FOCUS ON:
The Housing Bubble Hypothesis Revised

February, 16th 2007

THE HOUSING BUBBLE HYPOTHESIS REVISED

Foreword

Less than one year ago we examined the ongoing trends in house prices to assess the extent and size of the risk of a bubble burst in some major industrial countries (the G7 Group plus Spain). At that time (see also our "Focus on": The housing bubble: causes and prospects, April 2006) our conclusion was that a burst was unlikely, at least until interest rates remained at low levels, and that in any case such risks were concentrated primarily in Spain and, to a lesser extent, in France and the UK.

Almost one year later there is no hint that a bubble burst is looming in the above countries. Meanwhile, in the US house prices have been stalling while activity levels in the residential segment have been badly hit. In our view this suggests a revision of the whole issue in order to re-assess whether some fundamentals have changed and what prospects can be now drawn.

Nominal and real house prices dynamics

Since the trough occurred in most countries in 1996-1997 real prices (i.e. nominal house prices deflated by the cpi, see *graph 1*) have performed quite differently in our sample of countries. These may be thus grouped into three major categories: a) countries where house prices have continuously declined over the whole period (Germany, Japan); b) countries that have seen a positive slope in the real price curve, with increases ranging from 30% (Canada) to 50-60% (US and Italy); c) countries that have experienced a dramatic increase in house prices with a doubling or more in the real value of their housing stock (France, UK, Spain).

According to most recent data, prices have kept rising in the above b) and c) groups but in the US, where prices have stabilised in the third quarter 2006.[1] There is also evidence that in many countries the pace of price increases has moderated somewhat (namely in Italy, Spain, the UK, France). However, despite growing concerns surrounding the sustainability of current house prices in the above countries, there is no evidence so far of a forthcoming turnaround.

Residential activity still unaffected but in the US

In *graph 2* real house prices and residential investment are reported. In most countries the latter is still growing, although at less vibrant rates, but – once again – in the case of the US where housing investment has declined by roughly 15% last year. In our view this latter trend confirms that where markets are large and resilient enough, as in the US case, activity levels react more rapidly than prices leading to an adjustment when a disequilibrium between demand and supply arises. Instead, similar imbalances may lead to far more serious consequences on prices should they occur in continental Europe's markets.

[1] House prices are recovering in Germany and seem close to stabilise in Japan. In real terms prices are in both countries below ,far below in Japan, their previous peaks.

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House prices need a correction as compared to rents

Another indicator showing that house prices are too high is the price-to-rent-ratio (*graph 3*). In most countries of our sample the relationship is highly unbalanced towards house prices which signals that at a certain point a correction will set in. As a matter of fact, if prices are perceived as too high it will become cheaper to rent the same house instead of buying it. On the other hand, the rent represents the actual, or simply potential, return on investment for house owners; if it drops below a certain level the equilibrium may be restored only through a parallel drop in the asset's value, i.e. in the house price. Although comparisons among countries are inappropriate due to different criteria used to measure rents, we do believe that at levels reached in Spain, France and the UK the ratio represents a constraint on further rises in the value of houses. As the UK case suggests, the above ratio is particularly sensitive to interest rates (clearly the advantage of buying instead of renting is directly related to the burden of mortgages) and as soon as interest rates move upwards there may be a sharp correction in households' preferences towards renting their apartments.

Interest rates are the crucial issue

Graph 4 demonstrates the decisive importance of interest rates. In the last few years interest rates in real terms have been particularly favourable to the borrower side both in the US and in the eurozone. In the mid-Nineties interest rates in real terms were around 5% in North America and in France and even higher in Italy and Spain. This can be compared with real long rates prevailing in most recent years in the range of 2% or even lower in the US, France and Italy and sometimes below 1% in Spain (where inflation has remained higher then the euro area average). Growing competition among financial institutions and a wave of financial innovation have widened the range of possible choices in the borrowers' hands concerning maturity, interest rates characteristics (fixed or variable), repayment profile, refinancing alternatives. This renewed financial environment has triggered a run-up to borrow in all major countries (particularly so in Spain where the rate of growth of households' mortgage borrowing has peaked with a 35% y-o-y increase at the beginning of 2006; see *graph 5*). What is worth noting, however, is the fact that mortgage lending is softening quite everywhere due to both a slight increase in long term rates and early signs of saturation showing up in some local residential markets. A factor pointing to further slowdown in mortgage lending activity is the size already reached by the outstanding debt (see also *graph 6*): in countries such as the US and the UK it has become as high as households' disposable income; in Spain the level of mortgage debt is lower but it has grown threefold (to 46% of GDP) in the past ten years, a rate of growth clearly unsustainable in the long run.

Conclusions and short term prospects

Risks of a widespread housing bubble burst involving most industrial countries seem now less threatening than a few months ago. Two factors support this more benign view.

First, interest rates may be further hiked; in fact they are most likely close to their peak in the US, while also in Europe room for substantial increases seems limited. Furthermore, rates on longer maturities have performed quite differently from previous tightening phases as, due to a number of factors, they have barely reacted to the rise of policy rates; also in perspective, the probability of a dramatic worsening in borrowing conditions is reasonably low.

Secondly, in the UK a sizeable correction in monetary policy has already occurred; however, the housing market has suffered to a very limited extent from the new and less favourable financial environment; prices in real terms have stabilised and the price-to-rent-ratio has declined somewhat, but a clear-cut housing collapse has not actually materialised.

The recent housing market evolution in the US raises much more serious concerns. However, as already mentioned, the reaction to the fall in demand has so far impacted more severely on activity levels than on prices. This, combined with the likeliness that interest rates have already peaked, bodes well for price dynamics in the near future. In this regard, it is also worth stressing that a sharp contraction in activity implying only a minor price adjustment may be much easily overcome. As a matter of fact the value of collaterals against mortgages would be barely affected and households would not need to increase their savings in order to recover the virtual capital losses suffered in their real asset holdings. On this basis, we could guess that the recovery in the US residential sector may take place fairly soon, say within the current year (although on year average there may still be a remarkable decline as compared to 2006).

