

The history of house prices and bubble deflations

Chris Watling | Longview Economics | 04 May 2012

Analysis of between 100 to 800 years of house price data in a variety of Western economies demonstrates that on average house prices rise in real terms 0.5% to 1.0% per annum, depending on the country and time series analysed (see “Safe as Houses?”, N Monnery, 2011). The same analysis also shows that the 15 years leading up to 2008 were, in historical terms, exceptional for house prices:

“For a total of 37% of the time (across a variety of countries and 110 years of history – Ed), real prices fall for 10 years or more. In just under a fifth of cases, real house prices increase modestly at between 0% and 1%. In just over a fifth of cases, prices increase by between 1% and 3%, and in just a fifth of cases the rises are above 3%... there were 109 periods in which prices rose by more than a third over the course of a decade (a gain of over 3% each year for a decade). Nearly half of these have occurred since 1995...”

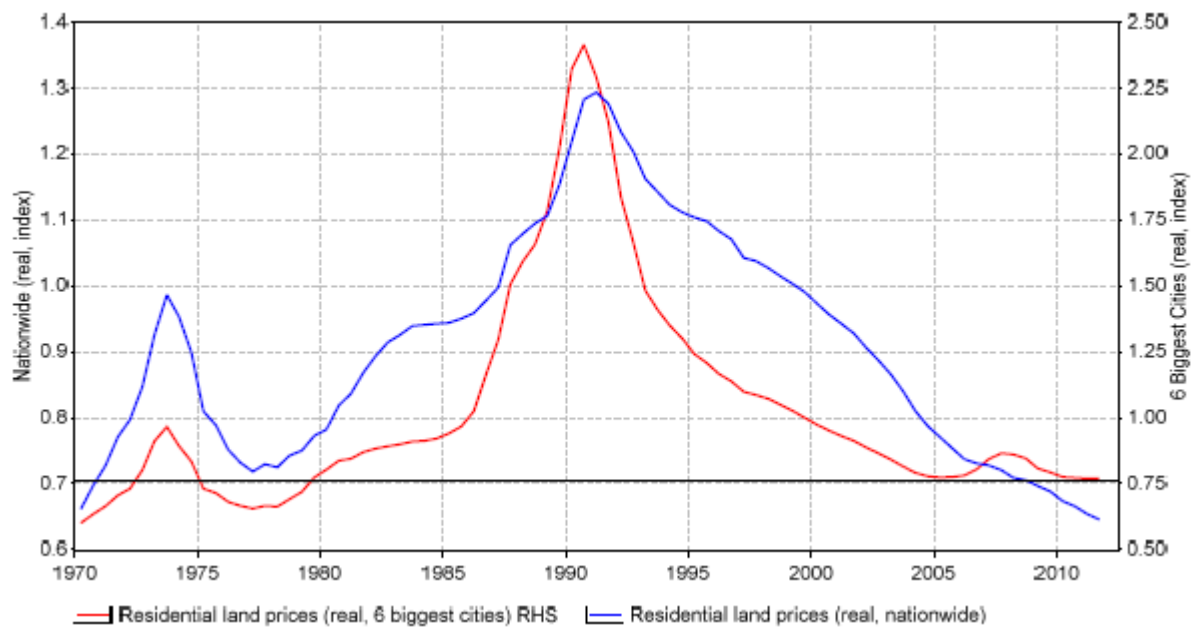
Intriguingly, while 47 of those 109 periods (i.e. where prices rose by more than a third over the course of a decade) were since 1995, a further 19 of them occurred in France post WWII as the market recovered, and the rest are spread around evenly. Therefore, excluding France, the last 15 years appears even more extreme. Monnery’s analysis in this instance is based on the distribution of price increases over rolling 10-year windows in four countries and one city (France, Norway, USA, Australia and Amsterdam).

Historically, the evidence suggests that sustained periods of above trend increases in real house prices are eventually followed by sustained periods of sub trend, or more likely, negative real house price annual increases. Japan is a recent example. Japanese residential land prices (that is, with land prices a good proxy for the house price trend given that land

is the key cost of the house purchase, especially when house prices are high) have fallen constantly since their peak in 1990/91 as shown in Figure 1. Land prices, in inflation/deflation-adjusted terms, are now back at or indeed below their early 1970s levels. The recent Japanese example is consistent with the historical experience outlined in Monnery's book of overinflated prices eventually returning back to their long-term up trend of between +0.5% to +1.0% real per annum.

Figure 1: Japanese residential land prices (inflation adjusted)
(1970–2012)

Japanese residential land prices (i.e. the main cost of a house) in inflation/deflation-adjusted terms are back to their levels of the early 1970s – i.e. have approximately halved on a nationwide basis and, in the six capital cities, have fallen by 68% (in real terms)



Source: Reuters EcoWin

Given the breaking of the interest rate transmission mechanism, coupled with the deleveraging forces underway, it seems likely that the historical precedent (and the Japanese experience) will be repeated in a variety of Western housing markets over coming years/decades.

