
Difference (S&P)		9.0%	33.0%

Source: Census, OFHEO, S&P and BBVA ERD

However, the first positive signs are now appearing on the horizon, suggesting that 2009 may be the year in which the market bottoms out.

In the current cycle, high house prices and the toughening of mortgage finance conditions in 2005 resulted in a sharp deterioration in housing affordability, which fed through into an accelerating decrease in sales from the start of 2006. Faced with this fall in sales, developers reduced production as prices started to adjust. This downward trend in sales and production have continued till present. In 2008, sales fell to almost 5.4 million units, almost 3 million fewer than in 2005, whilst the production of new homes was slightly below 870,000 units, almost 60% below the production level in 2005.

Unlike previous cycles, a large inventory of housing for sale has accumulated during the current cycle: between 2002 and 2005, housing production was basically driven by high prices rather than demographic reasons and greatly exceeded the number of new households formed. As a result of this overproduction, between 2005 and mid-2008, the stock of housing on sale doubled to reach a historic high of five million units, the equivalent of one year of sales at the rate recorded in 2008.

The first positive sign: a significant decrease in the stock of housing for sale from mid-2008. Despite the general fall in sales, the stock of houses for sale fell by 20% in the second half of 2008. This was due to lower production of new homes, the high number of properties repossessed and sold at public auction and some properties moving from the sale to the rental market.

The second positive sign: current production of new homes is well below the number of households being formed. At the end of 2008, production of homes stood at around half a million per year, which is well below the number of new homes formed, which has averaged 1.2 million per year over this decade. If this trend in construction continues, the excess supply will disappear once the rate of sales picks up.

The third positive sign: the major improvement in housing affordability. Throughout 2008, the adjustment in house prices and falling interest rates resulted in housing affordability improving substantially until, at the end of the year, it reached the highest levels since the indicator was launched. Despite this, the supply of mortgage loans has tightened considerably, suggesting that the improvement seen in financial factors will not be translated into an increase in demand for housing until conditions improve in financial markets.

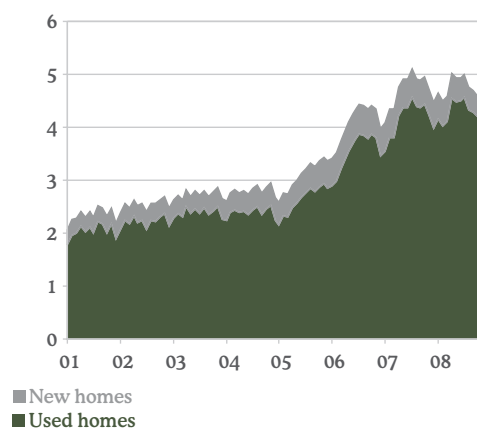
The improved affordability of housing has resulted from decreases in residential prices and, to a lesser extent, in-

Chart 3.
Housing affordability in the USA
Share of household income



Source: BBVA ERD

Chart 4.
Stock of homes for sale in the USA.
Million units



Source: NAR and Census

creases in household income and lower interest rates (see previous section).

However, weakness in the labor market and continuing financing difficulties will limit in residential demand growth in 2009. The forecasts of BBVA ERD indicate a lower volume of sales, which will fall to around 4 million homes, and new home starts, which we estimate will amount to 720,000 units in mid-2009. The recovery of the residential sector will be slower than in previous occasions, due to the large stock of homes already for sale. This is a characteristic shared by the Spanish real estate market.

In general terms, housing investment requires a long-term vision, and is strongly linked to the expectations of those involved. Historically, recovery in construction of new homes has been closely linked to consumer expectations, which are currently at very low levels. As consumer confidence is related to the labor market, we would expect expectations to improve when jobs stop being destroyed.

However, there are some significant supports for the US real estate market over the longer term. Furthermore, some positive signs are starting to appear for the economy in the short-term, and this could mean that the market will bottom out this year.

Chart 5.
USA mortgages

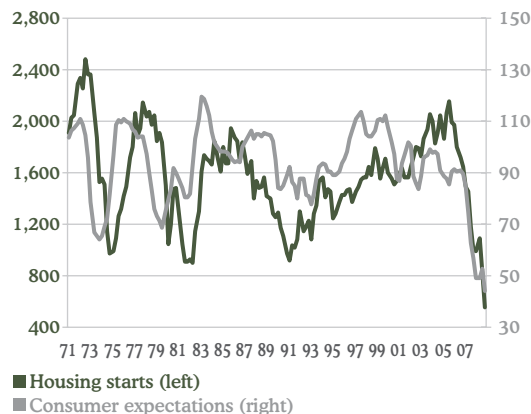
(% of institutions tightening finance terms)



Source: Federal Reserve

Chart 6.
Housing starts and consumer expectations in the USA.

(in thousands and index numbers)



Source: Census

Chart 1.
Spain: Housing supply and demand
rolling average 4 quarters, 2000 = 100

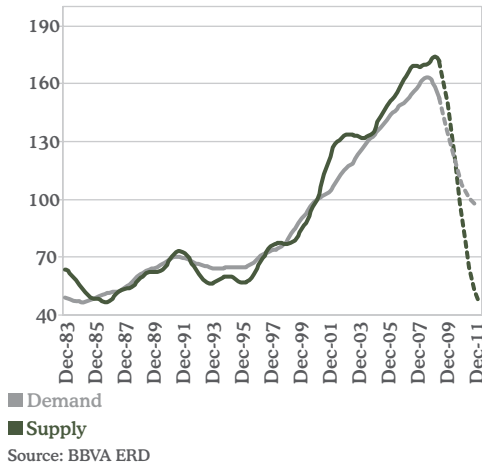


Chart 2.
Spain: Investment in residential property forecasts
Total y-o-y growth, rolling average 4 quarters

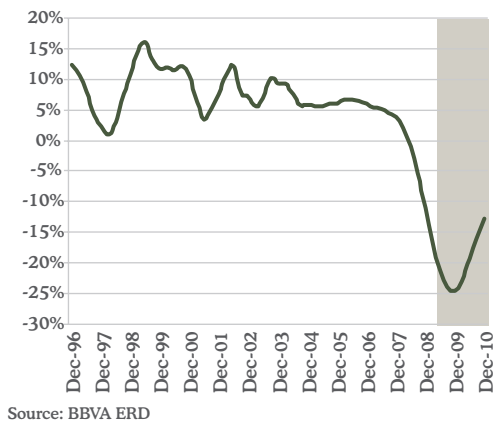
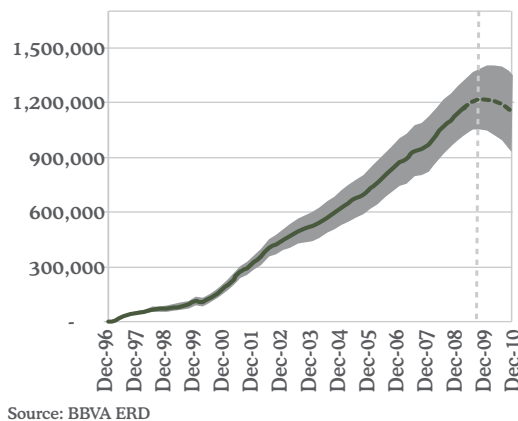


Chart 3.
Spain: Estimate of new housing over-supply, forecasts



2. The adjustment in the Spanish real estate market will take some time

2.1. The oversupply in the sector is continuing to accumulate

Following our analysis of changes in the property cycle internationally, in this chapter we will look at the property sector in Spain during the last quarter in greater detail. Unlike most other European real estate markets, in Spain the stabilization of the sector is characterized by a major imbalance in activity rather than in prices.

The imbalances described in the previous edition of this review are still important, and developments in the macroeconomic environment are not helping to speed up the adjustment. In terms of activity, the latest data available show that housing demand is continuing to contract sharply. Figures relating to house sales published by the National Institute of Statistics (INE) show that during the first quarter of 2009 a little over 34,000 homes were sold, 34% less than in the first quarter of 2008 and 54% less compared to 2007.

The increased rate of contraction in demand is contributing to the accumulation of housing in the market. According to our forecasts, this will start to slow down from the first quarter of 2010, and will reach the levels seen during 2005 at the end of 2012. However, these trends are based on factors which are difficult to predict. It is reasonable to expect that there is a certain level of stock in the market which is unsold for *“frictional” reasons* which could be maintained during a time of market stability because the number of homes on sale does not match demand. The lack of long and detailed series of data on housing stock and distribution (division into empty and occupied) makes it difficult to develop these estimates and establish the level of *“frictional” stock precisely*.

During the current phase of the housing cycle, this excess supply makes the adjustment difficult, and we therefore expect residential construction to remain at very low levels. The most recent figures published by the Ministry of Public Works show that in March 2009 only 11,234 construction permits were issued, which means that the contraction in the first quarter of 2009 would be -64% on a year-on-year basis. Although these figures represent an improvement on January and February in month-on-month terms, our forecasts remain conservative and we estimate that during 2009 and 2010 construction of around 150,000 homes will be approved each year (Chart 4).

In addition, the excess supply of housing in the market, which will not fall much over the coming months, and expectations of lower prices, are continuing to exert downward pressure on prices. In the first quarter of 2009 prices per square meter for homes in Spain returned to the levels of 2006, with negative growth of 6.8%. This contraction affects both new (-6.5%) and used accommodation (-6.9%). The accumulated devaluation, in real terms, since the peak at the end of 2007, amounts to -13%. We expect this downward trend to continue (Chart 5). There is a more rapid adjustment proc-

ess than expected and this could help to accelerate absorption of excess supply in the market. Furthermore, recent Government measures eliminating tax deductions for house purchases from 1 January 2011 may affect the adjustment in prices, and moderate their decline over the coming 19 months¹.

Overall, the forecasts point to a fall of around 10% in house prices in 2009, with a further 12% fall in 2010. In total, the accumulated fall from the peak is expected to be around 30%.

The improvement in affordability and the countercyclical measures may limit the fall in domestic demand

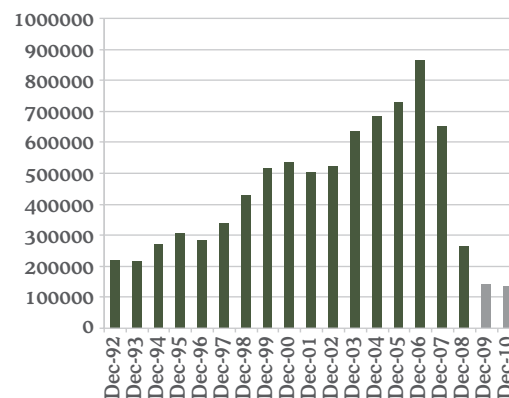
Some factors, such as the reductions in the ECB policy rate, the reduction in inflation and some public sector measures may help to contribute to increasing the disposable income of households. As a result, housing will become more affordable, and this, together with the house prices falls, will increase affordability and speed up the absorption of the excess housing supply.