As for the Group's European countries, the risks of a bubble burst have shrunk but cannot by no means be definitely ruled out, at least as far as France and Spain are concerned. As a matter of fact, in Italy property values are high although, when expressed in real terms, they outpace previous 1992-93 peaks by a mere 15-16%; improved macroeconomic conditions should also help sustaining households demand of houses thus limiting the scope for a substantial price drop. In France and Spain all available indicators show that current prices may be exposed to a downturn, particularly in the latter country where local markets are more segmented (there are indications that coastal areas are overbuilt while urban demand can keep rising); in addition, even a modest interest rate rise – which in Spain, other things being equal, may be triggered in real terms also by a tighter control over inflation – could provoke disproportionate reactions in households' behaviour.

All in all, an overall bubble burst seem unlikely, the US could be close to bottoming out, Spain is the Group's country where the risks of a house price collapse remain of sizeable magnitude.

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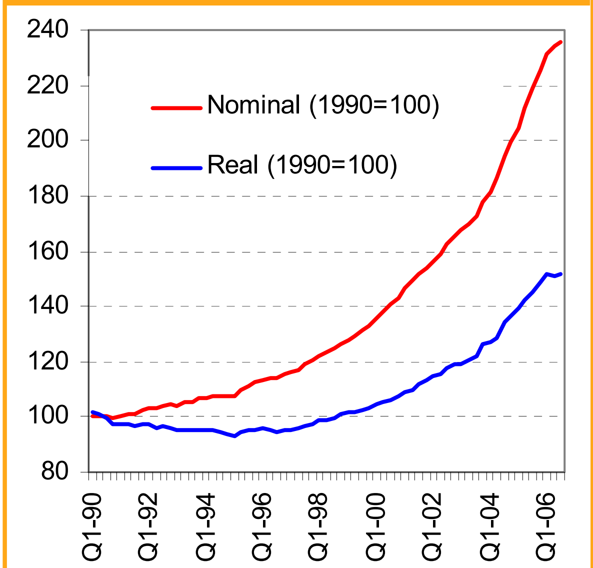
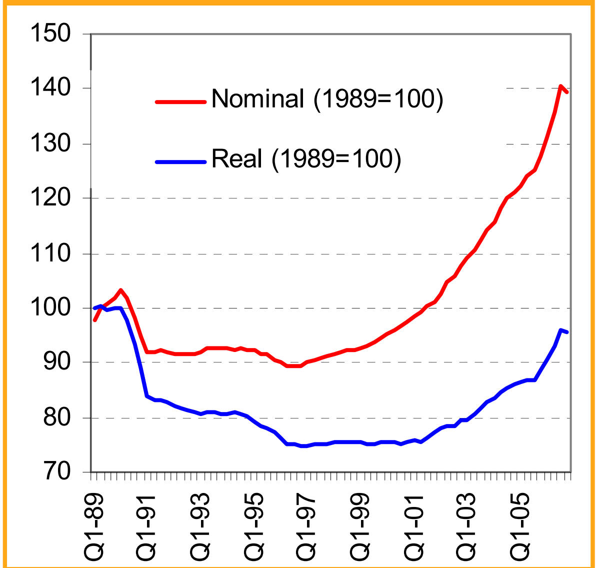
Graph 1 – **Housing prices**

a - **USA**



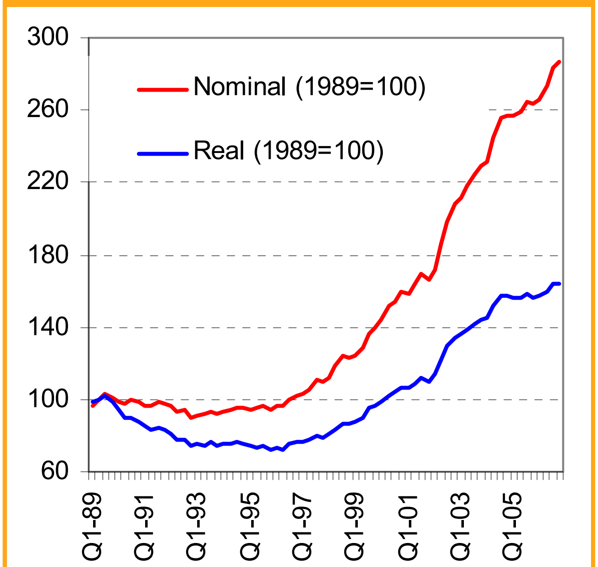
Sources: our calculations on OECD and OFHEO data; quarterly data

b - **Canada**



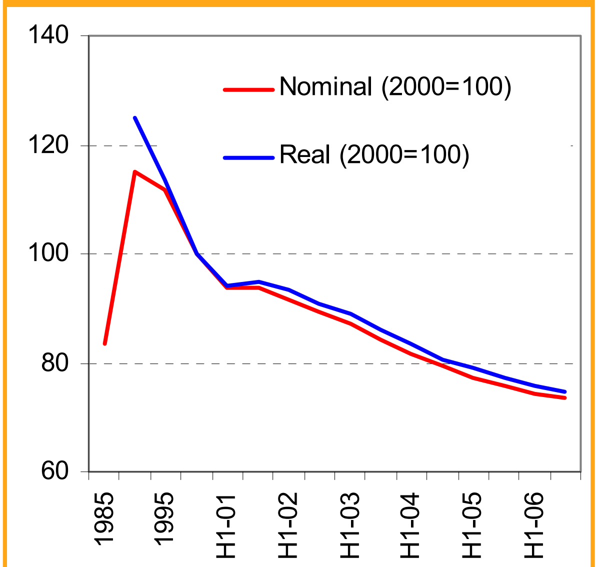
Sources: our calculations on OECD and Statistical Agency data; quarterly data