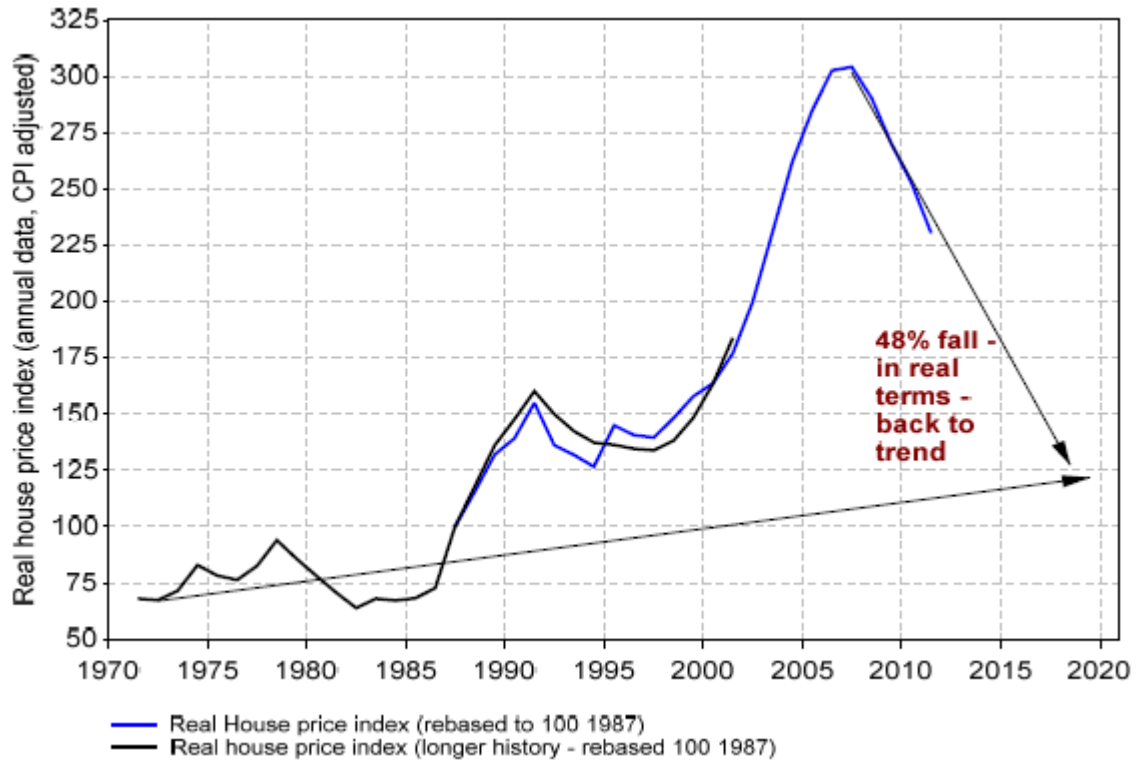
That likelihood rises in markets where demographic trends are poor/negative (i.e. many European countries, most notably Spain). Clearly, this is one of the key issues at the heart of the re-emergence of signs of stress in the Spanish sovereign bond market. Residential housing (along with commercial property) is the key collateral for banks' loan books. Equally, the addition of government austerity when the economy is within a fixed exchange rate regime, to an already deleveraging household sector (driven in large part by continued falls in house prices) exacerbates rather than improves the government's debt-to-GDP ratio (i.e. as economic growth turns negative, for example, Greece).

Therefore, one of the keys to Europe overcoming its sovereign debt crisis is the full unwinding of its housing bubble. In Spain, however, that is far off. On a benign uptrend view, there's an argument that Spanish house prices, having already adjusted significantly, might be approx 10% to 15% (in real terms) away from fully unwinding. Using the longer term 100 to 800 year historical precedent, and extrapolating at 1% trend rates from 1970, suggests a further 48% downside for Spanish house prices in real terms (Figure 2). Clearly, those are levels of real term falls that the banking system in its current capitalisation cannot withstand.

Figure 2: Spanish real house prices

(1970–2011)

Spain's poor demographics, high household indebtedness, government austerity and significant housing boom in the run-up to the 2008 peak, all suggest that Spanish house prices are likely to follow a similar path to the Japanese precedent as well as historical experience. In which case real prices are likely to deflate by more than 50% in real terms –from peak to trough – and possibly as much as 70%). That view is further supported by the broken transmission mechanism and deleveraging banking sector.