It has been calculated that in Spain mortgage rates will be the main factor contributing to improving the affordability of housing (see point 1 in this review). Nevertheless, the transformation of potential demand into effective purchases is still uncertain, particularly in the short-term. Confidence levels are improving, but access to credit is still tightening, and the recession is making people put off long-term investment decisions, such as investing in property.

Moreover, the latest housing policies, on top of stimulating current purchases (by announcing that tax deductions for mortgage payments will be discontinued in the future), aim to promote the development of the rental market in order to offset the imbalance between the different patterns of housing tenure. Against the current economic background, the stimulus to the rental market will be very positive, not only because of its ability to absorb some of the excess supply, but also because this could soften the process of creating and destroying employment, as shown in the following section.

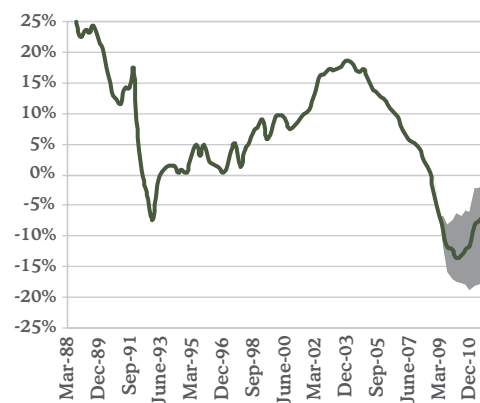
⁰¹For further details of the effects of this measure, see point 3 of this review.

Chart 4.
Spain: New building permits



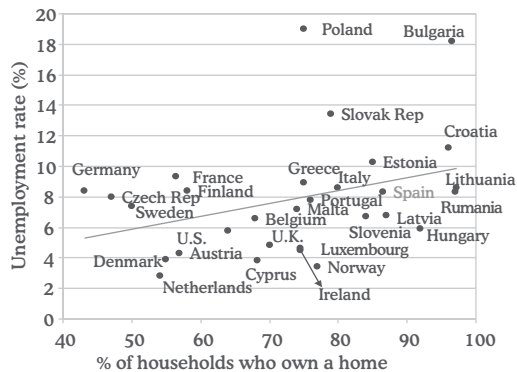
Source: Ministry of Public Works; BBVA ERD

Chart 5.
Spain: Nominal house price forecasts (year-on-year growth rate)



Source: BBVA ERD

Chart 6.
Unemployment rate vs percentage of households which own a home.
(Several years)



Source: European Mortgage Federation, Eurostat and BBVA ERD
 2000: Switzerland and Turkey
 2001: Belgium, Czech Republic, Cyprus and Norway
 2002: Bulgaria, Germany, Estonia, Italy, Holland, Rumania and Serbia
 2003: Hungary, Austria, Slovenia and Russia
 2004: France and Poland
 2005: Lithuania, Luxembourg, Malta, Finland, Sweden and the UK
 2006: Denmark, Greece, Ireland, Latvia, Portugal, Slovakia and Croatia
 2007: Spain
 2008: USA

2.2. Employment and property ownership system: is there a two-way relationship?

The persistence of financial tensions in the international environment intensified the deterioration in global economic activity throughout 2008 and the first quarter of 2009. In Spain, the adjustment in the economy has been aggravated by resizing in the real estate sector, particularly with regard to property investment. The reduction in economic activity favoured by both factors –the persistence of financial tensions and property sector adjustment- have had a negative impact on the labor market, resulting in relevant job destruction of employment which, together with the dynamism shown in the working age population, has resulted in the unemployment rate increasing 7.7 percentage points (pp) in the last year to 17.4% of those active in the first quarter of the year.

In addition to the direct relationship between adjustments in the property market and the deterioration in the labour market, there may be an indirect relationship resulting from the connection between someone's housing tenure (ownership or rental) and their employment situation. Three works publishes by A. Oswald in the late-90s suggested that international (and interregional) differences in unemployment rates may be explained by differences in the housing tenure. Using figures for some OECD countries (and regional figures for the USA, Italy, France, Sweden and Switzerland), Oswald found a positive correlation between the percentage of homeowners and unemployment, both between countries and between regions in the same country¹.

In the case of Spain, it is relevant to see whether there is a relationship between the rate of homeownership and the unemployment rate, not only because these figures are both relatively high compared to other EU-15 Member States -as can be seen from Chart 6- but also because of the implications that this could have for housing policy. In this regard, we should note that one of the causes of the increase in homeownership was the differential tax treatment given to mortgage payments rather than rent. In fact there has been no general aid to renting in Spain since 1998.

Therefore, the objective of this section is to analyze the relationship between an individual's housing tenure and their employment situation from a microeconomic point of view using data from the Household Budget Survey (Encuesta de Presupuestos Familiares - EPF) for 2006. Results show that the demographic shock experienced by Spain, the intense process of employment creation and the development of the mortgage market since the mid-1990s have contributed to the relationship between the rate of homeownership and unemployment being markedly negative. When the remaining variables affecting an individual's employment situation and/or housing situation are taken into account, it is found that being a homeowner has a positive and significant effect on the probability of being in employment. This result is explained by the greter relative importance of owner-occupiers who have mortagge loan: the cost of losing job for mortgaged homeowners –who as a result would probably not be able to meet their repayment commitments-increases their commitment to the labor market and, as a result, their likelihood of remaining in work.

¹ The results -which are not conditional on other explanatory variables- indicate that a 10 pp increase in the percentage of homeowners translates into an increase in the unemployment rate of 2 pp. Furthermore, an increase of 10 pp in the weight of property rental increases the proportion of men in work by 4 pp. See Oswald (1996, 1997, 1999).

As the probability of being a homeowner is positively dependent on the individual being in work, deterioration in employment may result in a decrease in the proportion of homeownership. In aggregate terms, this trend may decrease the cost of losing a job, which would reduce the probability of employment. This back-feeding between the adjustment in the labor market and the housing market might have been offset if measures had been implemented to promote rental instead of homeownership.

Links between the housing and labor markets

Bover *et al* (1989) and Oswald (1996, 1997, 1999) identify at least six channels through which having a home ownership might have a (negative) effect on their employment situation and, therefore, on the macroeconomic aspects of the labor market:

- Owning a house may reduce labor mobility, due, among other reasons to transaction costs associated with selling a home. If this were the case, the vulnerability of homeowners to deterioration in the economic situation in their region would be greater.
- If owning a home reduces mobility, the likelihood of inefficient worker-company job matching is comparatively high, resulting in lower productivity, lower salaries and higher unit labor costs.
- A lower percentage of homes for rental in a dynamic market (or geographic region) may act as a brake on geographic mobility for unemployed people from other areas who would not move to the region because of the difficulty of finding a home.
- Disincentives to being active in the labor market resulting from the wealth effect. When house prices rise, the housing wealth of homeowners increases; this may reduce the opportunity cost of leisure and therefore decrease the incentive to be active in the labor market and employment.
- Disincentive to company creation. In those regions where homeowners predominate, there could be less company creation due to the median voter -*i. e.* the homeowner- could reject certain types of business being established close to where they live² and this would result in less employment creation in the region.
- Assuming that the time taken by homeowners to get to work is greater than that for employees who rent (Chart 7), congestion problems may arise which increase the opportunity cost of employment³.

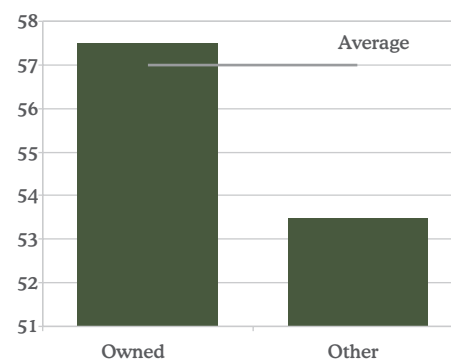
However, the relationship between an individual's housing situation and labor market situation works in both directions. The probability of someone in work buying their home is higher because employment increases their permanent income, encouraging the acquisition of durable goods, including housing. This income effect is intensified by the greater ease with which people in employment can obtain finance (Chart 8).

² When these businesses have negative externalities which could affect house prices.

³ The disincentive caused by the higher cost of job opportunity when the commuting time to the workplace increases is qualitatively equal to that derived from the defined unemployment benefit.

Chart 7.

Spain. Effect of home-owning status on commuting time to the workplace



Two individuals differentiated only by the home-owning status
Source: BBVA ERD based on NIS (Time use survey, 2002-03).

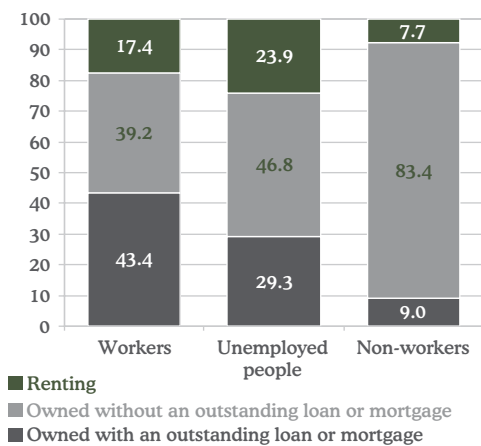
Chart 8.