c - **United Kingdom**



Sources: our calculations on OECD and ODPM data; quarterly data

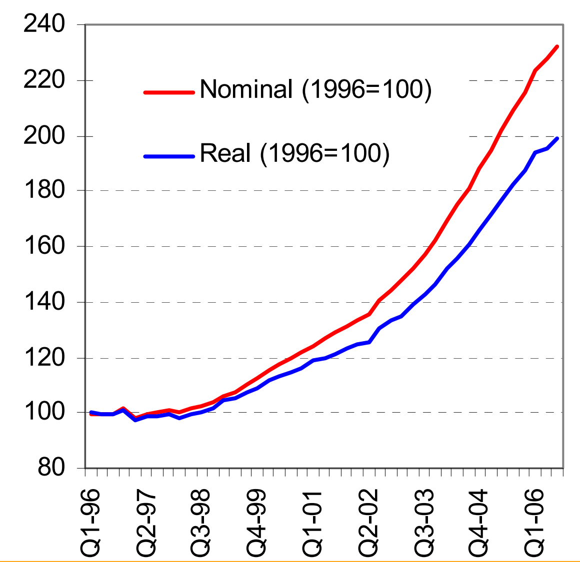
d - **Japan**



Sources: our calculations on OECD and JREstate Institute data; half-yearly data

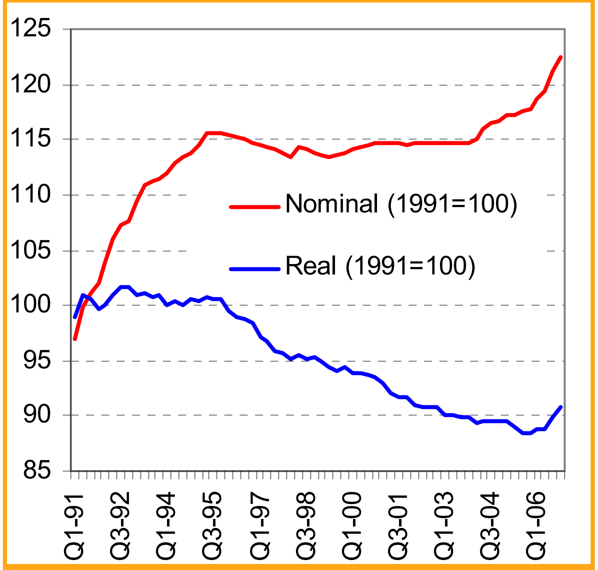
Graph 1 – **Housing prices (continued)**

e - **France**



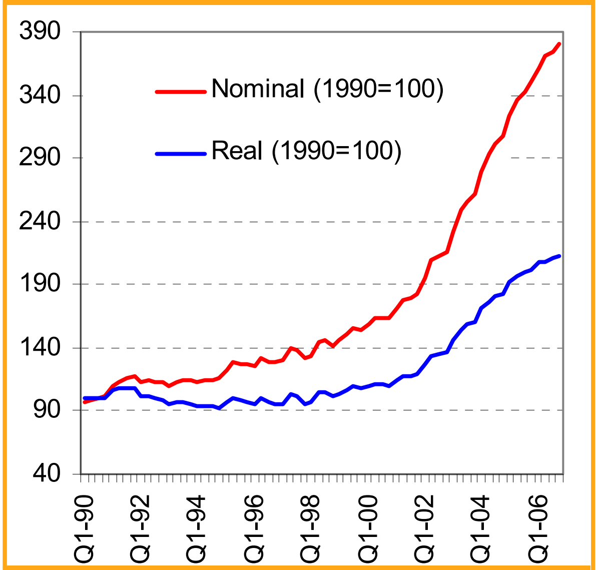
Sources: our calculations on OECD and INSEE data; quarterly data

f - **Germany**



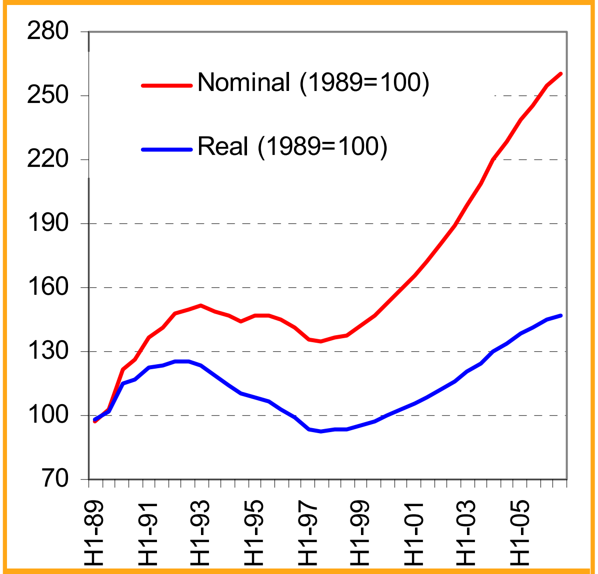
Sources: our calculations on OECD and Bundesbank data; quarterly data