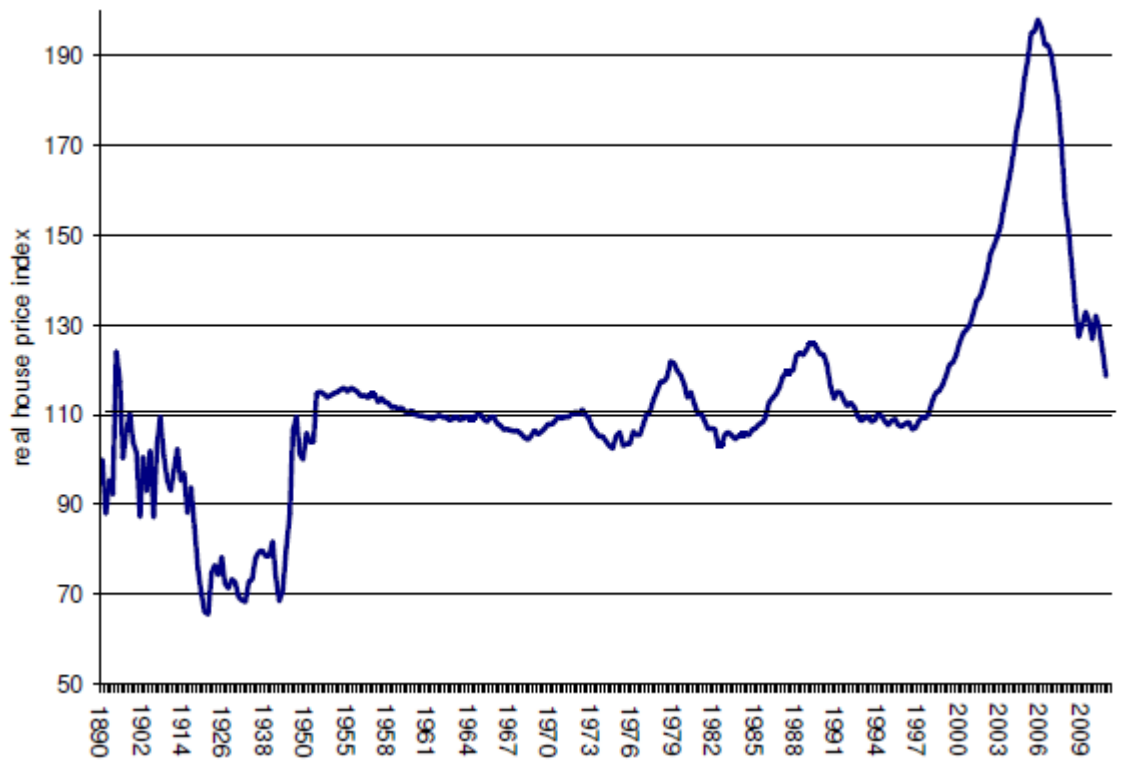
Source: Reuters EcoWin

Applying that long term-approach to other housing markets, it is clear that of the major Western economies only the US has deflated its house prices to close to its long-term uptrend. Indeed, on some measures, US house prices are now below their long-term uptrend rate (Fig 4) while on other measures, real house prices are within 10% of their long term trend line (Figure 3).

Figure 3: US house price series (real)

(1890-2010)

The US is the most advanced of all Western examples in terms of deflating its housing bubble. On this data, US real house prices are close to being back to their long term trend line (i.e. back close to 110)

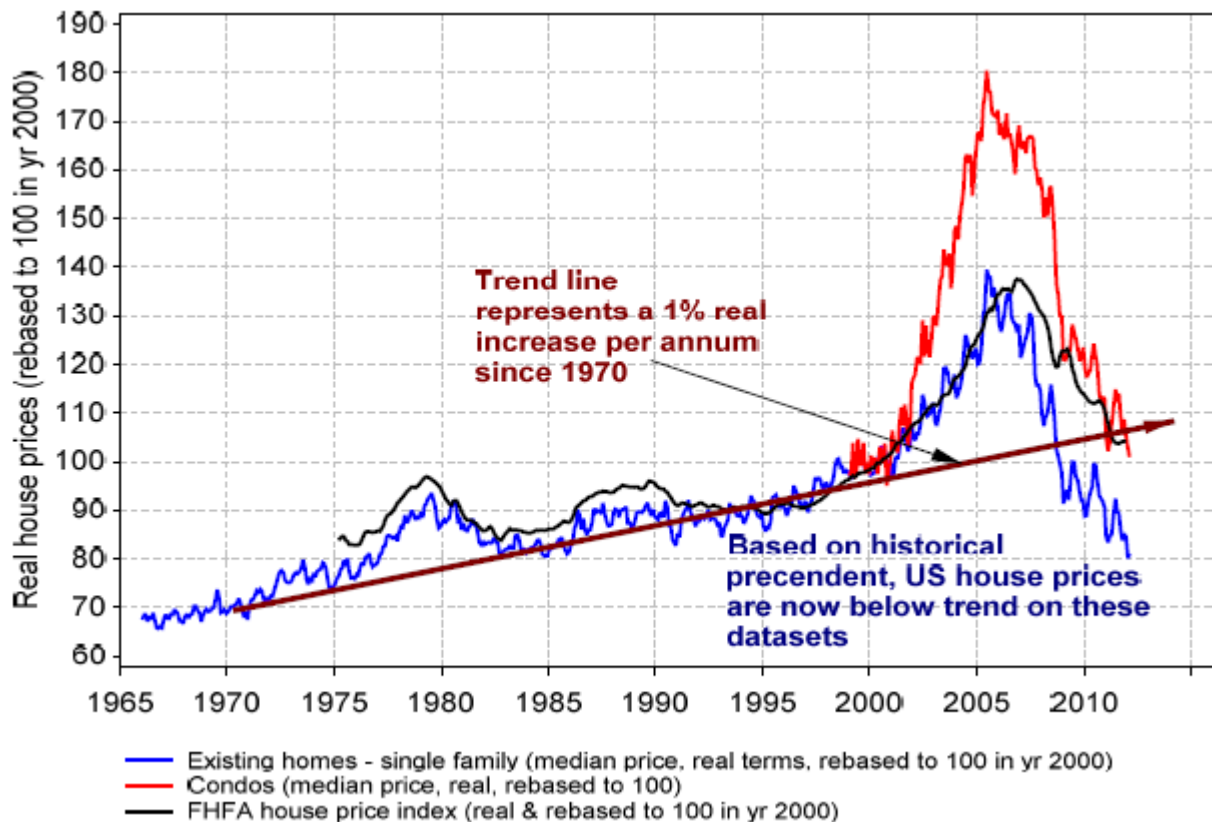


Source: Shiller data

Figure 4: US house prices (real)

(1966–2011)

On these measures, US house prices are now below their long-term uptrend growth rate of 1% pa.