Spain. Distribution of individuals with residential mortgage loans by job status



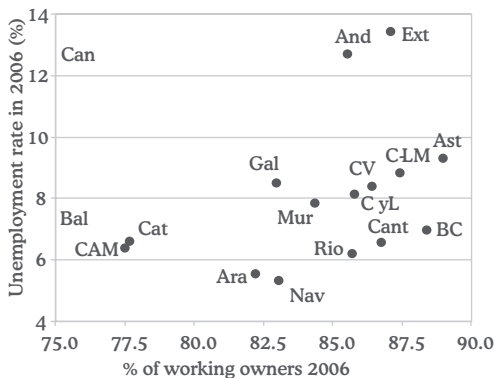
Source: BBVA ERD based on the Household Financial Survey 2005

Chart 9. Spain. Real estate tenure system by main bread winner's employment situation



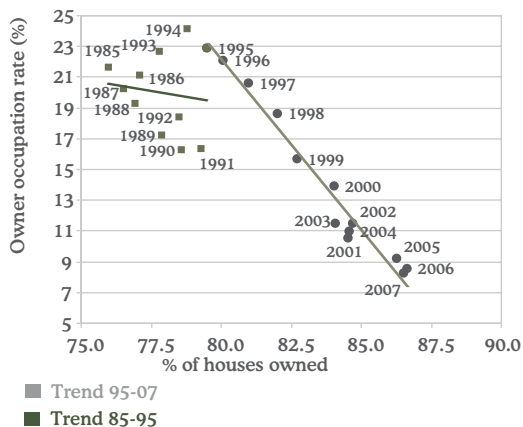
Source: National Institute of Statistics and BBVA ERD

Chart 10. Spain. Employment and home tenure pattern (Active individuals whose main home is purchased or rented)



Source: National Institute of Statistics and BBVA ERD

Chart 11. Spain. Unemployment rate vs percentage of households who own a home. 1985-2007



Source: National Institute of Statistics, Ministry of Housing and BBVA ERD

The economic literature does not shed clear light on the relationship between the housing tenure and labour market performance.

Following the publication of Oswald's works, many authors have analyzed the relationship between the housing tenure and various aspects of the labor market⁴: the unemployment rate (and how it changes), the probability of employment/unemployment, the time an individual remains in employment/unemployment, salaries (and how they change), geographic and employment mobility, etc. The results of these studies are not conclusive and depend on the country analyzed, the sample period, the sub-group of the population analyzed and the methodology used.

In the case of Spain, Barrio and Rodríguez (2004) studied the relationship between the unemployment rate and the percentage of homeownership at the regional level using data from the 1991 census. They found a negative, two-way effect between the two variables which is explained by the existence of positive externalities associated with homeownership and the influence of an extensively developed mortgage market. However, Barceló (2006) –using micro-data from the European Community Household Panel for Germany, France, Italy, the UK and Spain between 1994 and 1998- found that homeownership had a negative effect on the geographic mobility of the unemployed.

The descriptive evidence indicates that in Spain the unconditioned relationship between the percentage of homeownership and the unemployment rate is negative.

As empirical evidence for Spain is limited, this article aims to contribute to knowledge on the relationship between the employment situation of each individual and the ownership of their main home. Data from the Household Budget Survey (EPF) for 2006 has been used in this article.⁵

The results of the descriptive analysis show that while the percentage of unemployed homeowners is 3.2 times higher than the percentage of unemployed people renting their home, the weight of homeownership is greater amongst those in work (82.6%) than for the unemployed (76.1%) (Chart 9).⁶

If the relationship between the two is studied by Autonomous Community no clear result is obtained, as while some regions which have comparatively high homeownership rates have significant unemployment rate – such as Andalusia and Extremadura- others have comparatively low unemployment rates –such as Cantabria and the Basque Country, among others (Chart 10).

In addition, the performance over time of the relationship between homeownership and the unemployment rate for Spain as a whole is not consistent with the hypothesis suggested by Oswald. The results indicate that the correlation is both negative and significant (Chart 11), especially since the 90s, due to the size of the demographic shock experienced by the Spanish economy and the intense job creation process (Chart 12).⁷

⁴ See van Ewijk y van Leuvensteijn (2009) y Garcia (2009) for a detailed review of the economic literature that studies the relationship between patterns of housing tenure and job market behavior.

⁵ Although the results of the EPF of 2007 were public from the end of 2008, the anonymized microdata are not yet available.

⁶ Given the purpose of the article, both inactive individuals and those residing in free housing are excluded from the analysis. In the first case, the large percentage of inactive home owners would distort the results of the analysis. In the second case, the availability of free housing does not depend on the characteristics of the home.

⁷ In addition, there is no positive relationship when the first derivative of both variables is compared. Chart 8 indicates the changes in home owner weightings that are inversely related to changes in the unemployment rate.

... and will continue being so, when the other determinants of the probability of being employed and being a homeowner are taken into account...

While the descriptive evidence suggests that the relationship at the aggregate level between the rate of homeownership and the unemployment rate in Spain is negative, it could be that this is a spurious relationship -or the sign may even be the opposite- depending on the role played by other variables. For example, if the probability of being in employment increases with the number of members in a household -due to the higher cost of losing employment- whilst the probability of owning a home decreases -due to the need to acquire a larger property which is less affordable- the negative relationship between real estate and employment would not be casual, but would be determined by the size of the household.

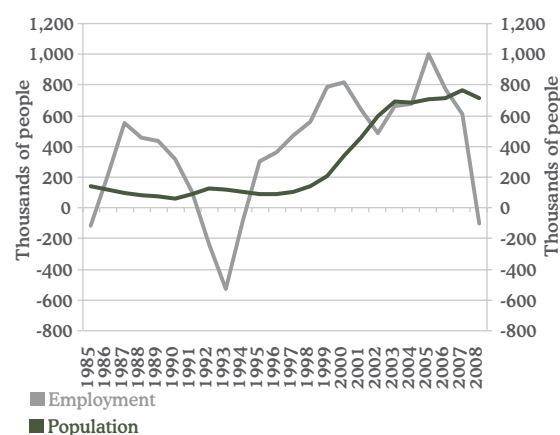
Therefore, in order to isolate the effect of each variable on the probability of owning a home (or renting) and being employed (or unemployed), a two-way discrete choice model has been estimated⁸ in which the employment situation of each individual depends on the homeownership regime and vice versa, and on the characteristics of the place of residence, the size and composition of the household, the nature of the main income earner, the characteristics of the home and the size and composition of household expenses and income.

The results of the estimation show that the effect of owning a home on the probability of being employed is positive and statistically significant. When the probability that two individuals who are only differentiated by whether they own their home or not is calculated, the homeowner has a 3.3 pp higher probability of being in employment than the person who is renting (Chart 14). The cause of this effect – in addition to the potential existence of positive externalities from homeownership on the employment probability of employment- is the greater cost of losing employment on homeowners with mortgages. The fact that 53.1% of homeowners in work have a mortgage implies that the negative effect which homeownership might have on geographic and employment mobility is more than offset by the positive effect of “greater commitment” to the labor market among homeowners (Chart 15).

In the same way, the conditioned probability of owning a home depends positively on the main income earner of the household being in work, although the size of the effect is reduced. As a result, the probability that an individual in work would own a home is only 1.6 pp greater than a person who is unemployed but he has other characteristics similar to those of worker (Chart 16). Therefore, in addition to the permanent income effect resulting from being in work, there are other factors which determine the probability of homeownership, such as the characteristics of the place of residence (Autonomous Community, provincial capital, population density, etc.), the size and composition of the household, the personal characteristics of the main income earner (age, nationality, ...), etc.

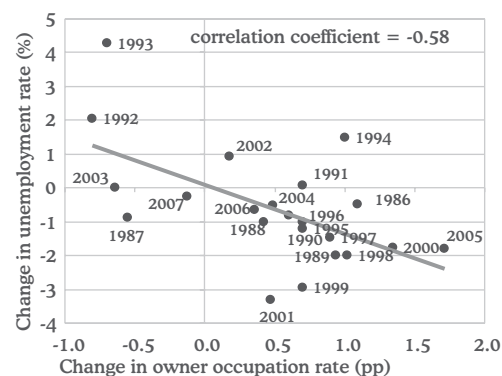
⁸ In line with Heckman (1978) and Maddala (1983), the estimation of the simultaneous equations model must be done in two stages. In the first stage, the equations of the structural model are set out in their reduced form in order to obtain consistent estimations the coefficients; in the second stage, the endogenous variables on the right of the structural model are substituted by their predicted values from the previous stage and the structural coefficients are estimated according to maximum likelihood. Given that the estimators obtained in the second stage are non-biased but inconsistent, the standard errors of the coefficients of the structural model require correction. See García (2009) for a detailed description of the model used and the results obtained.

Chart 12. Spain. Demographic growth and job creation (Annual variation in thousands of people)



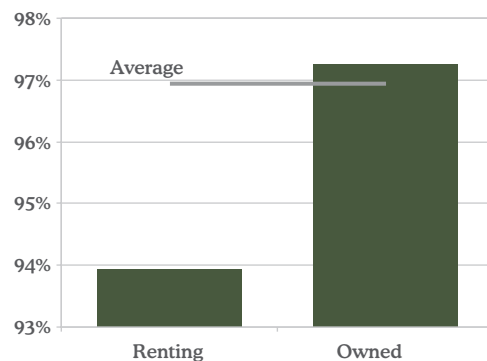
Source: AMECO, National Institute of Statistics and BBVA ERD

Chart 13. Spain. Change in the unemployment rate vs change in the percentage of households who own a home. 1985-2007



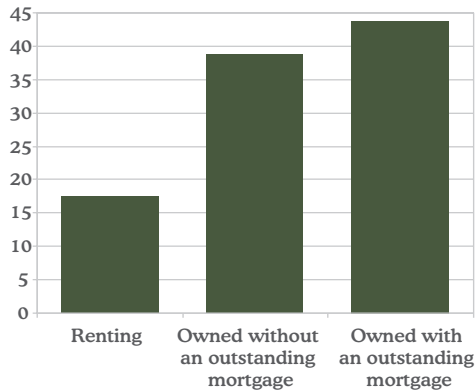
Source: National Institute of Statistics, Ministry of Housing and BBVA ERD

Chart 14. Spain. Predicted probability that the average individual is employed by his or her pattern of housing tenure



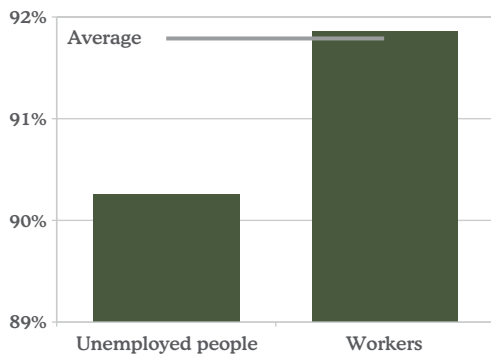
Source: BBVA ERD

Chart 15.
Spain. Percentage of employed persons according to their home tenure pattern



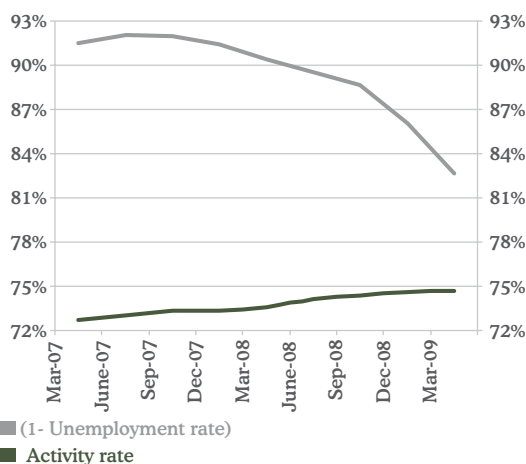
Source: BBVA ERD

Chart 16.
Predicted probability that the average individual wins a property by his or her employment situation



Source: BBVA ERD

Chart 17.
Spain. Activity and employment rates



Source: National Institute of Statistics and BBVA ERD

..., which during times of recession like the current one may translate into a greater than predicted reduction in the acquisition of real estate.