g - **Spain**



Sources: our calculations on OECD and Banco de Espana data; quarterly data

h - **Italy**



Sources: our calculations on OECD and Nomisma data; half-yearly data

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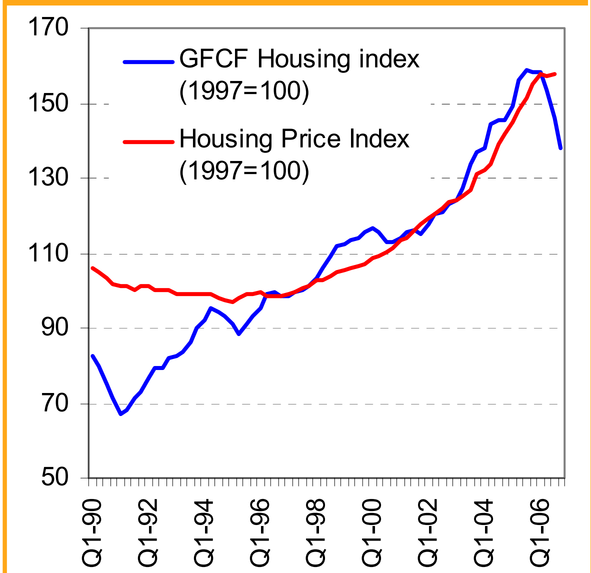
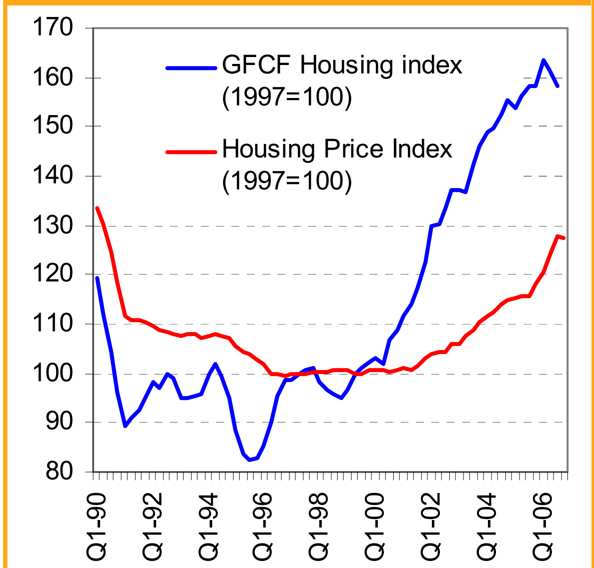
Graph 2 – **Real housing prices and residential investment**

a - **USA**



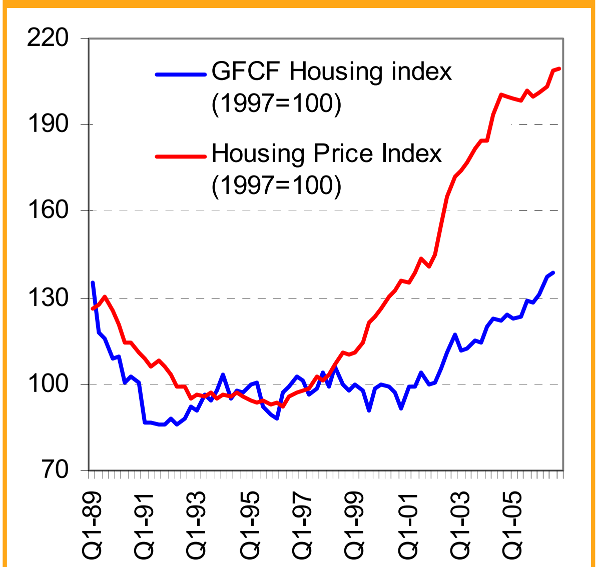
Sources: our calculations on OECD and OFHEO data; quarterly data

b - **Canada**



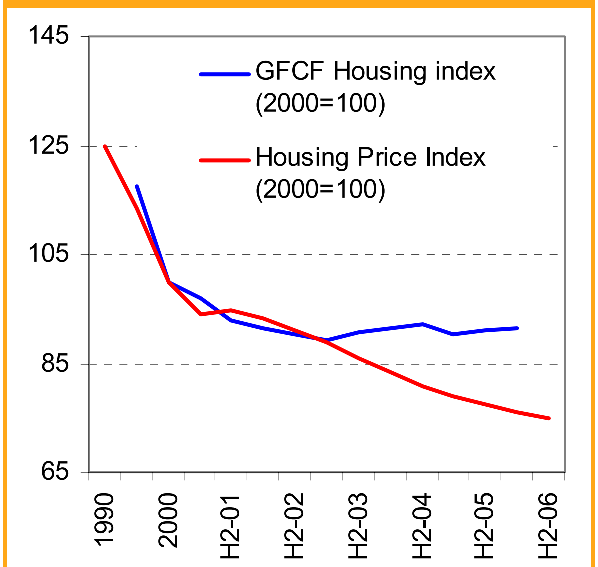
Sources: our calculations on OECD and Statistical Agency data; quarterly data

c - **United Kingdom**



Sources: our calculations on OECD and ODPM data; quarterly data

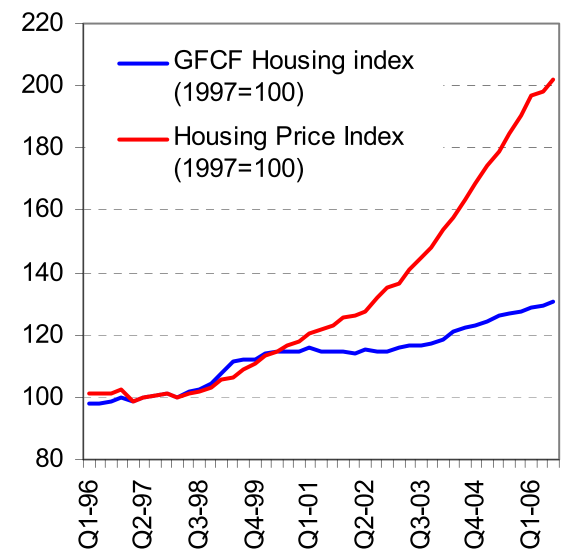
d - **Japan**



Sources: our calculations on OECD and JREstate Institute data; half-yearly data

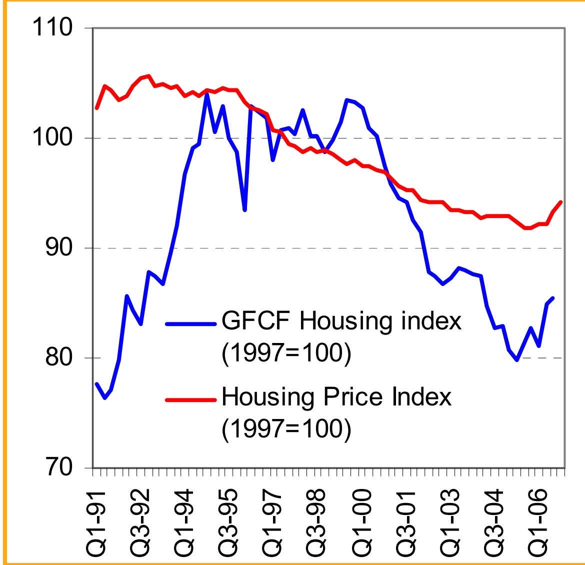
Graph 2 – **Real housing prices and residential investment (continued)**