Note: Various measures, all real and rebased to 100 in year 2000

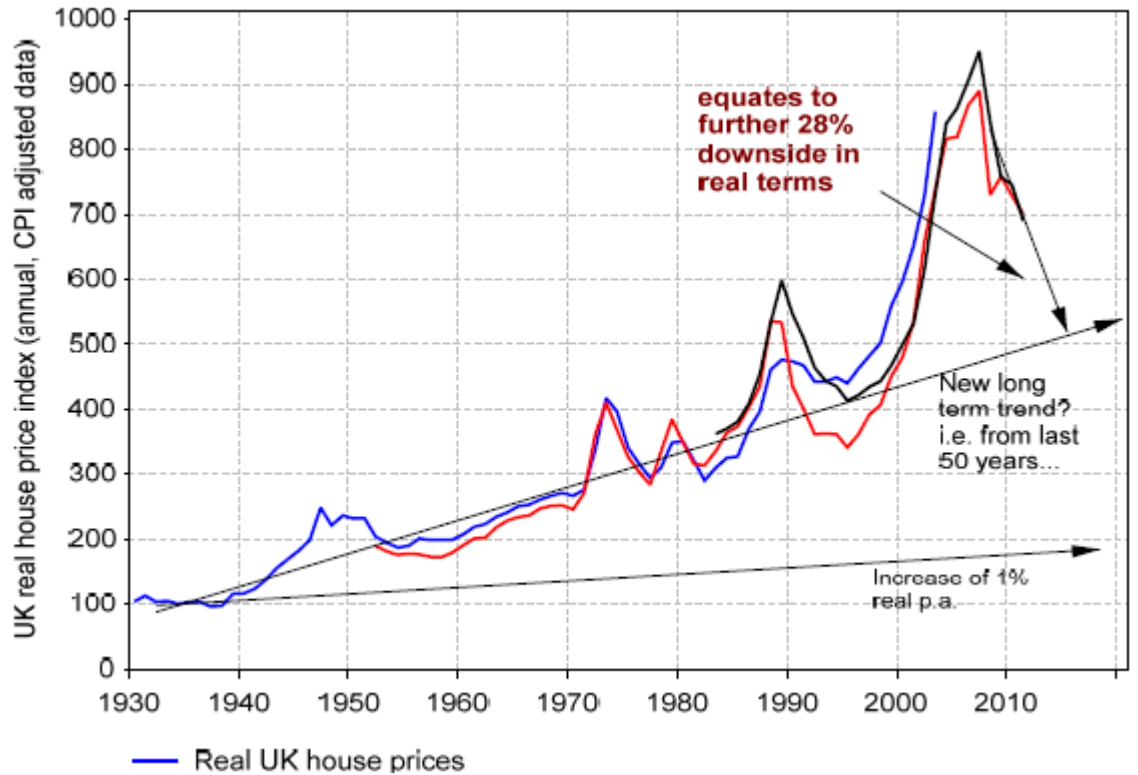
Source:

Germany, in contrast, is the only major economy which has not had a significant house price bubble in the past 40 years (Figure 8). However, in Australia (Figure 7), Spain (Figure 2), Holland (Figure 10), France (Figure 6), the UK (Figure 5) and even Ireland (Figure 9), that gap remains wide suggesting that a repeat of the Japanese experience of the past two decades remains a real possibility for many of these economies.

Figure 5: UK house prices (real)

(1930–2011)

An extrapolation of the UK's trend from the early 1930s suggests that long-term fair value (in real terms) for house prices is significantly lower than current levels – a return to the 'newer' trend of the last 50 years points to an approx 28% fall (in real terms) from current levels.

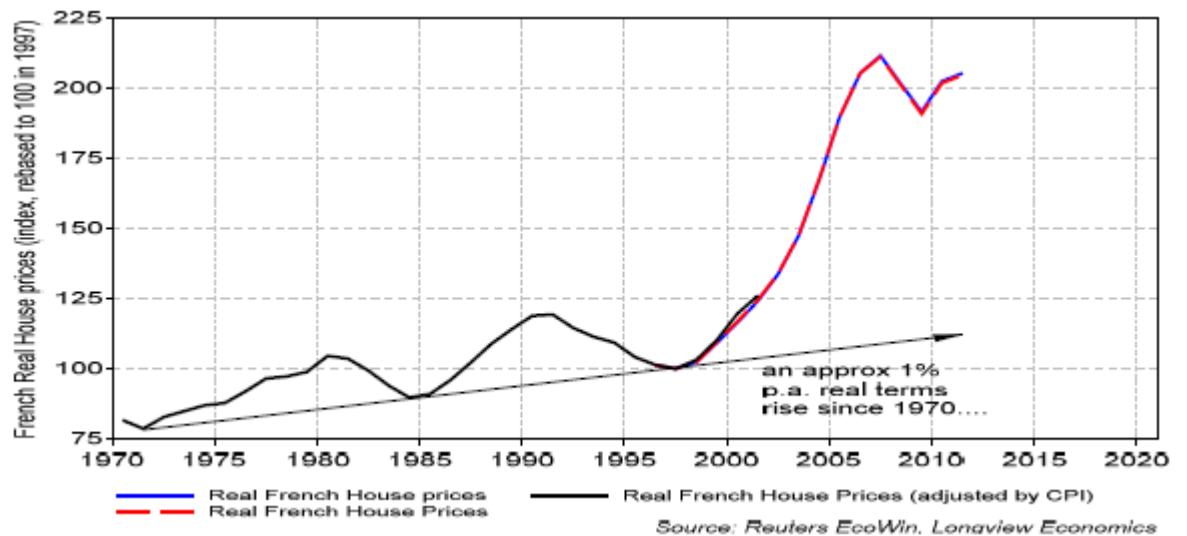


Source: Reuters EcoWin, UK DLGC

Figure 6: French house prices (real)

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French house prices have reaccelerated in the past two years and now stand significantly above their long-term trend growth rate.