Given the results of the model, what would the consequences of a reduction in economic activity be on the composition of tenure housing?

The current deterioration in the Spanish economy reduces employment probabilities (Chart 17). This, together with the slowdown in the growth of credit, makes it difficult to acquire a home. In aggregate terms, the decrease in the proportion of households which own their homes will reduce the cost of losing employment and, as a result, will limit the incentives for workers to remain in employment⁹ and reduce incentives to search for employment, both for the unemployed and the economically inactive, which in turn will further reduce the proportion of homeownership.

The decrease in the probability of being employed and/or finding employment may be aggravated by a fall in house prices. Therefore, a reduction in house prices may result in the value of mortgage debt –or rather, the price paid for the home- exceeding the real value of the property (negative equity). This would have an adverse effect on the mobility of homeowners¹⁰ which could reduce the probability of employment.

Renting as a way of smoothing out the cycle

As a result, given the back-feeding of the cross-effects between employment and homeownership, the accumulated decrease in the weight of homeownership in Spain could be greater than that resulting only from the contraction in the permanent income of households. Therefore, the cyclical effect on property prices and the destruction of employment could have been lessened if measures had been employed before the current crisis to promote renting rather than buying.

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⁹ Note that the effect is uncertain, given that the lower incentive to remain in the job due the lower relative importance of the property could be more than compensated for by an increased commitment with the job market of employed persons caused by the increased risk of losing their jobs.

¹⁰ Henley (1998) shows that the existence of *negative equity* significantly decreases residential mobility in the United Kingdom, causing lack of reaction of home owners to a negative impact in their working conditions.

Box 2: Changes in rental prices

The slow down of the Spanish economy has shown that the rental market can play a significant role in reactivating the real estate market. In this setting, one of the variables that is of increasing interest is the price of home rentals.

The progression of home rental prices in Spain began to show a downtrend at the end of 2007, and differences between Autonomous Communities. Thus, if we compare the y-o-y growth rate of the national total with the rest of the Communities, the trend changes significantly (Chart 1). In only 10 of the 18 Autonomous Communities (Ceuta and Melilla are not included because of lack of information) rental prices have fallen.

Asturias and the Balearic Islands, are the Aut. Com. with the highest price increases (11.4% and 6.3% respectively). At the other extreme are Extremadura (-15.7%) and the Basque Country (-12.8%). In national terms, the trend is falling prices. On average, the price for home rental in 2008 fell 0.6% in Spain during 2008 versus an average increase of 7.6% in 2007.

The analysis of the progress of rental prices is limited by the lack of official information sources. The Public Rental Association has published the rental prices per square meter since 2005. However, the use of this information is heavily restricted by both their recent nature and the small sample included, which limits its representation of the whole.

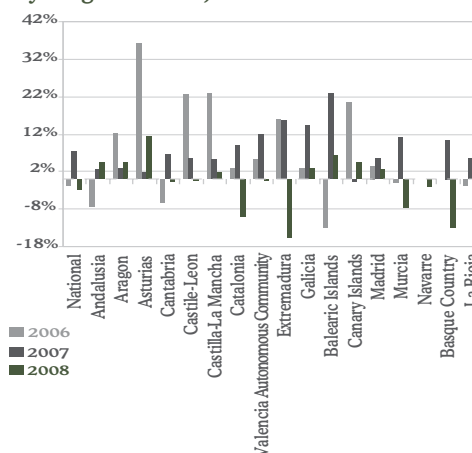
On the other hand, we could use the component of rental prices contained in the Consumer Price Index (CPI) published by the NIS, which dates from further back and can be divided by Aut.Com. The main limitation of this index is that the methodology used to calculate the results is not as clear and the source of the component we are interested in is not known.

One indicator which would be interesting to analyze in order to observe the evolution of rental prices is the homes-to-rent affordability index. This is calculated based on the quotient between the cost of rent for one year (calculated on the basis of the rental costs involved in gross profitability per rent published by the Bank of Spain) and family earnings. As shown in Chart 3, there has been a slowing trend since 2003 which demonstrates that the home-to-rent affordability index has fallen, and therefore the financial effort to live in rented homes has decreased.

The price of home rentals will continue to fall

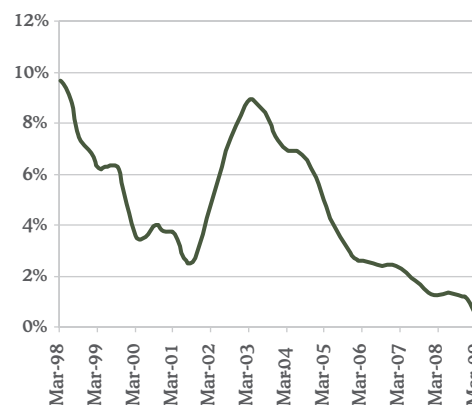
In the current period of crisis, the rental option has important advantages versus purchasing a home, which could increase its weight in the Spanish market in the coming quarters. When analyzing the factors involved in renting, we should distinguish between those associated with the de-

Chart 1.
Changes in rental prices
(Year-on-year growth rate)



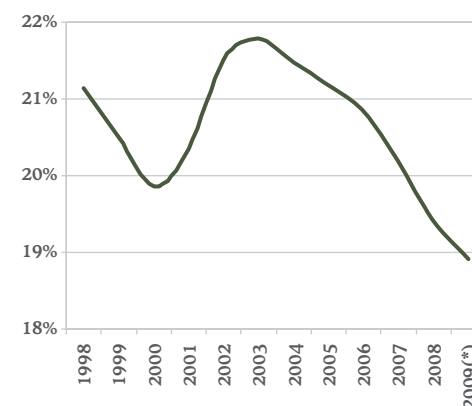
Source: Ministry of Housing.

Chart 2.
Year-on-year growth rate in rental prices



Source: BBVA ERD based on Bank of Spain

Chart 3.
Affordability of Rented Housing
Rent/family income (%)



(*) Data up to March
Source: BBVA ERD

should distinguish between those associated with the demand and those associated with the supply.

Regarding demand, economic uncertainty has a negative effect on the confidence of consumers, who may prefer renting a home instead of taking on long-term debt. Credit restrictions, uncertainty as to Spanish family income and the high unemployment rate could push households to delay their decision to purchase a home.

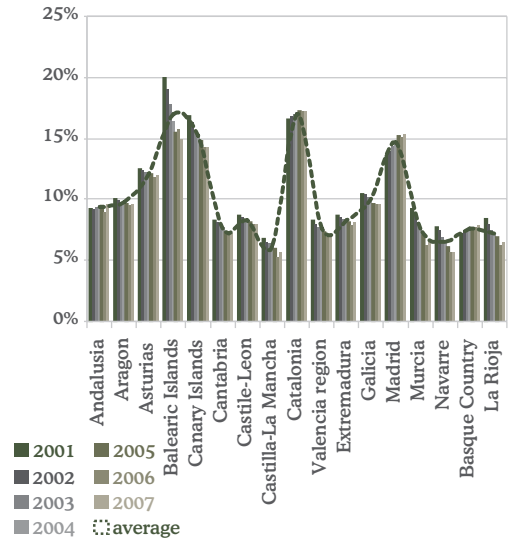
Concerning supply, the excess supply of homes could be converted to rental properties thus increasing the number of properties offered for rent, driving prices down.

Chart 4 shows that the percentage of homes in the rental market in comparison with the total homes continues to be low and lower than the European average, where it accounts for 30%. Although the importance of this market is still relatively limited, in recent years its significance has increased. In fact, in 2007 the ratio of rented homes was 9.7% versus 9.6% in 2006.

Apart from these factors, the role of the legal framework affecting the rented homes market must be taken into consideration. Recently, a Plan to Promote Home Rental has been developed by the Ministry of Housing (see Table 3 in this issue). One of the objectives is to encourage an increase in the supply of rental homes and to improve guarantees for

home owners and tenants. To do so, an attempt is made to increase the security and confidence of home owners (e.g., by making evictions less burdensome), supporting business initiatives in the construction sector (via construction of homes for rent or reconversion of homes for sale), and promoting emancipation and mobility of young people.

Chart 4.
Rented dwellings as percentage of total



Source: Ministry of Housing

Box 3: Profile of a home buyer based on the Household Financial Survey (2002-2005)

This article analyzes the results recently published by the Bank of Spain regarding the Household Finance Survey (FFS) for 2005¹. Here we will present the results obtained from the comparative analysis of the two waves of the survey (2002 and 2005)², for households that have a mortgage on their primary dwelling.

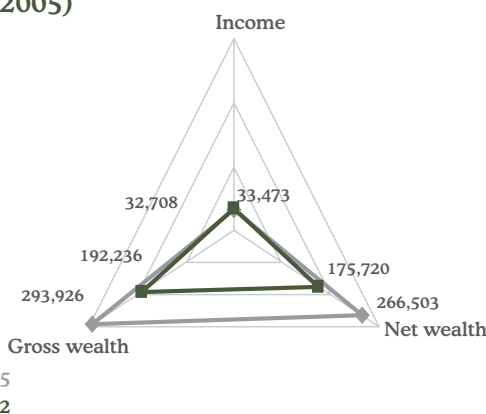
We will begin by analyzing the socio-economic characteristics of households in 2005 and the principal changes that have occurred since the 2002 survey. The second step will be to show the features of primary dwelling purchase mortgagahes..

This analysis is particularly relevant under the current situation of heavily indebted households; the impact of the crisis on households will be significant; and because the measures taken by the government are directed, among others, at buffering the adjustment of Spain's real estate market and, therefore of the mortgage activity in Spain.

Wage earning couples between 35 and 44 years old...

