

Real Estate Watch

BBVA Group Research Department

June 2, 2009

Main messages

- The economic policy responses to the **deterioration of the global economy** are significant and highly coordinated. Although uncertainty persists, the focus of attention will move from the depth of the adjustment to its duration
- Nearly all the real estate markets in **developed economies have registered significant falls** in prices and volumes
- Unlike most other European real estate markets, in **Spain** the sector is characterized by a major **imbalance in activity** rather than in prices. The stock of unsold new homes will begin to decrease starting in the first quarter of 2010, and will return to 2005 levels by the end of 2012.
- Overall, **housing prices** will fall cumulatively about 30% from their peak.
- The **countercyclical measures** introduced by the government, such as the announced elimination of the tax deduction allowance for home buyers, may speed up the recovery in the sector.

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01. The world economy: from depth to duration and differentiation

02. The real estate adjustment worldwide

- A synchronized adjustment
- affordability improves in all countries

03. The adjustment in Spain will take some time

04. The countercyclical measures introduced

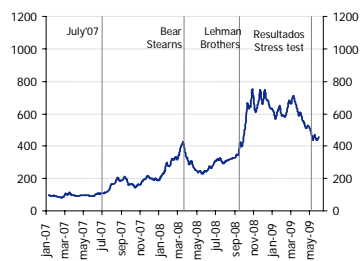
- An international comparison
- The case of tax deduction allowances in Spain

01. The world economy: From depth to duration and differentiation

Three elements that characterize the global situation

1.1 Financial turbulence has been lessening in recent months, although it remains at very high levels in historical terms

EMU: Financial Tensions Indicator
100 = Jan-07



Source: BBVA ERD.
First principal component, normalized, of the OIS differential, German stock market implied volatility, banks and corporate sector CDS.

U.S.: Financial Tensions Indicator
100 = Jan-07



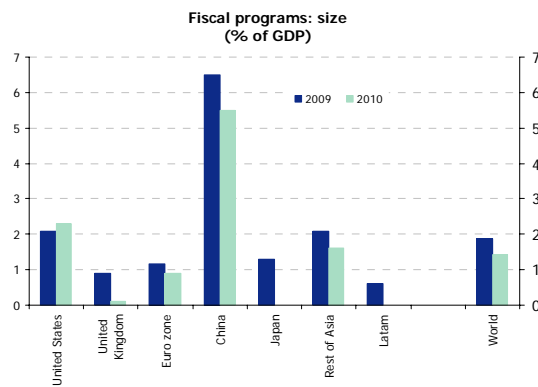
Source: BBVA ERD.
First principal component, normalized, of the OIS differential, US stock market implied volatility, banks and corporate sector CDS.

The announcement of *stress tests* in the U.S. has been a turning point, but financial tensions persist

01. The world economy: From depth to duration and differentiation

1.2 The economic policies implemented are of an unprecedented magnitude. This generates some uncertainty, but they contribute towards limiting the depth of the adjustment, although with some differences between geographical areas.

FISCAL POLICY



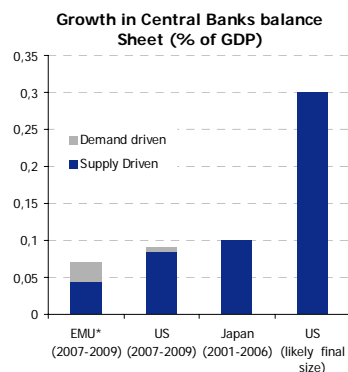
The different tax responses, which are key to compensating falling demand, will differentiate the recovery across regions

The United States and China have adopted much more decisive tax initiatives whose effects will begin to be felt in the second half of the year

01. The world economy: From depth to duration and differentiation

1.2 The economic policies implemented are of an unprecedented magnitude. This generates some uncertainty, but they contribute to limiting the depth of the adjustment, although with some differences between geographical areas.

MONETARY POLICY



After lowering interest rates to record lows, unconventional policies are being taken.

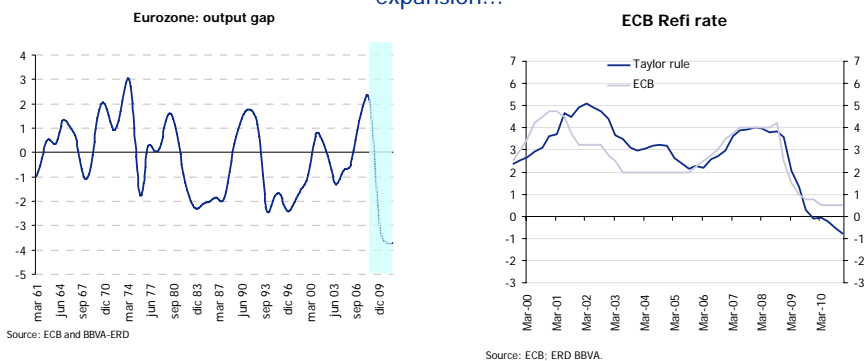
Monetary expansion is notable, although with differences across regions. Europe is lagging behind...