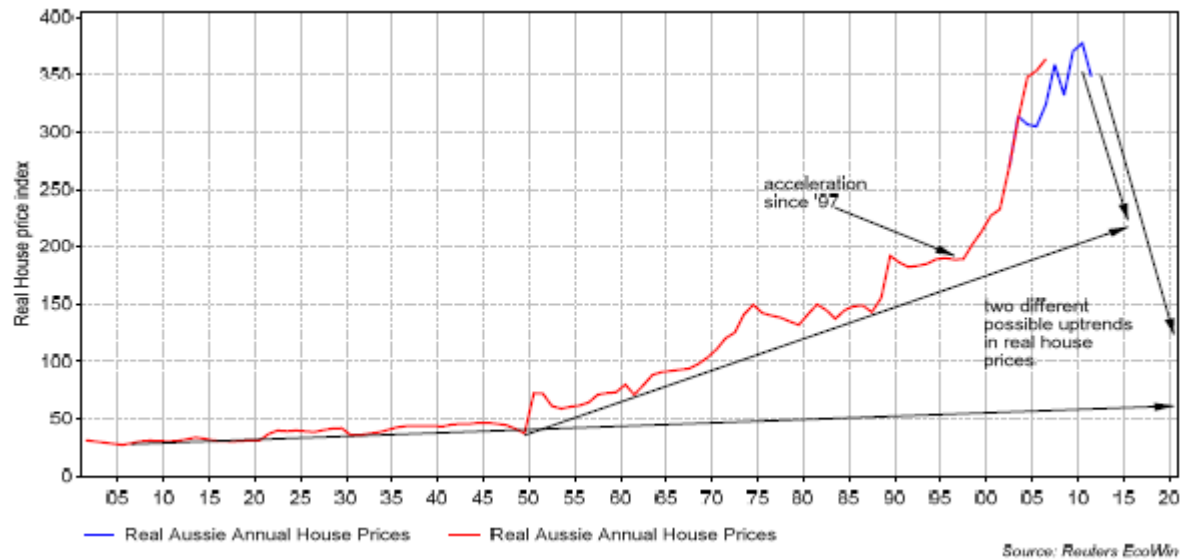


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Figure 7: Australian house prices (real)

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Australian house prices may be rolling over and are clearly significantly above long-term trend growth rates (i.e. with two possible long-term trend growth rates illustrated)

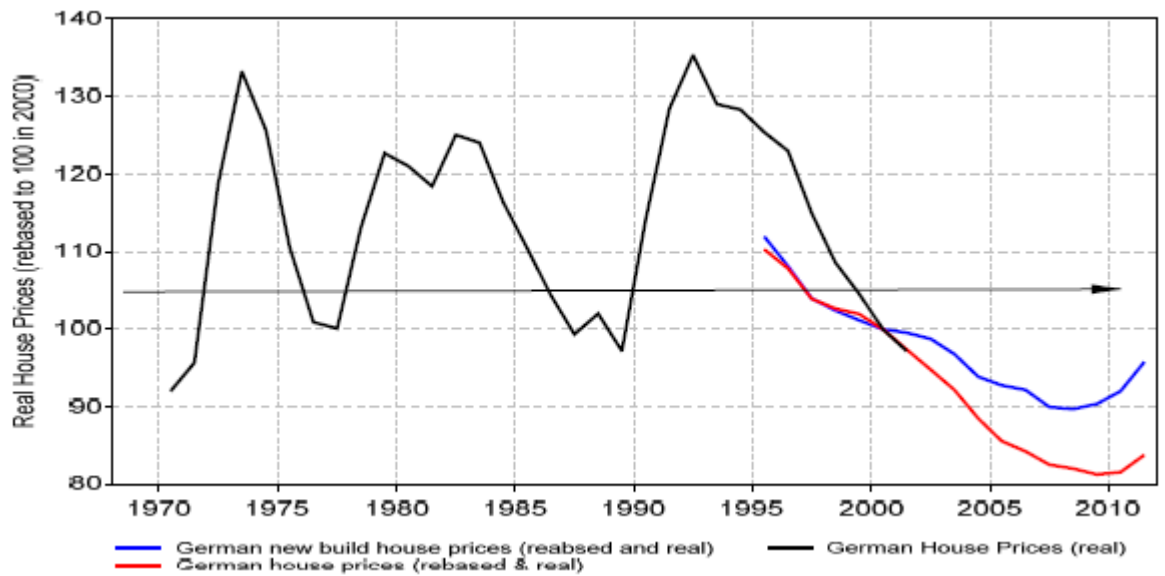


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Figure 8: Germany house price index (real)

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House prices have remained remarkably stable in Germany since 1970, in comparison to other Western housing markets. German real house prices have moved in a range of approx 40% and are currently close to their lowest levels since 1970.