Spanish households that own their primary home represent about 84% of all the households in the survey, in the two available editions. Factors such as the increase in home value in recent years or fiscal incentives have contributed to the fact that most Spanish families own their homes, in contrast to other developed countries.

Chart 1.
Characteristics of the households in the survey.
Average
(€ for 2005)



Source: The Spanish Survey of Household Finance, Bank of Spain

As with the total household average in the survey, those households that have mortgages on their "primary home" display a mean of three members; and the

¹ The first part of this analysis, regarding consumption funding, was published in the Situación Consumo review, in the May 2008 issue.

² See Bover (2004, 2008^a and 2008^b) for detailed analysis of the results and characteristics of the 2002 and 2005 EFFs.

head of the family is a man. In this case, if we compare the results obtained for 2005 with the previous results, the percentage of households with mortgages on their primary homes and a woman as the head of the family is higher in 2005, possibly due to greater integration of women in the job market or the higher number of divorces.

In addition, as occurred in consumer loans, the pattern described in the vital cycle theory is repeated: households in which the average age of the occupants is between 35 and 44 have the most mortgages. The concentration of mortgaged couples, whether married or not, is very high, and a trait unchanged between surveys (87% of mortgage holders in 2005 were couples).

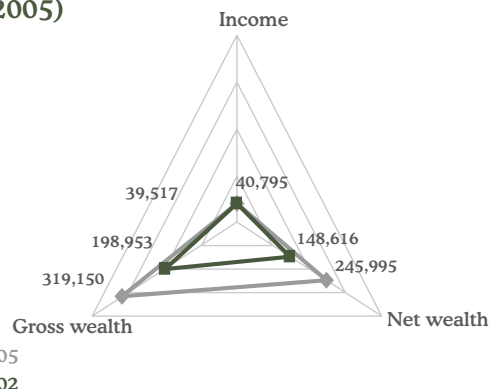
The job situation of the household head has not changed over time either. Most households, with or without mortgages, had a wage-earning head. If we look at the income and wealth of households with mortgages in constant 2005 euros, we can conclude that head of household income fell by 3% between 2002 and 2005. However this did not occur with wealth, whether gross or net, as both increased over 60%, driven by an increase in the home prices during that period.

... mortgages at longer term and higher amount

Most Spanish families that purchase their primary home, do so by taking on debt. Of those that get into debt, nearly 80% do so with a mortgage guarantee. This and the importance of primary home mortgages for financial institutions are the reasons why the second part of this article will present a more detailed analysis of mortgages in Spain.

Just as it happened with personal loans, the main loaning institutions are savings banks and banks. However, between 2002 and 2005, these institutions lost part of their market share to the rest of the financial institutions: credit coops,

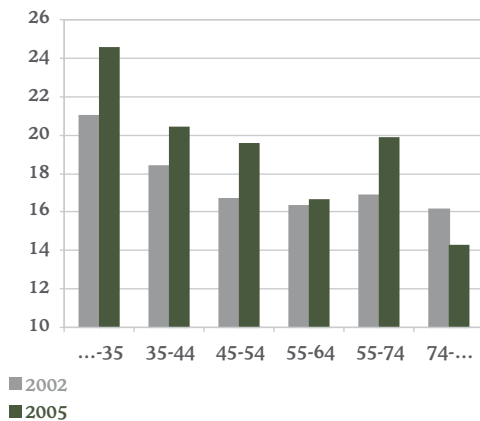
Chart 2.
Characteristics of the households with mortgages for the purchase of their primary home. Average
(€ for 2005)



Source: The Spanish Survey of Household Finance, Bank of Spain

internet agents and financial credit institutions. The latter entered the market during this period, taking advantage of a moment in which access to credit was laxer and wholesale financing conditions were very favorable.

Chart 3.
Initial mortgage period per age range
(years)



Source: The Spanish Survey of Household Finance, Bank of Spain

The “amounts for mortgages” increased an average of 34% during the period analyzed, reaching an average in 2005 of € 77,311. Per age range, mortgages requested by persons under 35 increased the most, possibly due the fact that it was easier for them to extend the mortgage installments. The initial amount mortgaged for these households grow from € 63,500 to € 93,500 on average.

On average, the mortgages requested did not exceed 80% of the worth of the home (Loan to value, LTV), although there was an increase of almost 3% between 2002 and 2005, reaching 79%.

During this period, the payment terms for mortgages were significantly extended, as corroborated by the information published by the Real Estate Property Registration. The information obtained is presented in Chart 3, which shows, as mentioned above that persons under 35 have the longest mortgages, at an average of almost 25 years. In addition, these are the households that increased their payment terms the most, in comparison with numbers from 2002.

Finally, most of the mortgages were signed at variable interest rates, with a sustained increase throughout the period for a final figure of 82% of all mortgaged households. All this has resulted in the average household paying a monthly payment in 2005 of 429€, which is a 9.1% increase in nominal terms for the 2002 – 2005 period.

From 2005 to the present, some of the characteristics of mortgages and households have changed: lengths of mortgages have stabilized, home prices have inverted their growing trend...but to answer important questions such as whether households have reduced their leverage, or whether government measures favoring renting have had any effect, we will have to wait for the next wave of the FFS.

References:

- Bover, O. (2004), “The Spanish Survey of Household Finance (EFF): Description and Methodology of the 2002 Survey”, Occasional Document 0409, Bank of Spain.
- Bover, O. (2008a), “The Spanish Survey of Household Finance (EFF): Description and Methods of the 2005 Wave”, Occasional Document 0803.
- Bover, O. (2008b), “Income and wealth dynamics for Spanish households: Results of the Spanish Survey of Household Finance Panel (EFF) 2002-2005”, Occasional Document 0810.

3. Countercyclical measures in the right direction

Given the intensity and duration of the current economic crisis, that is mostly affecting economies in the developed world and specifically their real estate sectors, a set of countercyclical measures has been put in place to accelerate the recovery.

There is a great amount of literature dealing with the capacity of governments to accelerate the recovery from an economic crisis, and although the results are mixed, depending on the country and the time sample, they point to a positive impact of these policies on the economic cycle. Moreover, the success of discretionary policies implemented during a crisis will depend, largely, on: the capacity of governments to implement them at the right time, to focus them towards the economic agents that most need them, and for a limited amount of time so that they do not increase public debt to unsustainable levels.

From the beginning of the crisis, the monetary policies on both sides of the Atlantic have reacted immediately, with both interest rate cuts and liquidity provisions to the system. With regard to the speed with which rates were cut, the USA was the first country to begin to cut interest rates (November 2007). In Europe, the ECB began to cut interest rates almost a year later (October 2008, Chart 1). One of the effects of these monetary policy measures was to reduce the cost of funding, although at different levels across countries.

As it is shown in Chart 2, the effect of lower interest rates on mortgage rates has had a significant effect, although in some countries, the transmission of these measures has been more effective than in others. Of the 325 basis points cut by the ECB since October 2008, in Spain 235 (until March) were transmitted to mortgage rates, while the figure in other European countries varies between 35 and 200 basis points. In the USA, of the 450 basis points cut, only a third was transferred to mortgage rates. This is largely due to the higher percentage of fixed interest rate mortgages in the USA and the high stability of mortgage rates in that country.

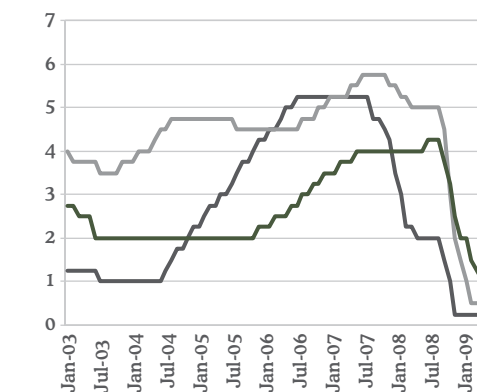
Specific measures taken in the real estate sector

Apart from the measures directed to general financial market stability, a series of plans have been developed for the specific support of the real estate sector in many European countries and the USA. Table 1 shows a summary of the measures launched in this respect up to the present. With few exceptions, the measures focus on three main aspects of the housing market.

- First, in almost all the countries shown in the sample, plans have been implemented in order to help families that are the most financially vulnerable and at a higher risk of losing their home. In the USA, with the "Making Home Affordable" plan; or the United Kingdom, with the bailout program that could help as many as 6,000 household avoid eviction; or in Spain with the suspension of mortgage payments for those who loose their job¹.
- Second, there are a series of measures directed towards first home buyers. Given the new restrictions for mortgage approval, both in Europe and the USA, it is highly probable that new home buyers will

¹ For further details of the effects of this measure, see Real Estate Situation, December 2008.

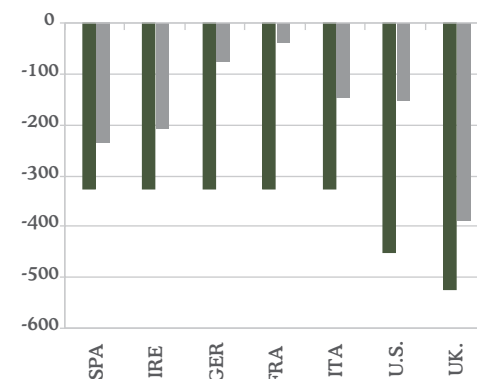
Chart 1.
Official interest rates (%)



■ European Central Bank
■ Bank of England
■ Federal Reserve

Source: Datastream.

Chart 2.
Official rates and benchmark mortgage rates
basis points since start of interventions*

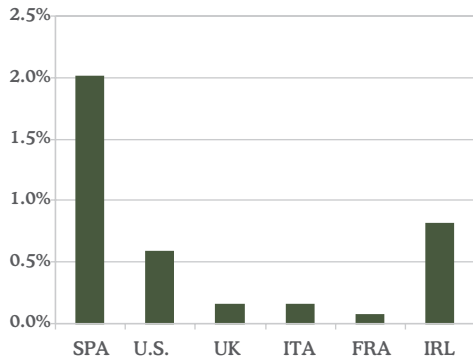


■ Official rates
■ Mortgage rates

Note: the mortgage rates are the benchmark rates in each country. In Spain, Ireland, United Kingdom and Italy, variable rate on new transactions. Germany and France, 10-year fixed rate. U.S. 30-year fixed mortgage rate.

* Federal Reserve (Nov-07); Bank of England (Dec-07); BCE (Oct 08).
Source: BCE; Datastream; BBVA ERD.