01. The world economy: From depth to duration and differentiation

1.2 The economic policies implemented are of an unprecedented magnitude. This generates some uncertainty, but they contribute to limiting the depth of the adjustment, although with some differences between geographical areas.

MONETARY POLICY

... even though the reduction in activity will imply more monetary expansion...



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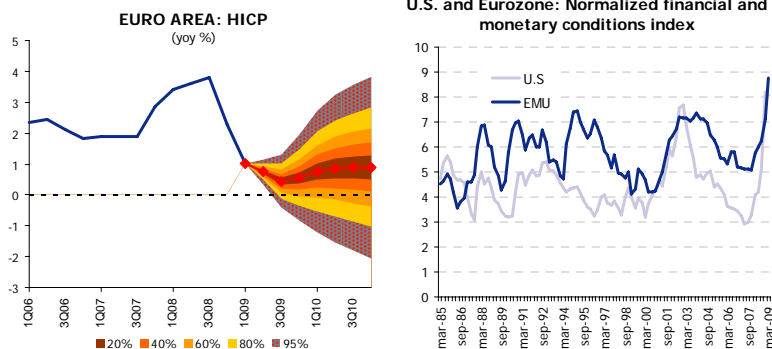
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01. The world economy: From depth to duration and differentiation

1.2 The economic policies implemented are of an unprecedented magnitude. This generates some uncertainty, but they contribute to limiting the depth of the adjustment, although with some differences between geographical areas.

MONETARY POLICY

... given lower inflationary risks and current restrictive monetary policies.



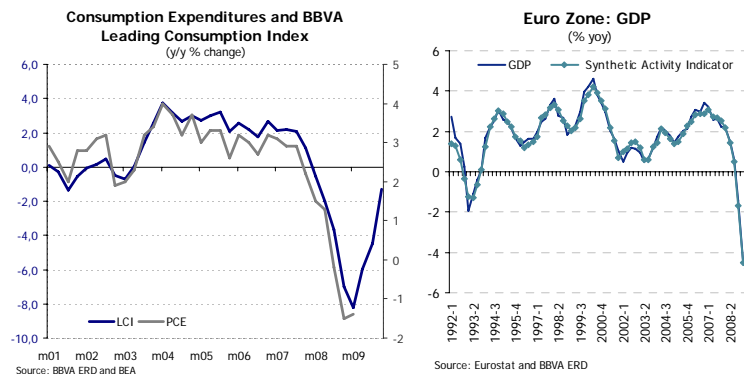
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01. The world economy: From depth to duration and differentiation

1.3 The crisis has had a global dimension, but from here on the differences between economies will become significant.

Recent indicators show stabilization at low levels, but the recovery will still require time.



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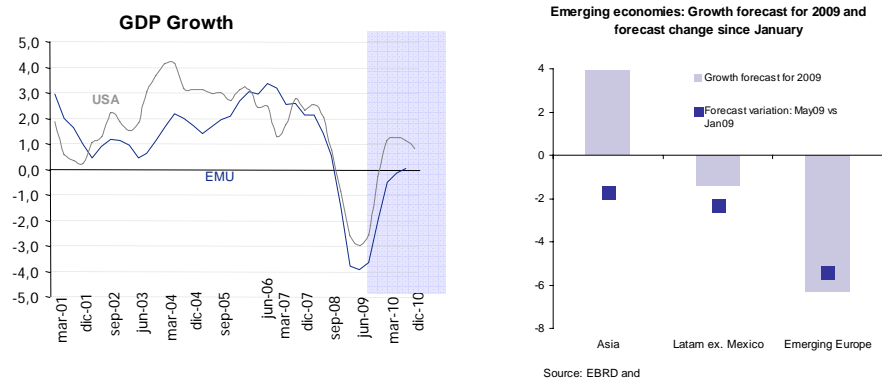
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01. The world economy: From depth to duration and differentiation

1.3 The crisis has had a global dimension, but from here on the differences between economies will become significant.

The U.S. will be ahead of Europe in its recovery.

Emerging countries as a whole will avoid the collapse, although differences between countries remain



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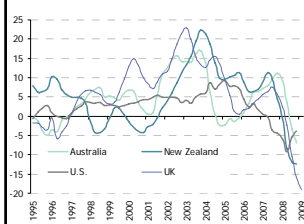
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02. The adjustments in the real estate sector will still take time at a global level

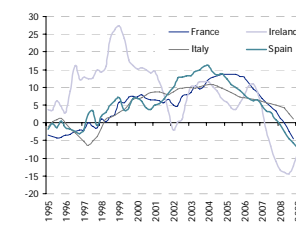
Synchronized price adjustment, differences in activity

Since the end of 2008, house prices have been registering negative growth rates in nearly all advanced economies...