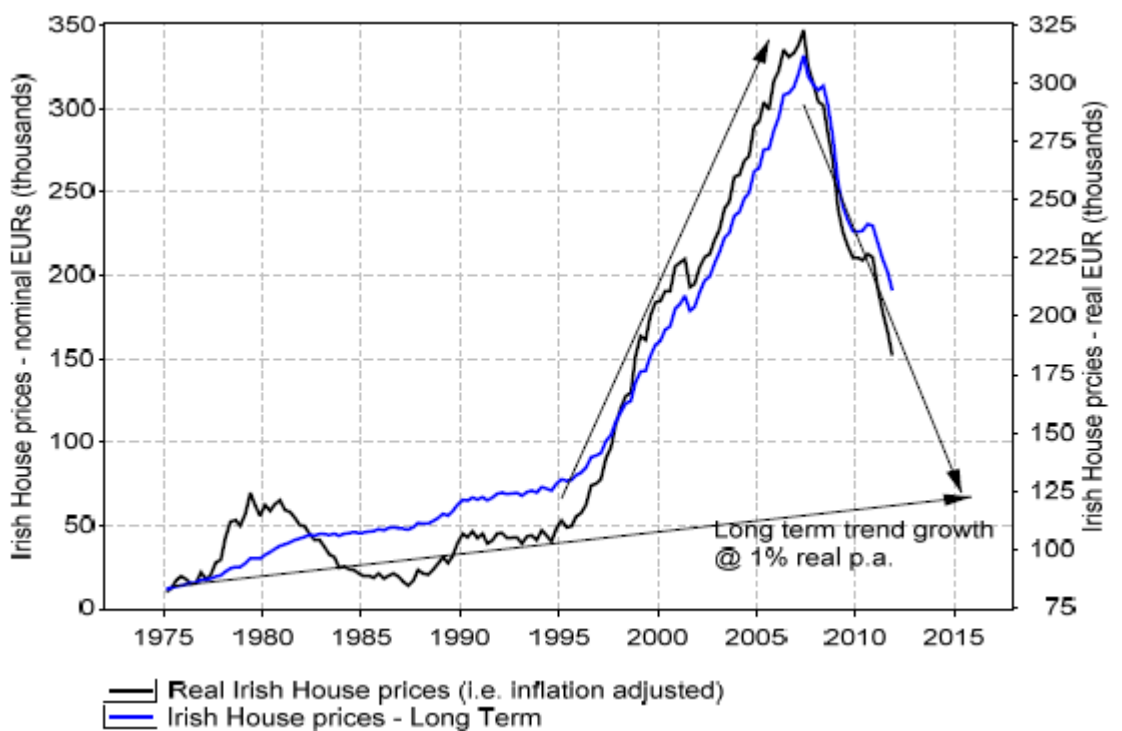


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Figure 9: Irish house price index (real)

(1975–2011)

Irish house prices have fallen by 42% from their peak in nominal terms and 43% in real terms. To return to a long-term uptrend (of +1% real growth per annum), real prices would need to fall a further 35% from current levels.

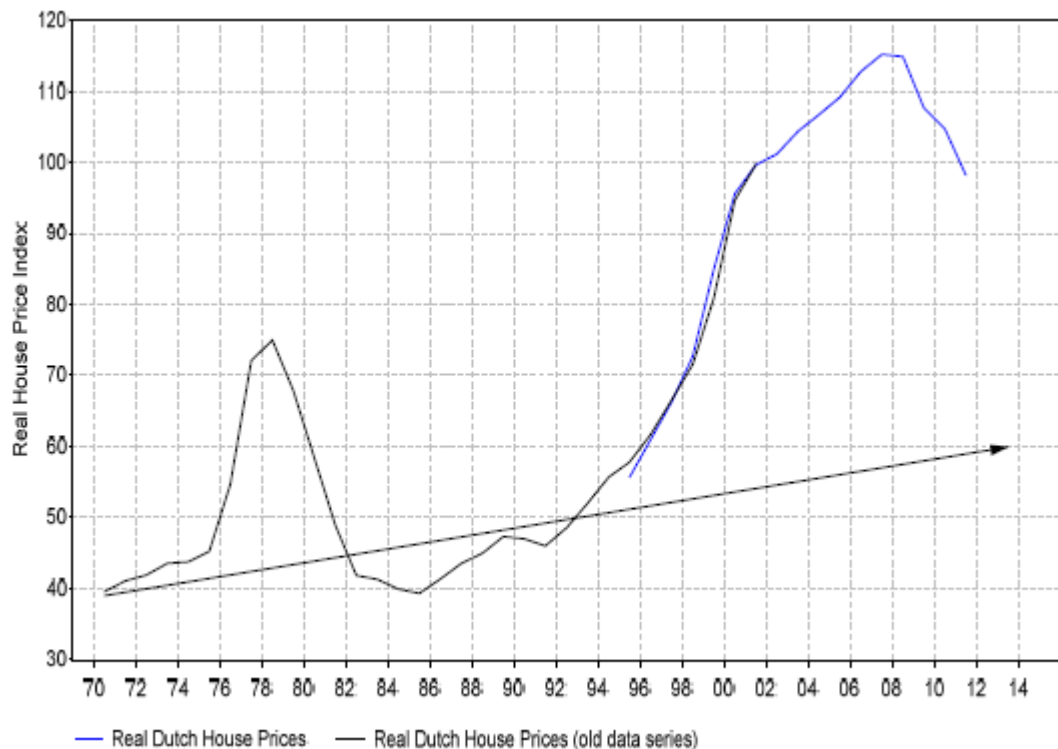


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Figure 10: Dutch house price index (real)

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A key reason the Dutch fiscal status has become a key concern for some market participants, despite Holland's AAA rating, is deflating house prices along with the highly indebted and deleveraging household sector. This chart suggests significant further downside to house prices in real terms over coming years.



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Longview Economics is an independent consultancy specialising in macroeconomic, thematic and commodity research. Founded in 2003 by CEO Chris Watling, Longview Economics offers strong macro and quantitative views across all major asset classes and markets. Chris is a regular speaker at the PortfolioConstruction Forum Markets Summit each February and PortfolioConstruction Forum Conference each August.