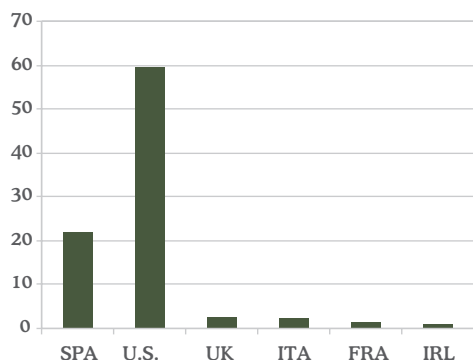
Chart 3.
Aid packages for the real estate sector:
budgets in % GDP



Note: the percentages represent the total aid package budgets going to the sector. They include aid for construction, state-subsidized housing, rental and renovation works, as well as specific measures in each country. They do not include indirect spending effects due to tax benefits.

Sources: Ministries of Housing, national sources, BBVA ERD.

Chart 4.
Aid packages for the real estate sector:
budgets in billions of euros



Note: the levels represent the total aid package budgets going to the sector. They include aid for construction, state-subsidized housing, rental and renovation works, as well as specific measures in each country. They do not include indirect spending effects due to tax benefits.

Source: Ministry of Housing, national sources, BBVA ERD.

be the most affected segment of potential buyers, as they do not have a real guarantee to back up the purchase of their home.

- The last group of measures is the promotion of officially protected housing for rental.

As it can be seen in Table 1, the number and size of measures varies greatly between countries. In GDP terms, Spain is the country that has dedicated the highest budget to the recovery of the sector (Chart 3) followed by Ireland and the USA. This effort reflects, in part, the weight that the real estate sector has in each of these economies, as well as the discretionary power available to manage the budget given the existing level of debt.

Apart from these direct recovery measures and the regulation of the real estate sectors, some countries have also adopted some fiscal measures in order to stimulate the purchase or rental of homes. In the following part, we proceed to analyze the effect that fiscal measures regarding home purchase have on the evolution of the real estate sector.

The role of tax regimes in housing markets

Nearly all developed countries provide tax breaks for housing. This is justified, historically, by the intention of modern societies to increase home ownership to the largest degree possible. Among the various instruments that can be used, some are more important than others.

- Tax breaks on indirect taxes paid at the time of the purchase (VAT; taxes on legal transactions; inheritance taxes).
- Deductions on income tax for investment in residential property, interest and/or on the base tax rate for mortgages.
- Lower direct taxation on housing and capital gain derived from home sales.

Some or a combination of these favorable home-purchasing measures have been used rather unevenly in several countries. Specifically, there are several arguments against subsidizing the purchase of a home through tax breaks, as these can produce several distortions in the market. That is why these measures were reduced and, in some cases, eliminated in most countries. According to the literature we can identify three main reasons for market distortion due to tax breaks associated with home purchases.

First of all, tax breaks for home purchases favor the investment in residential property over alternative assets, that is, the opportunity cost for investing in other assets (e.g., financial assets) is reduced by the existence of tax breaks on home purchase. In this way, housing demand is could increase, not only for residential purposes but also as an investment asset.

Secondly, tax breaks for home purchases are regressive as they would favor those buyers on the high income end. Tax breaks usually push house prices up, (especially if the housing supply is not flexible), having a negative effect on housing affordability for lower income households.

Finally, if tax breaks for the purchase of a home is not accompanied by similar tax breaks for home rental, the home rental market could be

harmed, resulting in a very unbalanced relationship between the two tenancy regimes, with consequences on rental prices and job mobility (for more on this last point, see el point 2.2 of this issue).

Table 2, attempts to summarize main taxes affecting housing, in some European countries. As it can be seen, housing tax measures vary widely, even in countries within the same area. Historically, tax breaks on housing have been subject to changes that have attempted to influence the evolution of housing investment, or to promote self-owned housing over rental or as economic policy to slow the growth of the real estate market when there are signs that a housing bubble is forming. Some studies are particularly interesting, as they measure the effect of a reduction or the elimination of tax breaks on home prices.

Chart 5 shows how there is a strong correlation between house price volatility (measured as the standard deviation of prices from their long-term trend) and tax incentives (measured as the tax wedge, that is, the user cost of housing with and without tax deductions). In addition, other studies mention the important role of tax law on prices. In Sweden, for example, all mortgage payments used to be deductible without any limits. Along with strong economic growth and the deregulation of the financial markets, this contributed to a high increase in housing prices between 1982 and 1991 (accumulative increase of approximately 122%). The adoption of progressive limits on tax breaks for interest payments (between 1983 and 1991) is estimated to have adjusted real estate values by around 10%-15%².

Another country that has reduced and finally eliminated tax deductions on interest payments on mortgages is the United Kingdom. The effect on prices of this measure (which began to be implemented in the 1960's) has been estimated by the Bank of England: for each percentage point of reduction in the home user cost (implied in lower limits of interest reduction) caused a drop in home prices of 3% in the short-term.

Implications of the recent measures taken by the Spanish government on the real estate sector

In light of the experience of other countries and the economic policy recommendations of various international organizations (the IMF or the OECD)³, and in order to correct the imbalances in the Spanish housing market, the government has decided to gradually eliminate the tax deduction for home purchases.

From January 1, 2011, tax payers with an annual income over 17,000 euros who purchase a house will not be able to deduct the payments on their mortgages. This restriction will be scaled for those making between 17,000 and 24,000 euros, and will disappear completely for incomes over 24,000 euros⁴. One of the expected effects of this measure is that it will increase home purchases in the next 19 months.

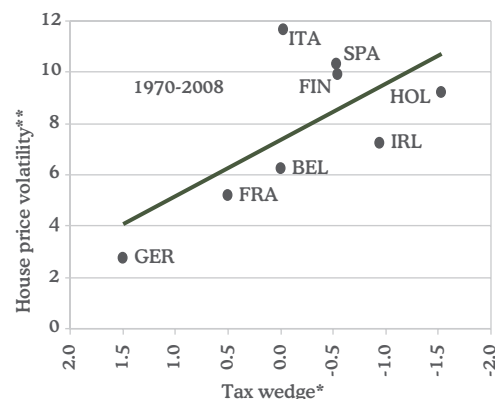
However, whether this measure will effectively increase home sales will depend on several factors and the expectations of the economic agents regarding the possibility that home prices will continue to fall after January 1, 2011, once the deduction is finally removed. A simple

² Agell, J. and Berg, L. (1995), "Does financial deregulation cause the Swedish consumption boom?" *Scandinavian Journal of Economics*, 98, no 4, 579-601.

³ For example, see OECD Economic Survey of Spain 2005: Stabilising the housing market, OECD 2005; or the IMF-Spain staff report for the 2008 Article IV Consultation, 3 february 2009.

Chart 5.

Correlation between tax wedges and house price volatility



* Difference between cost of use of a house with and without tax deductions. A negative value means a greater tax incentive to buy a house.

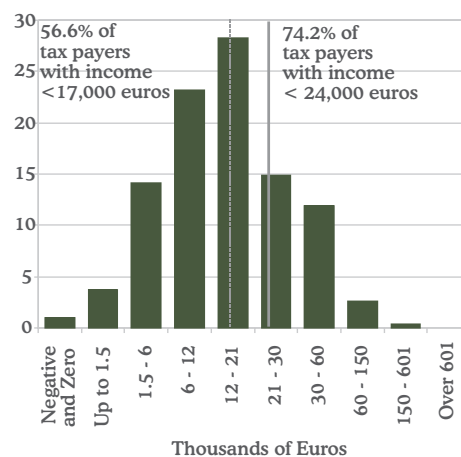
** Average percentage deviation from trend in real prices.

Source: OECD; BBVA ERD.

Chart 6.

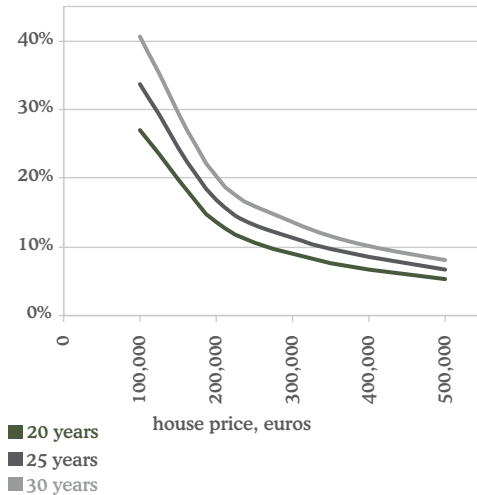
Spain.

Distribution of taxpayers in accordance with general tax base



Source: AEAT (Income Tax 2006)

Chart 7.
Equivalent drop in house price by mortgage period



* Mortgage with LTV = 80%; mortgage rate = 4%.
Source: BBVA ERD

calculation of how much prices should fall in order to compensate the elimination of tax benefits shows that the effect will depend mostly on the price of the home and the mortgage period (Chart 7).

The lower the price of the home, the more prices will have to drop in the next 19 months. For example, for a house that costs 150,000 euros with a 20-year mortgage, the price drop in 2011 should be at least 22%, while for a home worth 300,000 euros with the same mortgage period, a drop of 9% should be sufficient in order to compensate the elimination of the deduction. We obtain the same direct relationship if we consider mortgage terms. The longer the mortgage horizon, the higher the drop in the house price will have to be, in order to compensate the loss in tax benefits.

This simple exercise demonstrates the key role played by house price expectations in deciding whether to buy now at a higher price and continue to benefit from mortgage deductions or wait until 2011 and buy for less once the tax deductions have been eliminated. This *trade-off* may turn out in favour of sure benefits now, the mortgage deductions, against the uncertain perception of economic agents regarding future declines in home prices.

In any case, the adoption of this measure comes late with respect to the evolution of the sector. Evidence from other countries, shows that these measures are usually taken during periods of upward price pressures, in order to avoid the formation of a bubble. Despite all this, tax deduction for the purchase of a home represented a distortion of the Spanish market and needed to be eliminated, undertaking it now, while the sector is undergoing an important adjustment, could have a countercyclical effect.

Apart from the change in the tax law regarding housing, the package of measures implemented includes –for the first time– a certain degree of equality between the tax treatment of renting and buying. The thresholds for deduction on home rentals and mortgage payments have been finally balanced. Moreover, the landlord could benefit from a deduction of up to 60% of the rent income (or 100% if the tenant is under 35 years old). These measures, along with those already taken at the end of 2008 (summarized in Table 3), appear to be along the right lines to rebalance the buy and rental markets. The development of the rental market is a key element that could help absorbing the stock of new houses for sale in the market.