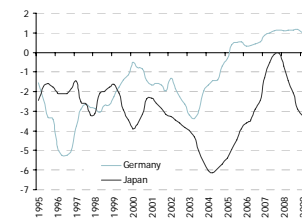
Real house price growth
Year-on-year growth



Real house price growth
Year-on-year growth



Real house price growth
Year-on-year growth



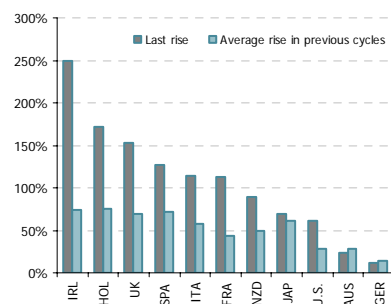
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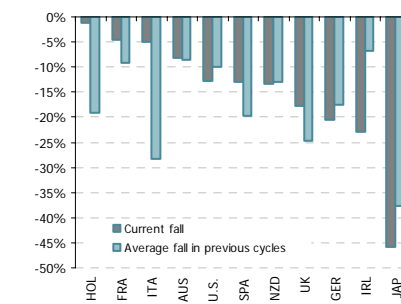
02. The adjustments in the real estate sector will still take time at a global level

Synchronized price adjustment, differences in activity

Increases in real house prices



Decreases in real house prices



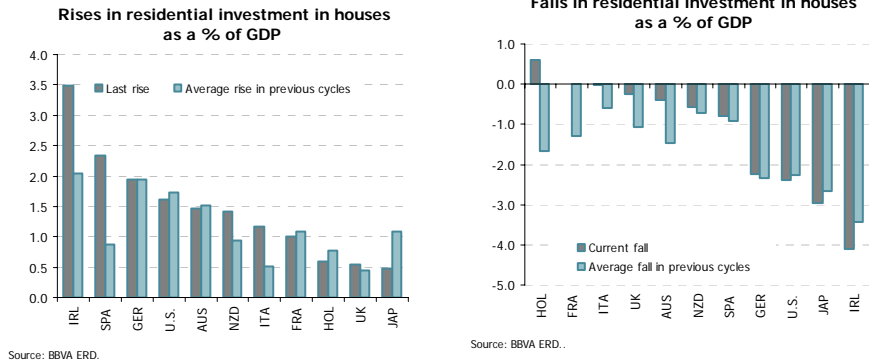
There are significant differences in the degree of adjustment among countries

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

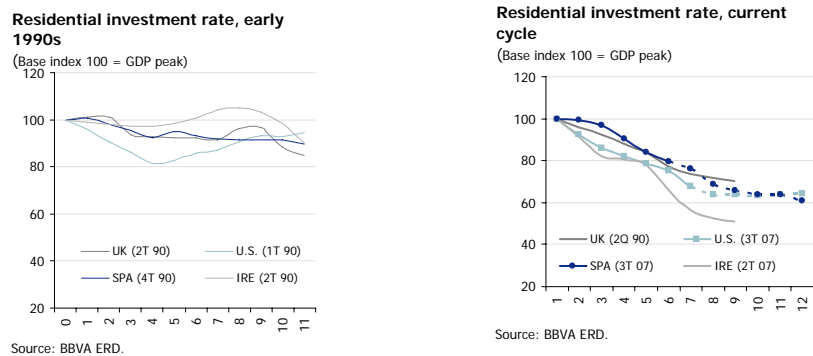
2.1 Synchronized price adjustment, differences in activity



The synchronized fall in prices is not reflected so much in activity...

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

Synchronized price adjustment, differences in activity

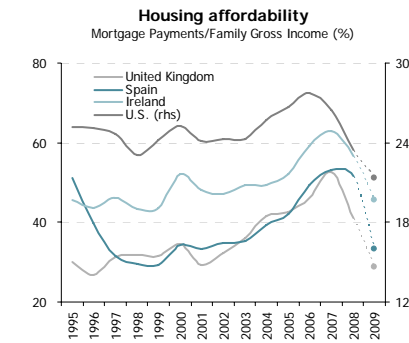


The current cycle is more intense and longer-lasting

The U.S. appears to be close to bottoming out in activity; countries like Spain are lagging behind

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

Affordability as a supporting factor



Fuente: SEE BBVA.

Housing affordability levels are improving in all the countries where there has been a strong expansion in the sector

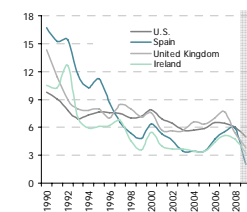
02. The adjustments in the real estate sector will still take time at a global level

Affordability as a supporting factor

The effort needed to access to a home depends on:

INTEREST RATES

Mortgage rates, nominal %

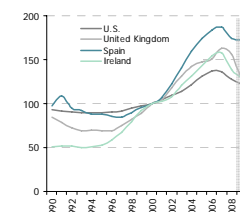


Source: National data; BBVA ERD.

Towards all-time lows

HOUSE PRICES

Real house prices, 2000 = 100

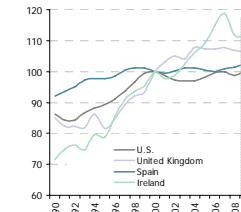


Source: National data; BBVA ERD.

Adjusts at a different rate

DISPOSABLE INCOME

Real gross income, 2000 = 100



Source: National data; BBVA ERD.