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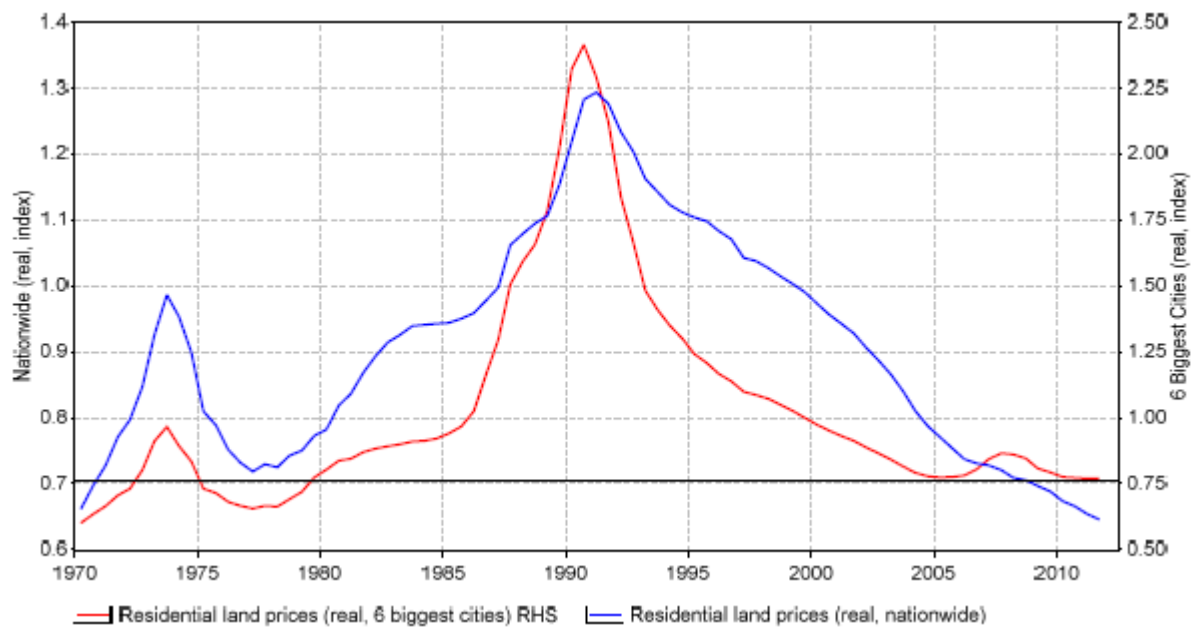
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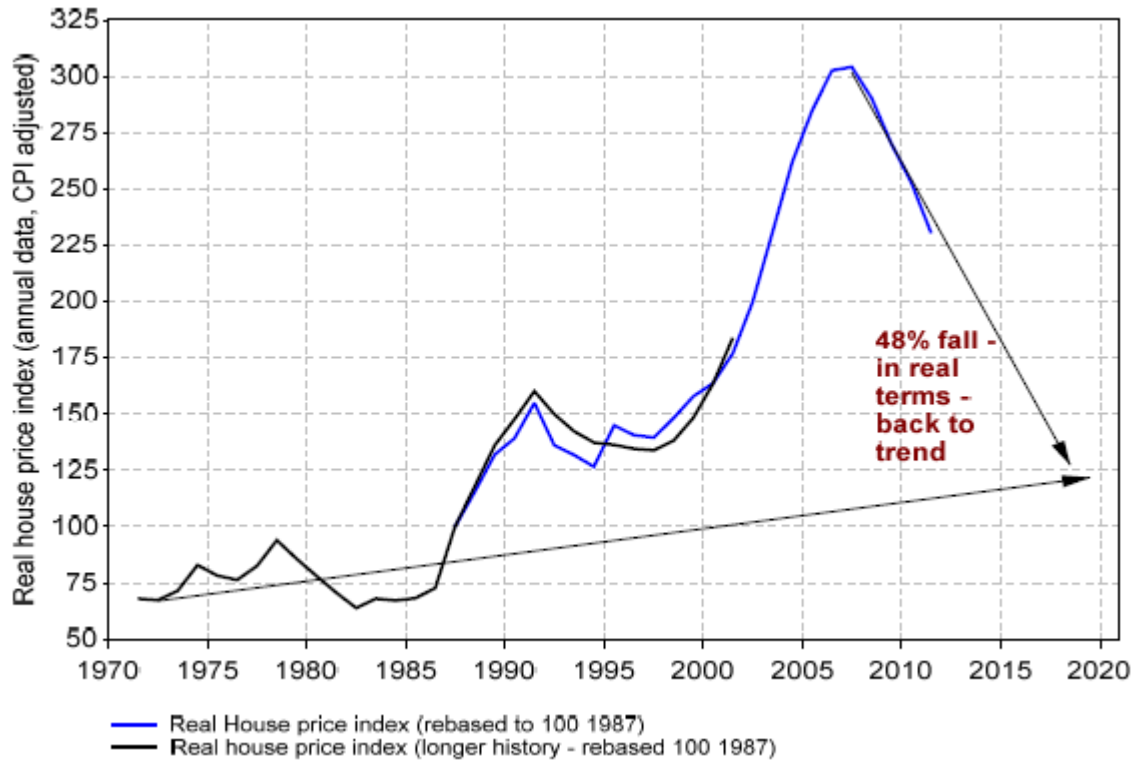