e - **France**



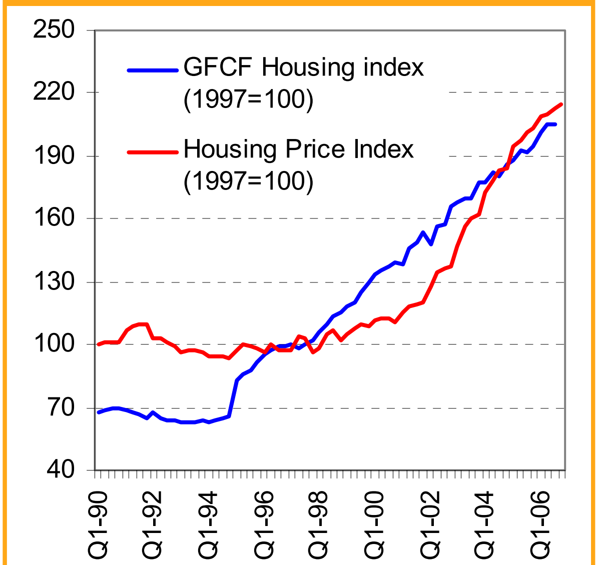
Sources: our calculations on OECD and INSEE data; quarterly data

f - **Germany**



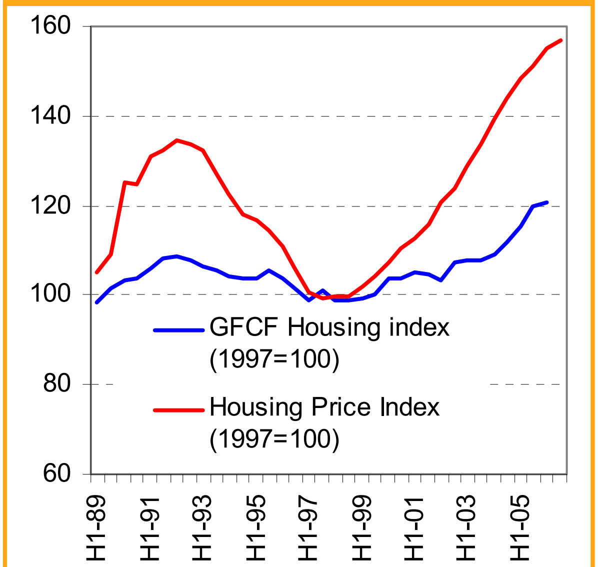
Sources: our calculations on OECD and Bundesbank data; quarterly data