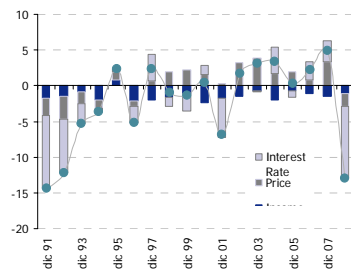
Remains stable or rises slightly

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

Affordability as a supporting factor

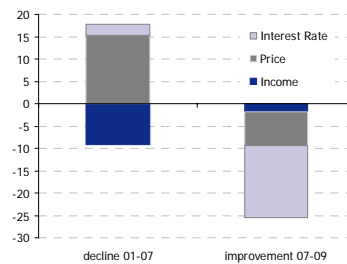
United Kingdom

UK: contributions to changes in housing affordability , %



Source: BBVA ERD.

UK: contributions to changes in housing affordability , %



Source: BBVA ERD.

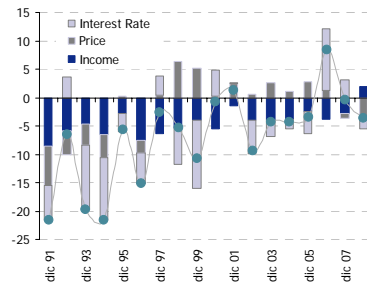
In the United Kingdom the steep drop in interest rates is the most important factor in reducing the effort required to buy a home

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

Affordability as a supporting factor

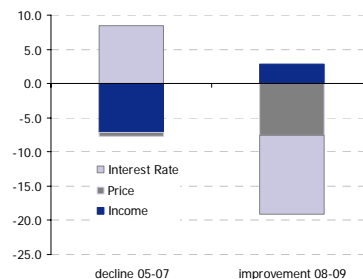
Ireland

Ireland: contributions to changes in housing affordability , %



Source: BBVA ERD.

Ireland: contributions to changes in housing affordability , %



Source: BBVA ERD.

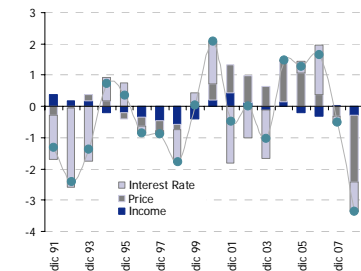
In Ireland the fall in interest rates and prices is partially compensated by a contraction of disposable income

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

Affordability as a supporting factor

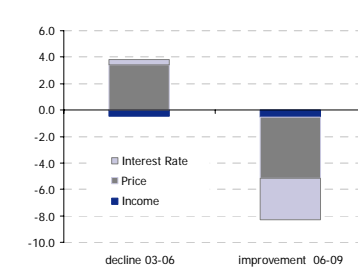
U.S.

U.S.: contributions to changes in housing affordability , %



Source: BBVA ERD.

U.S.: contributions to changes in housing affordability , %



Source: BBVA ERD.

Price adjustments are accountable for the majority of the improvement in housing affordability

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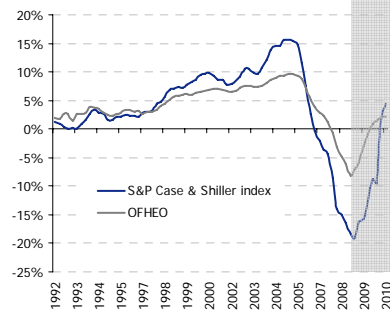
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02. The adjustments in the real estate sector will still take time at a global level

Affordability as a supporting factor

U.S.: Adjustment in the sector

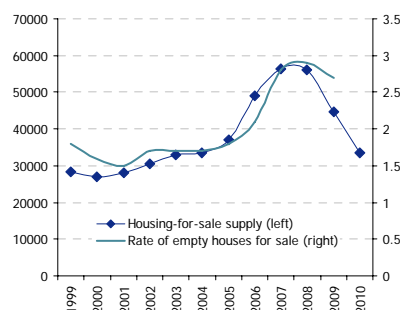
U.S.: House prices growth



Source: Datastream; BBVA ERD.

Price adjustment continues...

U.S.: Housing supply growth



Source: Census; BBVA ERD.

... until the excess of unsold housing on the market is absorbed

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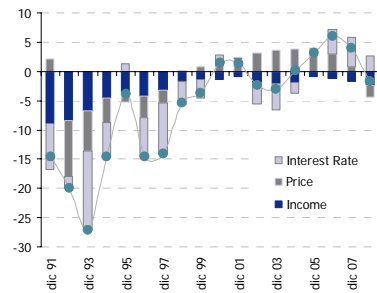
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02. The adjustments in the real estate sector will still take time at a global level

Affordability as a supporting factor

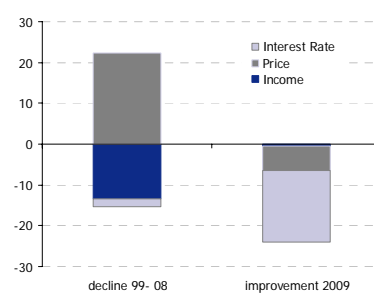
Spain

Spain: contributions to changes in housing affordability, %



Source: BBVA ERD.

Spain: contributions to changes in housing affordability, %



Source: BBVA ERD.