⁴ The income brackets have not been approved yet. The decision to discriminate between high and low incomes in order to have a right to the deduction could be an element of distortion (incentives to hiding income and the distortion of effective marginal rates for tax payers with income over the right to deduction limit).

Table 1. Measures directed to the real estate sector from the beginning of the crisis

Country	Name of the measure	Amount	Description	
France	Mortgages for the purchase of OPH		Increased resources for the purchase of protected housing. 60% of households could benefit from this type of real estate credit (only 20% previously).	
	OPH	1.4 billion €	120,000 homes in 2009 (measure prepared previously).	
	Pass Foncier		This is a financing program for home purchases for households with limited means, the number of households that can apply for this plan was increased from 20,000 to 30,000 in 2009. Reductions in social security contributions for the lowest incomes.	
	First-time buyers		Aid for first-time buyers, none over the prices that have to be adjusted to their "natural" level.	
	Aid for the construction sector		Purchase at a reduced price by the State of more than 30,000 newly built houses.	
Denmark			Loans up to a total of over 10 billion € to banks and the rest to companies mortgage loans at variable interest determined by the financial solidity of the company with an average rate of 10%.	
Ireland	Aids for persons holding mortgages		A moratorium in mortgage payments is conceded to owners in precarious situations and this procedure is interrupted when the mortgaged property is the habitual home of the owner and delinquency does not exceed twelve months.	
	Aid for first-time buyers	1 billion €	This will allow more than 4,000 people to buy their first house.	
Italy		2.4 billion €	In favor of variable rate mortgage holders, that have increased a lot in the past year with serious effects on household budgets. In 2009, payments can not exceed 4% interest, of any figure higher than this will be taken on by the Italian government. Payments to households most in need (tax elimination).	
	"Home plan"		Real estate market stimulus plan by aid for enlarging or renovating homes (single family or semi-detached).	
United Kingdom	"New Build home"		Through property shared with the State, the potential buyer would take on a minimum of 25% and pay rent for the rest. 6,000 houses have been built since April 2008.	
	"Open Market Homebuy"		This helps people buy the property they choose. This has helped 8,700 people to date, including 3,500 since April, 2008.	
	"Rent to HomeBuy"		This is a plan where the potential buyer rents a new home at 80% of the market value for a maximum of five years. The buyer has the option of purchasing a percentage of the property during that period, or at the end of the period.	
	HomeBuy Direct	300 million GBP	To finance mortgages at zero interest for five years, for 30% of the value of the home, for purchase of new homes; for persons with income under 60,000 GBP. This could help 10,000 potential buyers.	
	Stamp duty		The amount after which the individual begins to pay 1% of the tax on the price of the home 175,000 GBP (from 125,000).	
	Mortgage rescue	285 million GBP	A fund that could help as many as 6,000 households prevent home seizure. In the most extreme cases, a government agency would acquire the debt and receive the rent directly from the family. The mortgage institutions would be forced to delay the property seizure process on clients.	
	Protected Housing	710 million GBP	Increase in protected housing, the Government takes over empty homes and converts them into protected housing. To date, 5,000 houses have accepted this measure.	
	Unemployment/Mortgage		In the event of losing a job, the unemployed individual will have to wait 13 months (instead of 39) to receive subsidies to pay mortgage interests, to a maximum of 175 thousand GBP instead of 100 thousand.	
	Counsel	25 million GBP	Economic aid for legal counsel and representation for households risking seizure.	
	New home construction	1 billion GBP	Plan to promote housing construction and greater support for the unemployed.	
Germany			Bailout of real estate companies such as Hypo Real Estate.	
USA	"Making Home Affordable Program"	75 billion \$	Housing refinancing accessible to 4 or 5 million families with loans issued or guaranteed By Freddie Mac or Fannie Mae at low interest rates.	
			The objective is to reduce the payments for between 3 to 4 million citizens to no more than 31% of the total of their income.	
			Program to reduce the payment in second mortgages. Directed to a group of 1-1.5 million People.	
	"American Recovery and Reinvestment Act of 2009"		4 billion \$	To repair and modernize public housing.
			2 billion \$	For aid of rented housing.
			1.5 billion \$	To aid in relocation and rent of low income families.
			510 million \$	To renovate housing for American Indians.
		200 million \$	For social housing in rural settings.	
			The program includes 8,000 \$ for first time buyers in 2009.	
Spain	OPH	2.87 billion €	Public tender for land purchase for the construction of between 15,000 and 20,000 protected housing units.	
	OCI	3 billion €	A new line of credit for the conversion of housing which has not been sold to promote the rental market.	
	PEV	10.188 billion €	New variations of OPH; budget for renovating and reconvertng OPH for rental; renovating buildings to more efficient energy use.	
	Measures for persons holding mortgages		For the unemployed with mortgages, a moratorium of 2 years in payment of half the monthly payment of the mortgage, maximum 500 euros. Mortgages in: < 70,000 euros.	
	Measures for rental promotion		See Table 3.	
	Tax measures		Elimination of tax deduction for home ownership in the tax return from January 1, 2009 onwards (See article in this issue).	
	Mortgage guarantee for protected housing	6 billion €	The Ministry of Housing will share the risk with the banks to facilitate access to OPH for more than 100,000 households. The OCI will manage these transactions.	

Table 2. Housing tax law at the international level

	Deductions in mortgage payments housing	Capital gains capital	tax on
Spain	Yes, up to January 1, 2011 a deduction of 15% can be applied to mortgage payments (on both interest and capital) on a maximum base of 9,015.08 € for home purchase, or renovation (continued use as a first residence during three years). From then on, the home purchase deductions will be eliminated for persons with an income over 17,000 €. The deduction will be reduced in stages when income is between 17,000 € and 24,000 €.	Exempt if reinvested in less than two years	Yes, 0.4% in urban areas and 0.3% in rural areas
Ireland	Yes, financial aid for mortgages is given in the form of credit at a standard rate of 20% of income tax, subject to certain restrictions (up to 5,080 € for married individuals and 2,450 € for individual tax payers). For first-time home buyers, the restrictions increase to 8,000 € (married individuals) and 4,000 € (unmarried individuals) during the first seven years of the law.	Exempt	No
Belgium	Yes. The interest for mortgages signed before January 1, 2005 can be deducted from taxable income to the total amount of income from the property. The interest on mortgages signed in or after January 1, 2005 can deduct up to 2,000 € during the first 10 years and 1,500 € thereafter.	Exempt	No
United Kingdom	No. Mortgage interest deduction was gradually eliminated for over more than 25 years (1974-1999).	Exempt	No
Netherlands	Yes.	Exempt	No
France	It is applied during the first 5 years of the mortgage. It is applied to both housing purchase and construction. It is available for first-time buyers or owners that are going to buy a new main residence. The maximum refund if the mortgage is in one name only is 3,750 € and 7,500 for a couple €.	Exempt if occupied for over 5 years	No
Sweden	The costs due to mortgage interest are partially deductible (30%).	2/3 of capital income is subject to 30%	Yes, the tax is 0.5% for industrial property and 1% for housing and shops
Italy	Yes. A loan for 19 % of the interest paid in mortgages for homes occupied by the owner, to a maximum loan of 686.89 €.	Exempt if occupied for over five years	No
Denmark	Yes	Exempt	No
Germany	No	Exempt	No
USA	Yes	Exempt to a maximum of 250,000 \$ (500,000 \$ per couple)	No, only at the local level

Source: European tax handbook; ECB; IMF; national sources.

* The income limit after which home purchase deductions are eliminated is not definite.

Table 3. Measures to promote the rental market in Spain:

• Qualified loans, with the possibility of being subsidized buy the Ministry of Housing, for developers of newly built OPH for rental.
• Subsidies for requalifying empty housing to OPH for rental (up to 410 € per square meter).
• Subsidies of up to 6,000 € for owners of empty housing dedicated to rental.
• Direct financial aid to tenants, preferably young people, of 40% of their annual income, to a maximum of 2,880 €.
• The landlords can deduct up to 60% of the income from rent in their tax return to a maximum of 100% when the tenant is less than 30 years old, or up to 35 years old for existing contracts.
• Creation of Real Estate Investment Companies (SOCIMI) with the purpose of investing in real estate for rent.
• Financial aid of 210 € per month for young people between 22-30 years old that rent a house.
• Flexibility in the legal paperwork in the case of non-payment.
• Tax deduction for payment of rent with the same thresholds that exist for self-owned property.

Sources: Ministry of Housing and national sources.

4. Real estate markets in Latin America

There has been sustained growth in Latin American real estate markets over the last decade, although this has varied in speed from country to country. This was, largely due, to the better macroeconomic environment, with inflation at historically low levels, stable economic growth rates and favorable funding conditions. However, in comparison to advanced economies and other developing countries in Asia, the size of these markets is small and they still have high growth potential.

The economic stability that has characterized the region during the last decade is now subject to conditions of greater stress. More than a year after the beginning of the international financial crisis, these economies are showing signs of weakness that may slow the progress of the housing markets in the region.

This section deals with the degree of development achieved by the real estate sectors in the various economies of Latin America, and what changes might occur in the sector in light of the current global financial crisis.

Starting point

The real estate sector in Latin America has benefited from the economic stability since the beginning of this decade. The housing supply, measured by the growth in new building permits in each country, underwent very intense growth in all the economies of the region (Chart 1). In Peru, for example, between 2002 and 2008, an average of 8,000 homes were certified per year, more than three times the number of permits issued in 1995-2001. Growth has also been significant in Colombia, where permits increased by over 50%¹.

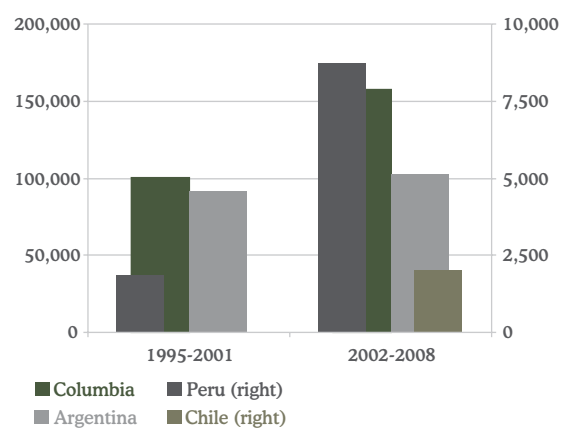
It is difficult to comparisons cross country of these indicators. especially from the supply side, due to the lack of detailed statistics of the sector. In addition, part of the real estate activity is not recorded due to the large amount of unofficial construction and self-construction.