g - **Spain**



Sources: our calculations on OECD and Banco de Espana data; quarterly data

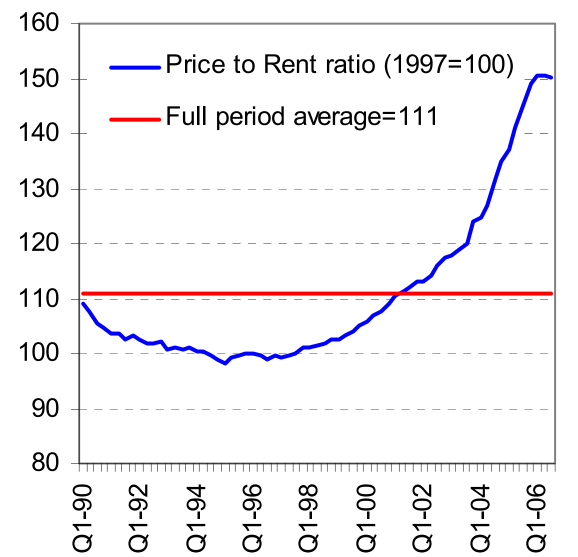
h - **Italy**



Sources: our calculations on OECD and Nomisma data; half-yearly data

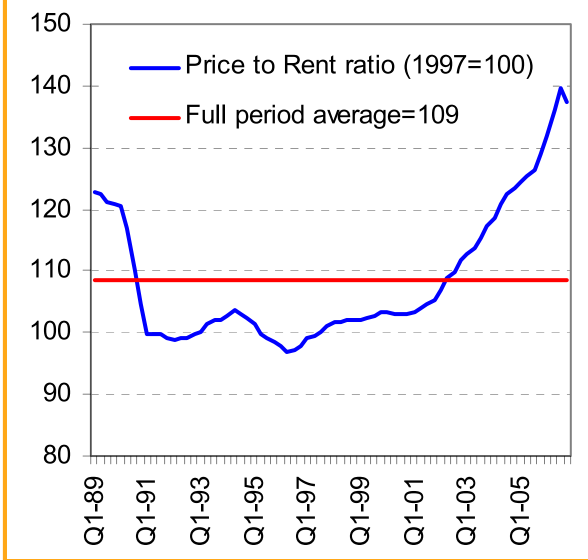
Graph 3 – **Price to rent ratios**

a - **USA**



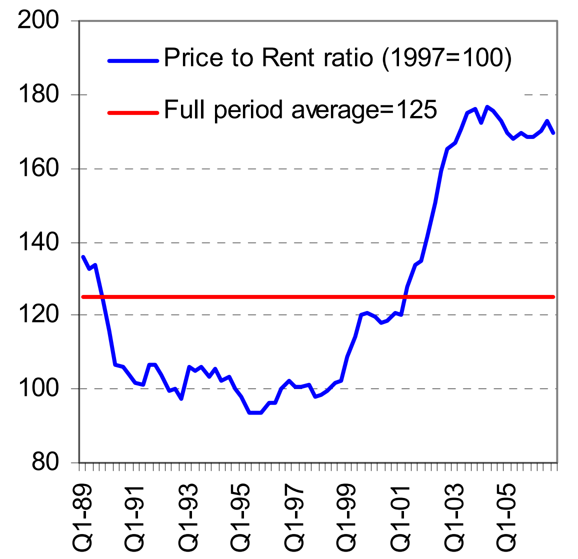
Sources: our calculations on OECD and OFHEO data; quarterly data

b - **Canada**



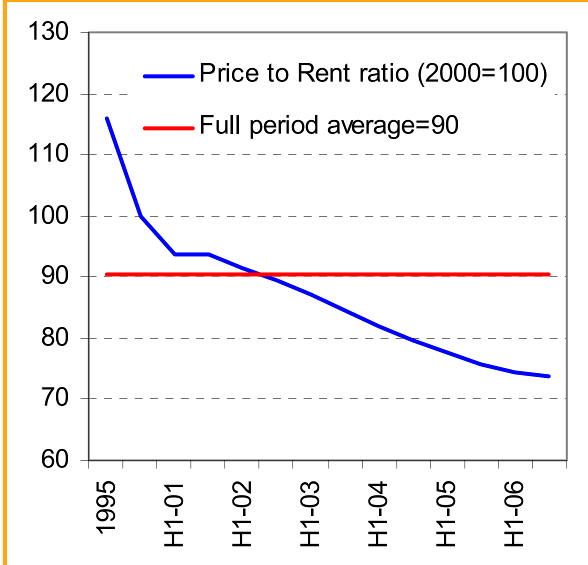
Sources: our calculations on OECD and Statistical Agency data; quarterly data

c - **United Kingdom**



Sources: our calculations on OECD and ODPM data; quarterly data

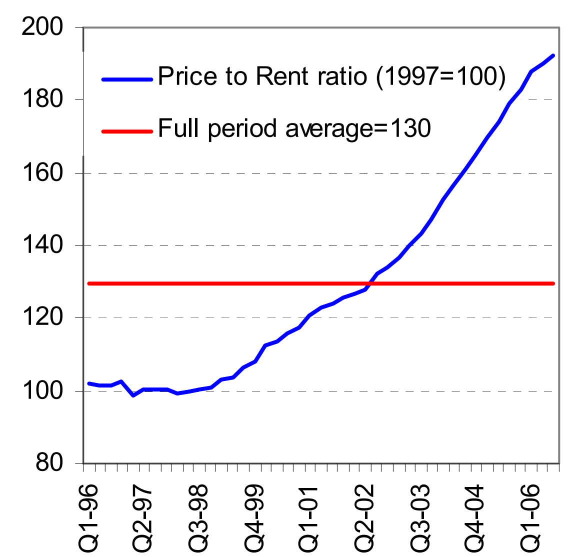
d - **Japan**



Sources: our calculations on OECD and JREstate Institute data; half-yearly data

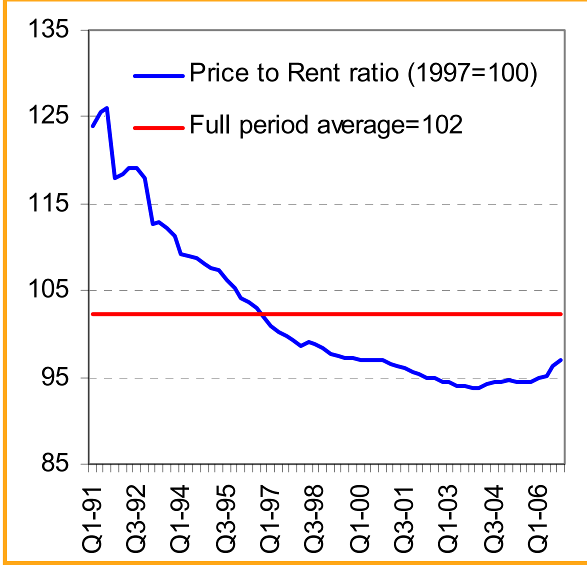
Graph 3 – **Price to rent ratios (continued)**

e - **France**



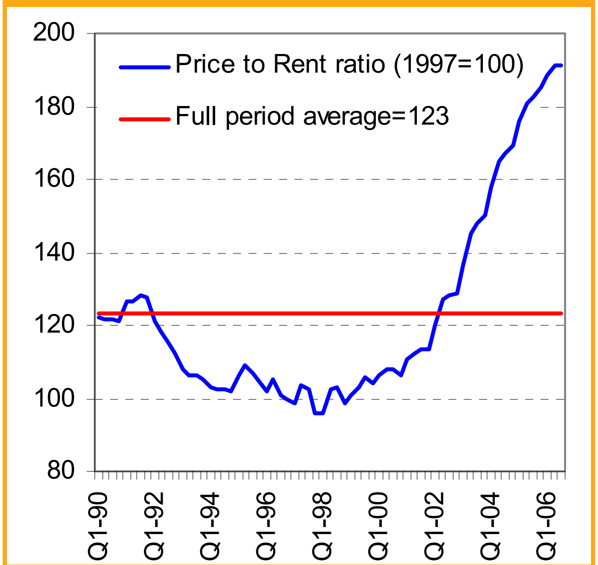
Sources: our calculations on OECD and INSEE data; quarterly data