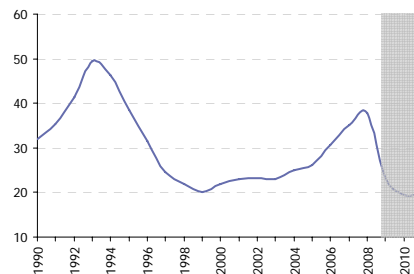
In Spain it will be the fall in interest rates that will improve affordability the most

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

Affordability as a supporting factor

Spain

Housing affordability in Spain
After-tax efforts over income, %

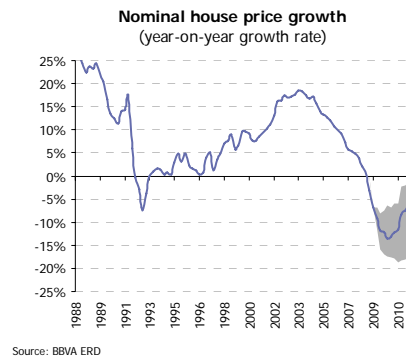


Source: ERD BBVA.

Our net affordability indicator suggests a significant improvement

03. In Spain too

The adjustment intensifies



The downward adjustment of prices intensifies
allowing excess supply absorption...

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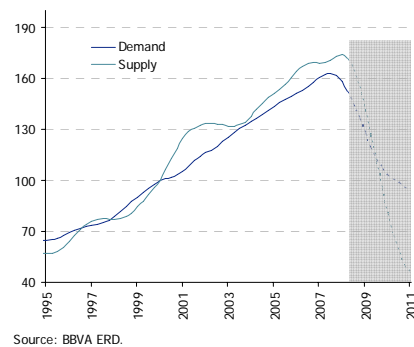
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03. In Spain too

The adjustment intensifies

Volume imbalances persist,
while supply follows the fall
in demand

Housing supply and demand
4 quarters moving average, 2000=100



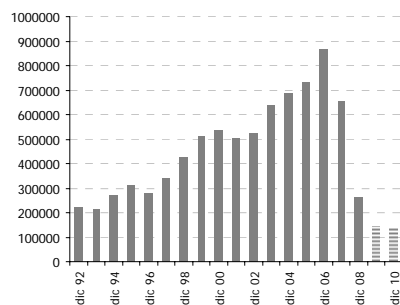
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03. In Spain too

The adjustment intensifies

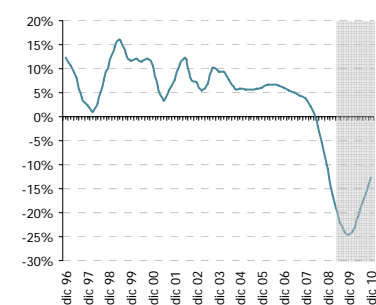
New building permits



Source: Ministry of Public Works; BBVA ERD.

Housing Investment forecasts

YoY growth rate, 4 quarters moving average



Source: BBVA ERD

Strong contraction in housing sector activity, less than 200,000 new homes approved in 2009 and 2010

Demand will also contract throughout 2009

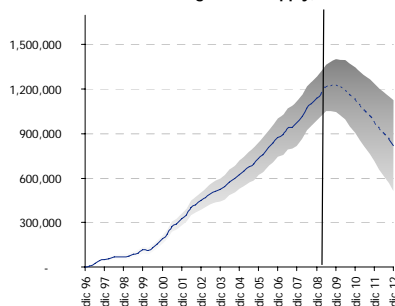
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03. In Spain too

The adjustment intensifies

Estimated housing excess supply, forecasts



Source: BBVA ERD

The housing over-supply continues to slowly approach a equilibrium level: excess housing on the market will only begin to be absorbed starting in 1Q10

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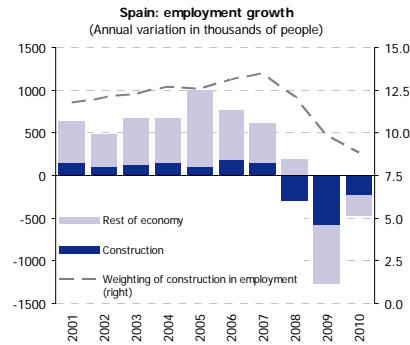
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03. In Spain too

Employment and housing: a complicated interrelation

The direct effect of the deterioration in the real estate sector on employment

Construction will continue to be the main sector responsible for the destruction of employment in Spain



Source: National Institute of Statistics and BBVA ERD

In 2009-2010, 46.8% of the total reduction in employment will be accounted for by the sector...

... this will ensure that the weight of construction in total employment will continue to fall from 13.3% in 2007 to 8.7% in 2010.