As regards demand, the available housing price indicators show an upward trend that has slowed down since the beginning of the global financial crisis, but can not be quantified in detail due to the lack of updated information. Even so, it is interesting to note that, with the exception of Chile and Colombia, housing prices were on an increasing pattern in the entire region. In real terms, housing prices in Argentina, for example, increased almost 9% yoy in 2008. In Peru, growth during the same period was even higher: in nominal terms, housing has been revaluated by 40%, and 35% in real terms.

This evolution of the housing market has been accompanied by a significant growth in mortgages, although these are still at very low levels in comparison with the standards of more mature markets. As can be seen from Chart 3, the country with the highest level of development in the region is Chile (credit balance was 18% of GDP in 2008), followed by Mexico (14%). However, these ratios are well below the levels reached by more mature markets. For example in Spain, for example, these ratios reached 60% of GDP in 2008 and in the USA over 70%,

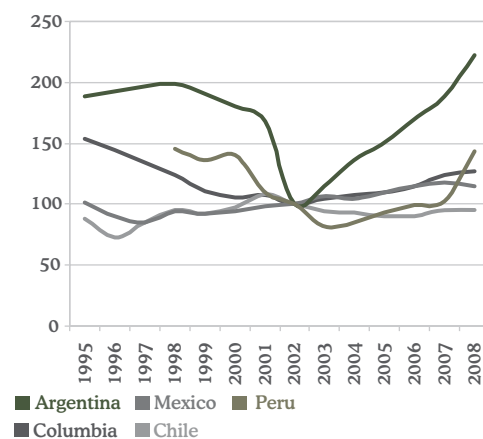
¹ These indicators apply to an average size of between 80 and 70 square meters.

Chart 1.
New building permits on average



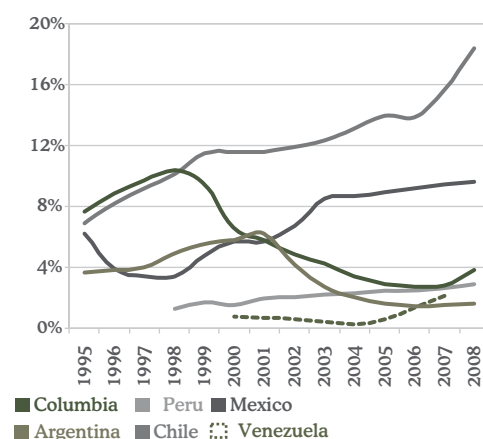
Source: BBVA ERD with national data.

Chart 2.
Nominal house prices
2002 = 100



Source: BBVA ERD with national data.

Chart 3.
Mortgage credit, % GDP



Source: BBVA ERD with national data.

Chart 4.
Argentina: housing affordability indicators

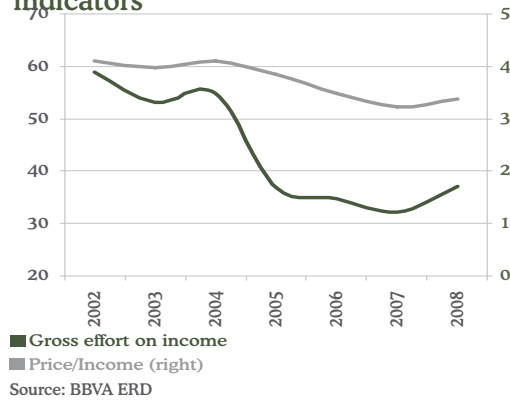


Chart 5.
Chile: housing affordability indicators

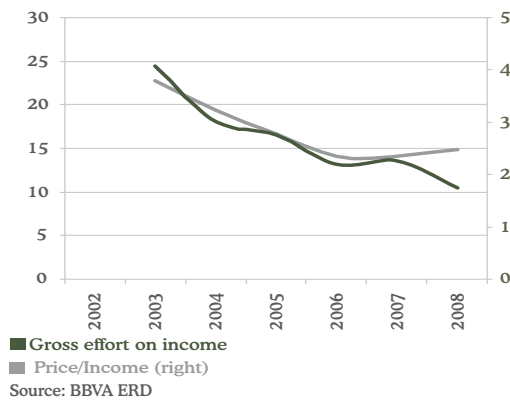


Chart 6.
Peru: housing affordability indicators

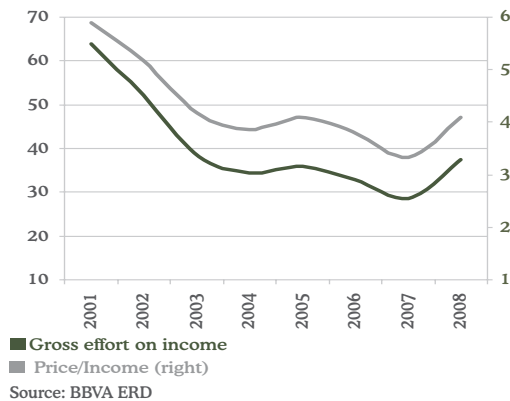
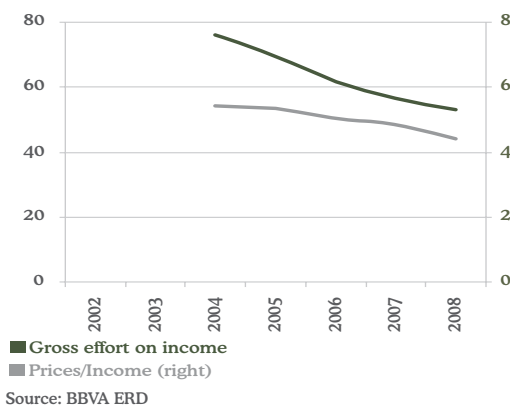


Chart 7.
Mexico: housing affordability indicators



The lack of mortgage credit in the region can be explained mainly by two factors. First of all, there is a high percentage of informal economy that can not access financial services such as mortgages², in countries where the presence of banks is still small. In addition, a history of volatile growth has generated high finance costs and has increased the aversion of banks to take on risk (such as long-term loans financed by short-term deposits). Basically, the sources of housing market financing continue at a basic level; the securitization process which was beginning to be developed successfully in some countries such as Mexico and Colombia has been thwarted due to the international financing crisis.

The effort to access housing in the region has been reduced

In spite of the slowdown in the development of the housing market in the region, it should be noted that recent years have probably represented the period of greatest economic stability in the countries analyzed. Macroeconomic stability took these countries to sustained levels of growth and the containment of high inflation like never before. In part, the real estate sector has benefited from these important advances in the macro-economic setting, as well as from factors such as population growth in these countries. As mentioned above, the value of real assets has grown and the levels of housing affordability have improved.

Graphs 4-7 show the indicators of affordability relative to the purchase of a home with an average size of 70 square meters, and a mortgage at 25 years, measured as the effort in percentage of household income. As can be seen, affordability has improved significantly since 2002. In Argentina, for example, the indicator of gross effort over income has gone from 60% in 2002 to a minimum of 31% in 2007. A similar improvement was observed in Peru. On the other hand, in Mexico this index has also dropped but the purchase of a home continues to require substantial effort.

All in all, these indicators show how housing markets were moving in the right direction, benefiting from the positive effects of monetary policies which were more focused on controlling inflation and stabilizing economies.

The international financial crisis has interrupted this process, and in spite of the fact that the origin of current financial instability is not to be found in this region of the world, it is possible that the level of risk aversion will continue to be high. However, the high housing deficit and rapid growth of cities in the region are a solid base for the development of the housing market in Latin America.

² The growth of micro-credit has been helpful, although partially, to satisfy part of the credit demand of irregular workers.

Box 4: Changes in the housing market in Mexico: slowdown in 2009

The global financial crisis, sparked by the North American housing market, has begun to have an impact on the real estate sector in Mexico, closely linked to the economic variations in the USA. The slowdown in the sector has been evident since 2008, with significant adjustments in home sales, although the dynamics differ among regions and segments.

Housing activity has especially slowed down in coastal areas, where the demand for homes by foreigners, and in particular baby boomers has come to a halt. Moreover, tourism has also declined abruptly, contributing to lowering income of locals and that it is highly dependent on tourism activity. These factors together, have contributed to a reduce the volume of home purchases in these areas. However, a look at the breakdown of sales in these cities by housing segment shows a certain upward movement in the "A" sector of social housing. As can be seen in Chart 1, this segment also shows a certain activity at a national level.

This resilience can be explained largely by the greater availability of land for the construction of this type of housing. In Mexico, housing supply is not very flexible, not only due to the rigidity of the institutional purchasing scheme, but also to the high development costs in areas far from urban centers, where there is a lack of services such as electricity, water, transportation or security, among others. All in all, these elements exert pressure on construction costs that limit the development of homes of higher standing.

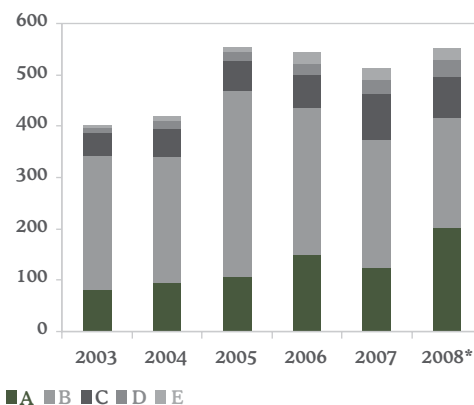
From the financial point of view, the development process of the mortgage market and, above all, the securitization process of the mortgage portfolio that has been an innovative factor in the region and has allowed an increase in housing financing sources, has been stopped temporarily. There has been a significant increase in the outstanding payments

portfolio in the Limited Object Financial Companies (Sofoles-Sofomes) since the beginning of the crisis.

Nonetheless, mortgage rates have remained relatively stable and the situation is still favorable for innovation in financial instruments (inverted mortgage, collateralized mortgages with correlated assets) and further mortgage banking. These latent strengths will be an important factor when the sector recovers.

Once the crisis is overcome, and the economy will start growing again, employment in the formal sector of the economy will also grow significantly and the average interest rates will stabilize or even fall. This will be the time to expect the housing bank credit to return to the path of growth.

Chart 1.
National house sales
(thousands)



* Forecast based on figures from the third quarter 2008.
Source: BBVA Bancomer with Softec data

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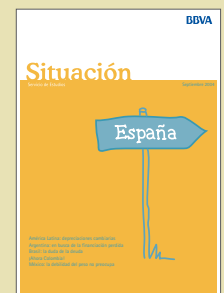
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