f - **Germany**



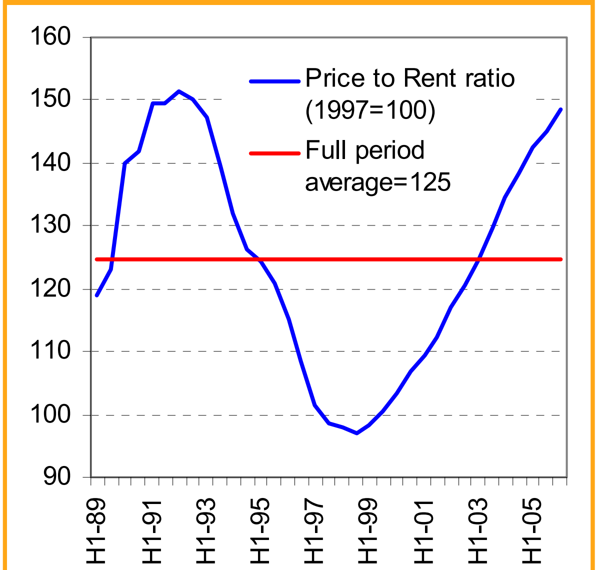
Sources: our calculations on OECD and Bundesbank data; quarterly data

g - **Spain**



Sources: our calculations on OECD and Banco de Espana data; quarterly data

h - **Italy**



Sources: our calculations on OECD and Nomisma data; half-yearly data

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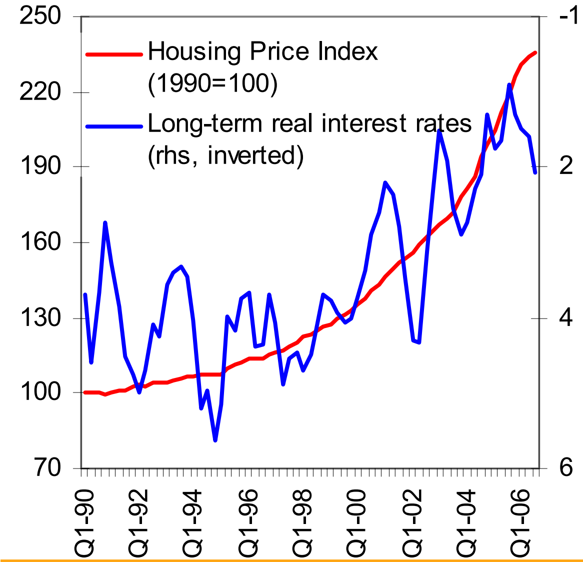
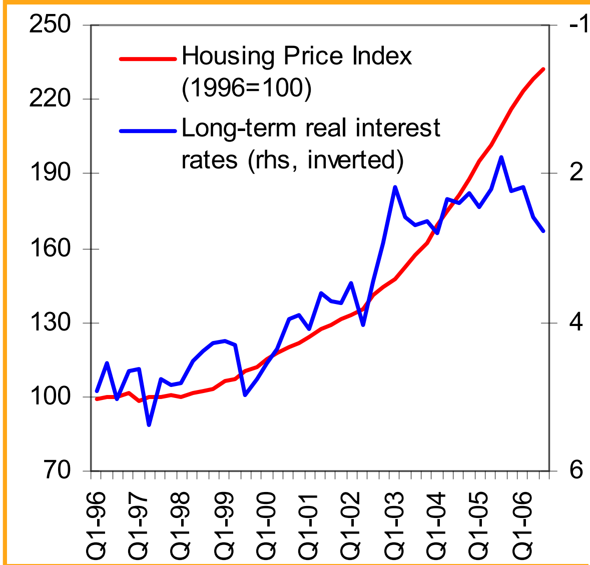
Graph 4 – **Housing prices and real interest rates**

a - **USA**



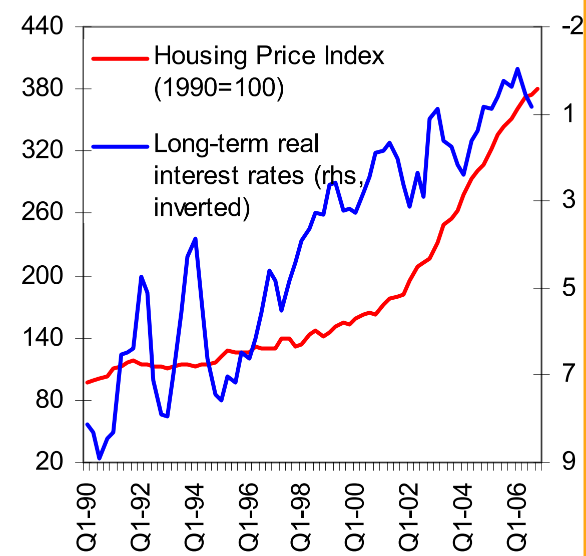
Source: our calculations on OECD data; quarterly data

b - **France**



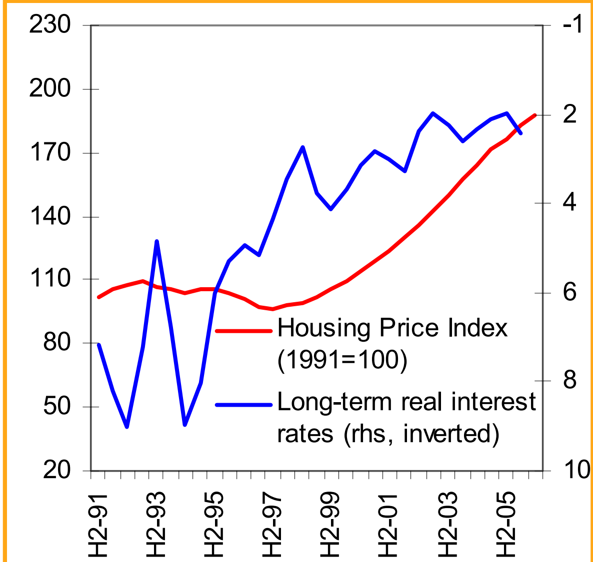
Source: our calculations on OECD data; quarterly data