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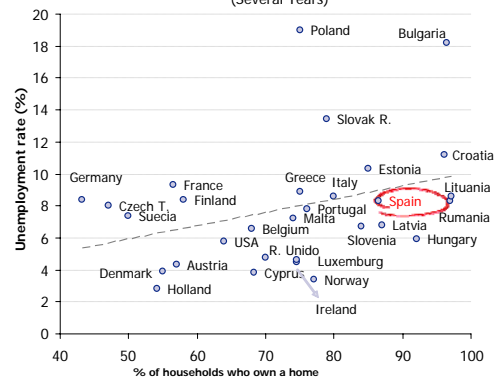
03. In Spain too

Employment and housing: a complicated interrelation

Apart from the direct effect, there could be an indirect effect

Home ownership may limit labor mobility. This implies that countries with a greater proportion of homeowners will have a greater rate of unemployment

Unemployment rate vs percentage of households who own a home.
(Several Years)



Source: European Mortgage Federation, Eurostat and BBVA ERD

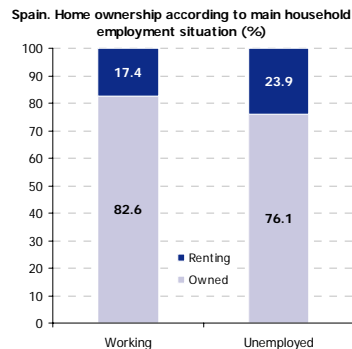
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03. In Spain too

Employment and housing: a complicated interrelation

In Spain, recent evidence indicates that the (unconditioned) relationship between the rate of homeownership and unemployment is negative.



Source: National Institute of Statistics and BBVA ERD

The proportion of home ownership is greater among the employed (82.6%) than the unemployed (76.1%)

The probability that an employed person buys a home is greater because he or she has a job:

- This increases permanent income, which encourages the purchase of durable goods
- It makes it easier to obtain funding

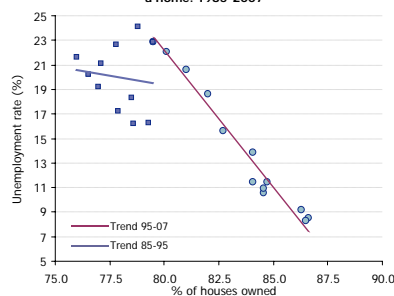
03. In Spain too

Employment and housing: a complicated interrelation

In Spain, recent evidence indicates that the (unconditioned) relationship between the rate of homeownership and unemployment is negative.

Since the mid-1990s, the relationship between the rate of homeowners and unemployment has been negative

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

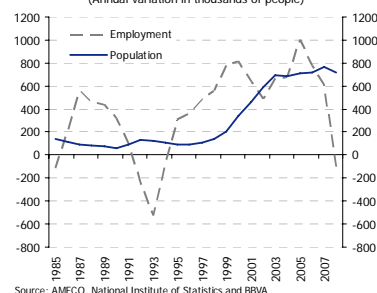


Source: National Institute of Statistics, Ministry of Housing and BBVA ERD.

Causes:

- Size of the demographic shock
- Intense job creation

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



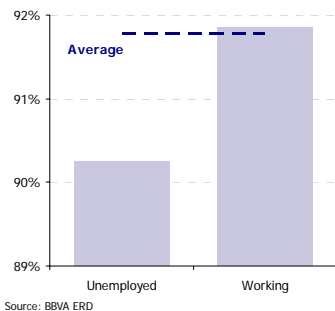
Source: AMECO, National Institute of Statistics and BBVA

03. In Spain too

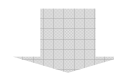
Employment and housing: a complicated interrelation

When the remaining variables affecting an individual's employment and/or housing situation are taken into account, it is found that being a homeowner has a positive effect on the probability of being in employment.,,

Spain. Predicted probability of household ownership according to the employment situation



When calculating the probability of being employed for two individuals who are only differentiated by home ownership, the **homeowner** has a **3.3 pp higher probability of being in employment than the tenant**



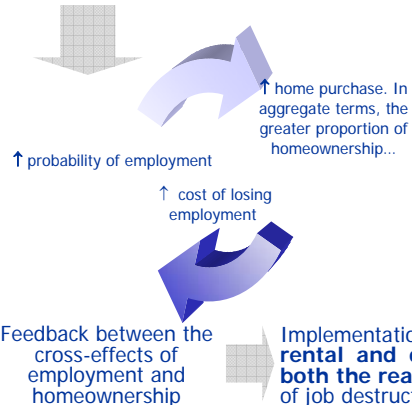
The **greater cost for mortgage holders of losing their jobs** increases their **commitment to the labor market** and, as a result, their likelihood of remaining employed.

03. In Spain too

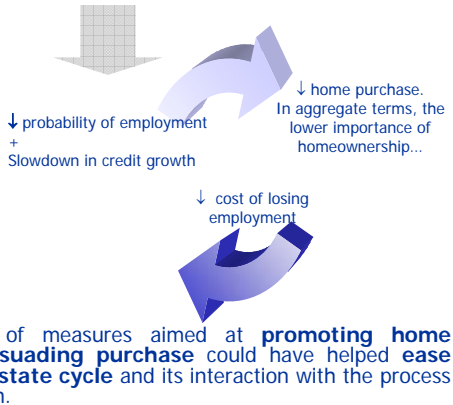
Employment and housing: a complicated interrelation

What could the consequences of a reduction in economic activity be on the different forms of home occupancy in Spain?

When the economy grows:



When economic activity deteriorates:

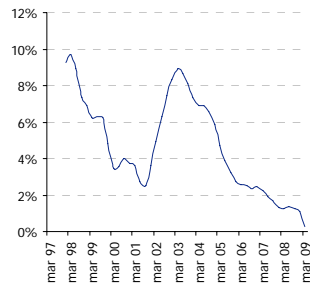


03. In Spain too

Renting as a way of smoothing out the cycle

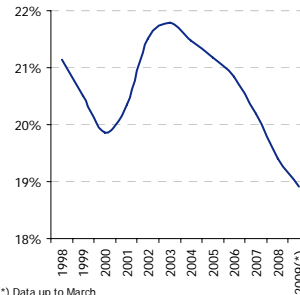
The slowdown of growth in rental prices makes it easier to access this form of home

Rental price growth
Year-on-year growth rate . 4 quarters moving average



Source: BBVA ERD based on BoS

Rental housing affordability
Rental cost/income (%)



(*) Data up to March
Source: BBVA ERD

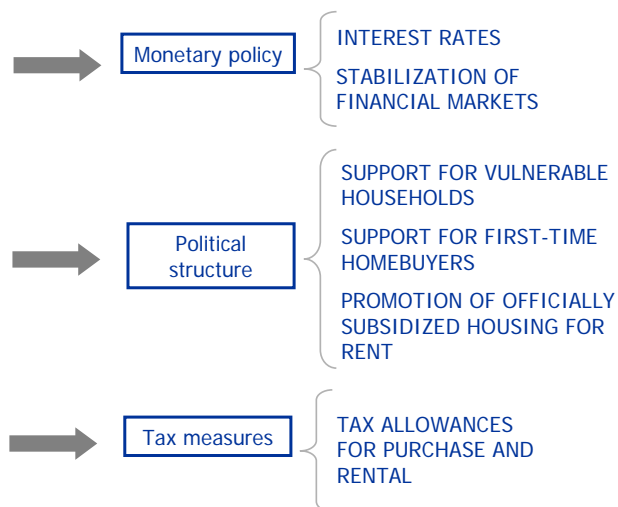
Other factors also have a positive effect: increase in the supply of rented homes, improvement in tax treatment, uncertain financial environment, etc.

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04. Countercyclical measures to speed up recovery

From the start of the crisis a series of economic measures have been implemented with an impact on housing



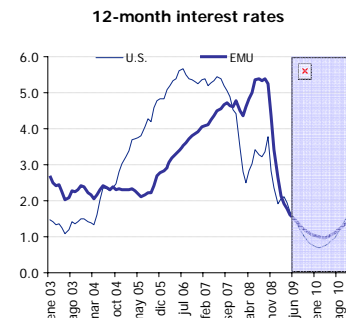
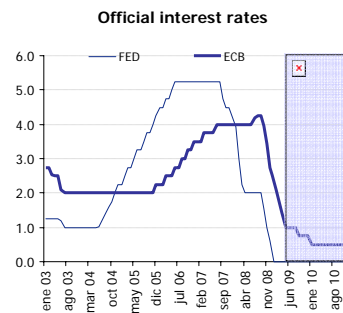
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04. Countercyclical measures to speed up recovery

Monetary policy measures

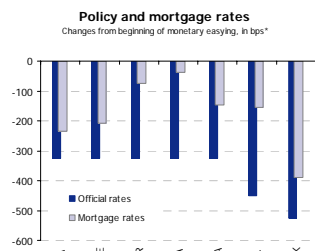
Monetary policy reactions in Europe and the U.S. pushed interest rate at all-time lows... although this happened at different speeds



04. Countercyclical measures to speed up recovery

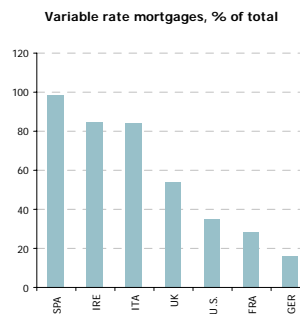
Monetary policy measures: Results

... and have been passed on to mortgage rates at different speed in different countries



Note: the mortgage rates are the mostly used rates in each country. In Spain, Ireland, United Kingdom and Italy, variable rate on new operations. Germany and France, 10-year fixed rate. U.S. 30-year fixed mortgage rate.
* Federal Reserve (Nov-07); Bank of England (Dec-07); ECB (Oct 08).

Source: ECB; Datastream; BBVA ERD.



Source: European Mortgage Federation; OECD.

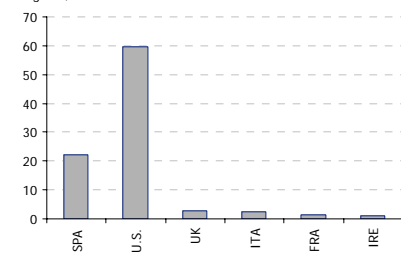
In Spain the effect has been significant, in part due to the relatively high proportion of variable-rate mortgages

04. Countercyclical measures to speed up recovery

Specific measures

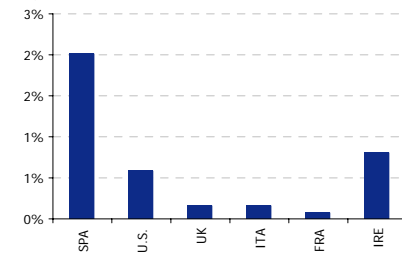
In Spain the amount budgeted for the recovery of the sector reaches 2% of GDP, more than in the other countries under analysis

Housing sector rescue plans
budgeted, in € bn



Note: including the total amount of budget announced for rescue plans such as: help to the construction industry, development of social housing plans, help to rental market and first-time buyers. Indirect costs, such as deriving from the cancellation of some taxes are excluded.
Sources: Ministries of Housing, national sources, BBVA ERD.