c - **Spain**



Source: our calculations on OECD data; quarterly data

d - **Italy**

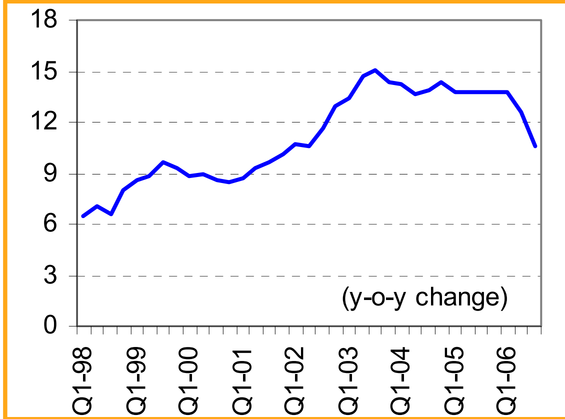


Source: our calculations on OECD data; quarterly data

THE HOUSING BUBBLE HYPOTHESIS REVISED

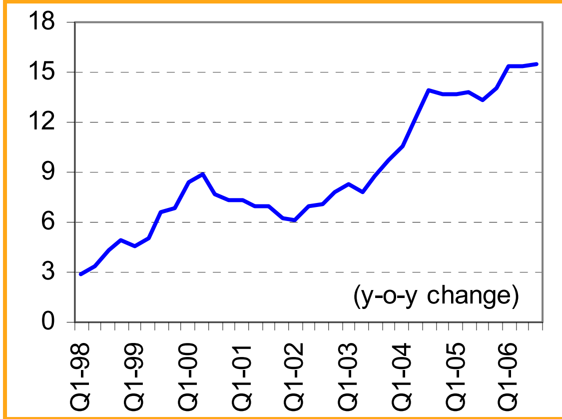
Graph 5 – **Households' mortgage debt**

a - **USA**



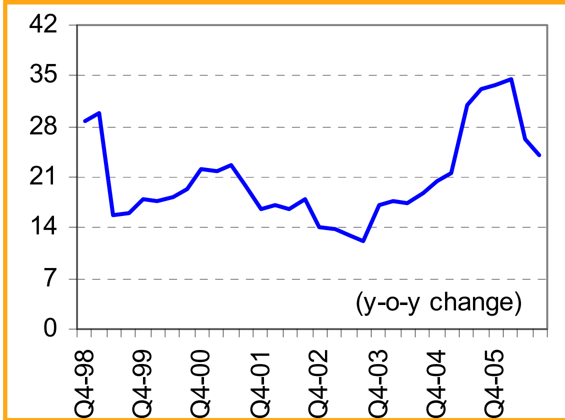
Source: Federal Reserve; quarterly data

b - **France**



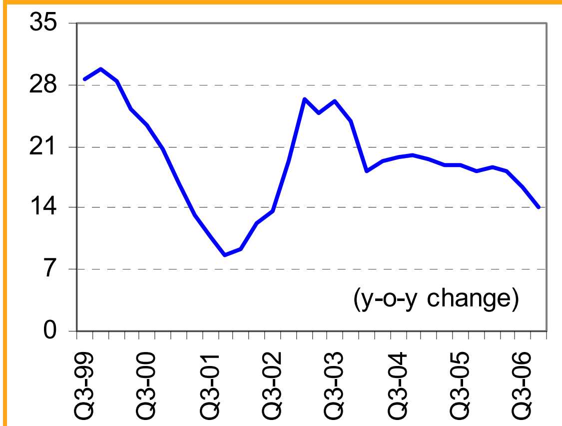
Source: Banque de France; quarterly data

c - **Spain**



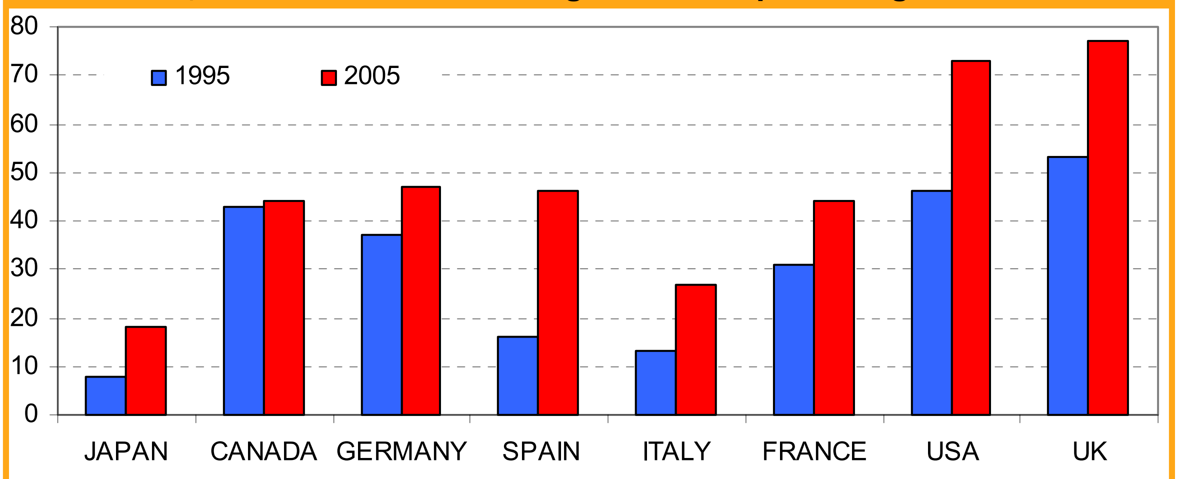
Source: Banco de Espana; quarterly data

d - **Italy**



Source: Banca d'Italia; quarterly data

Graph 6 - **Households' mortage debt as a percentage of GDP**



Source: OECD