Housing sector rescue plans
budgeted, as % GDP



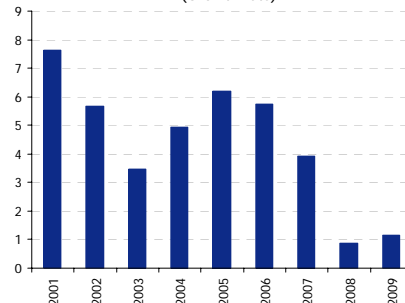
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Sources: Ministries of Housing, national sources, BBVA ERD.

04. Countercyclical measures to speed up recovery

Specific measures

In particular, measures such as the local investment plan will reactivate non-residential construction for the rest of the year.

Spain: Non-residential construction
(Growth rate)



Source: National Institute of Statistics and BBVA ERD

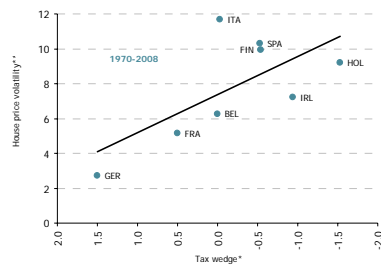
04. Countercyclical measures to speed up recovery

The role of tax allowances in the housing market

A tax regime that encourages home purchase implies three kinds of distortion in the housing market:

1. Encourages investment in housing rather than other assets
2. Increases house prices:
Favors higher-income buyers
3. Penalizes home rental and labor mobility

Correlation between tax wedges and house price volatility



* Difference between user cost of housing 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.

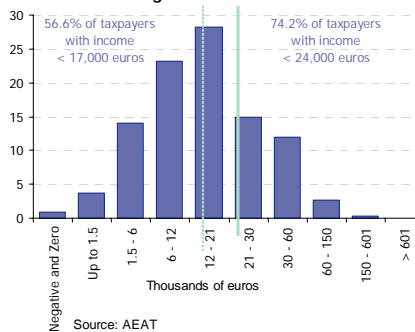
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Who is affected by the removal of tax allowances for house purchase from 1 January 2009?

Taxpayers with an income < 24,000 euros (74% of the total) will continue to benefit from the allowance

Income Tax 2006.
Distribution of taxpayers according to general tax base



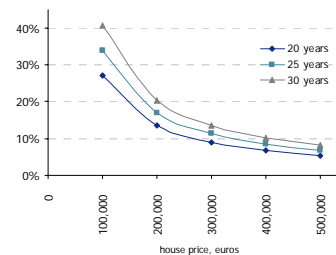
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The most important factors affecting the decision to buy now or when the allowance is abolished (1 January 2011) are:

- House prices
- Duration of mortgages

Equivalent drop in housing price by mortgage term



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

Thus, buyers of low-priced homes, with the longest mortgages, are those who benefit the most from the allowances. Given that the tax allowance will be eliminated only for high income groups, it is likely that this benefit will continue to exist.

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Although these kinds of measures tend to be taken when prices are rising, the initiative is a move in the right direction. However, given that these kind of measures always imply some trade-offs, they could be designed differently

- Income limits

- Discrimination may generate distortion in income tax returns and thus in effective marginal rates

- Period of application

- Postponing the removal of the allowance until 2012 could contain the price adjustment, but it could give time for the economy to recover substantially by this date.

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Apart from the measures to promote rental taken previously, the government plan includes:

- Bringing the thresholds of the allowances for home rental and purchase onto the same level
- The tenant may deduct up to 60% of rental (100% if the tenant is under 35 years of age)

These measures will have a positive impact, since the rental market is key to absorbing the stock of new unsold housing in a phase of falling prices and unfavorable economic environment

Other measures taken such as simplifying the eviction process and support for converting homes originally aimed for sale into rental, should also have an effect on the rental market.

Main messages

- The economic policy responses to the **deterioration of the global economy** are significant and highly coordinated. Although uncertainty persists, the focus of attention will move from the depth of the adjustment to its duration
- Nearly all the real estate markets in **developed economies have registered significant falls** in prices and volumes
- Unlike most other European real estate markets, in **Spain** the sector is characterized by a major **imbalance in activity** rather than in prices. The stock of unsold new homes will begin to decrease starting in the first quarter of 2010, and will return to 2005 levels by the end of 2012.
- Overall, **housing prices** will fall cumulatively about 30% from their peak.
- The **countercyclical measures** introduced by the government, such as the announced elimination of the tax deduction allowance for home buyers, may speed up the recovery of the sector.



BBVA

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