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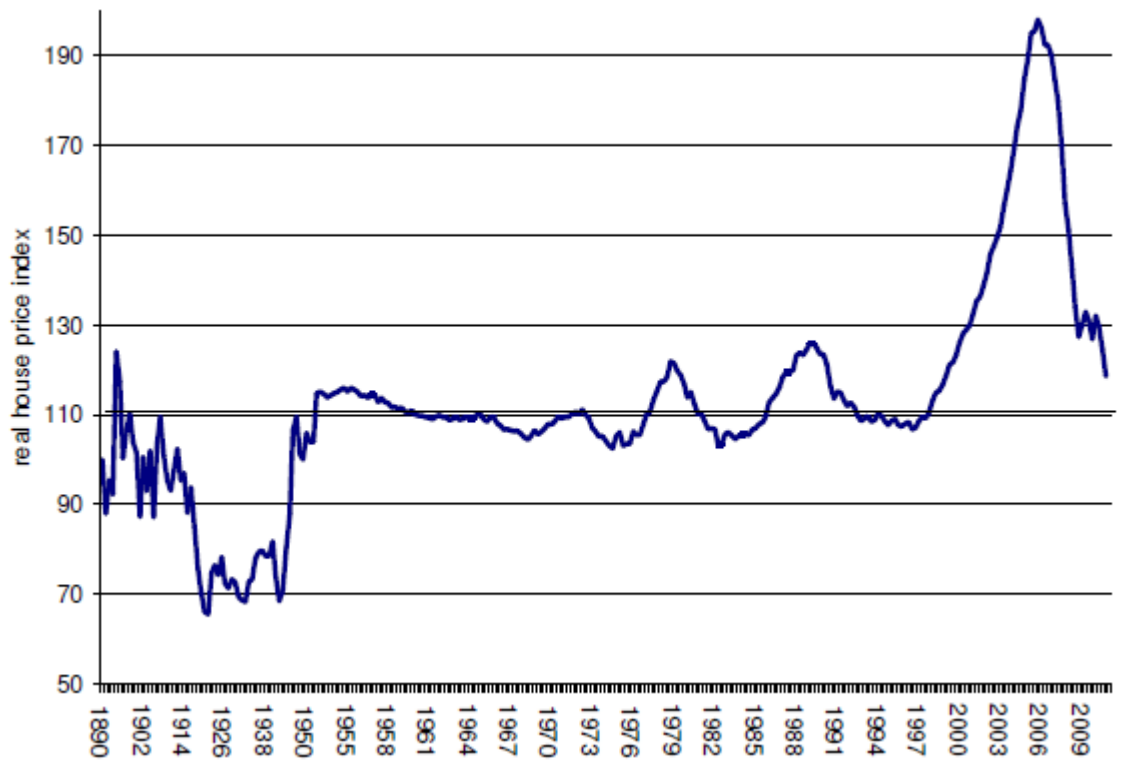
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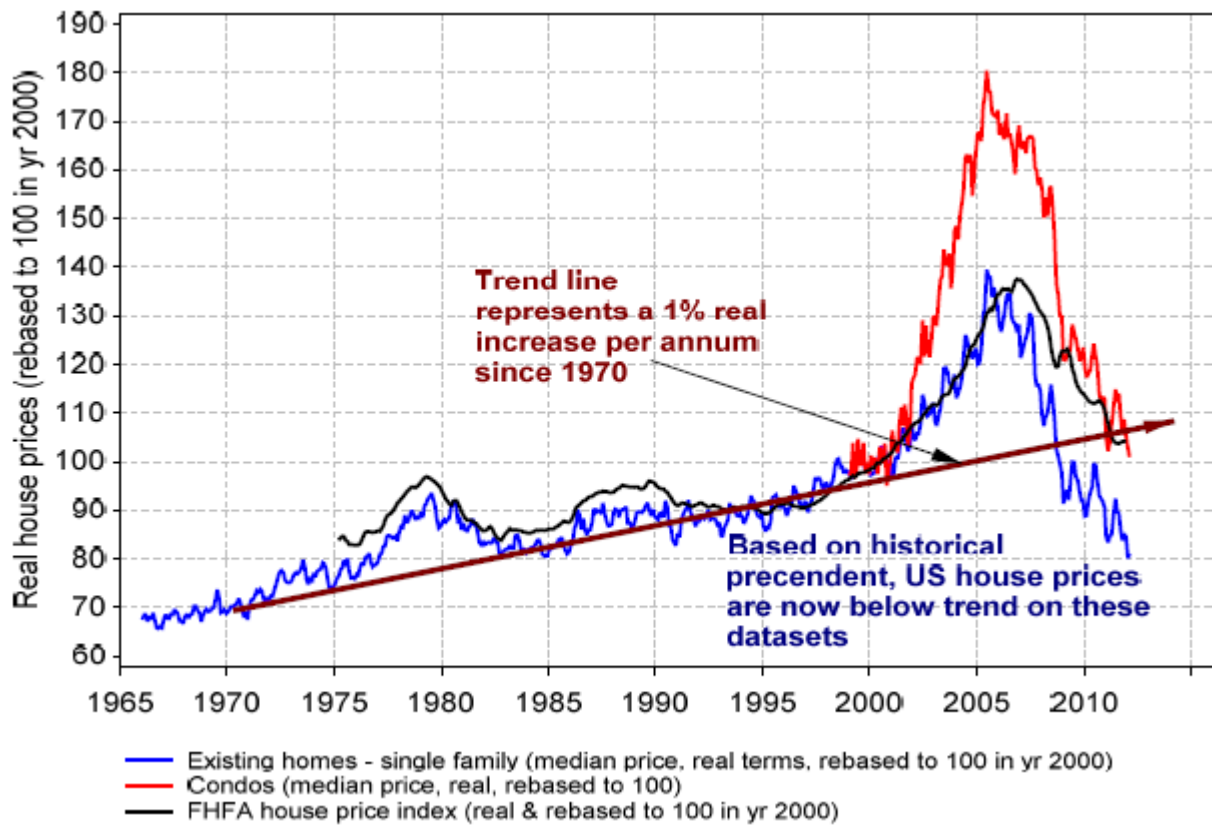


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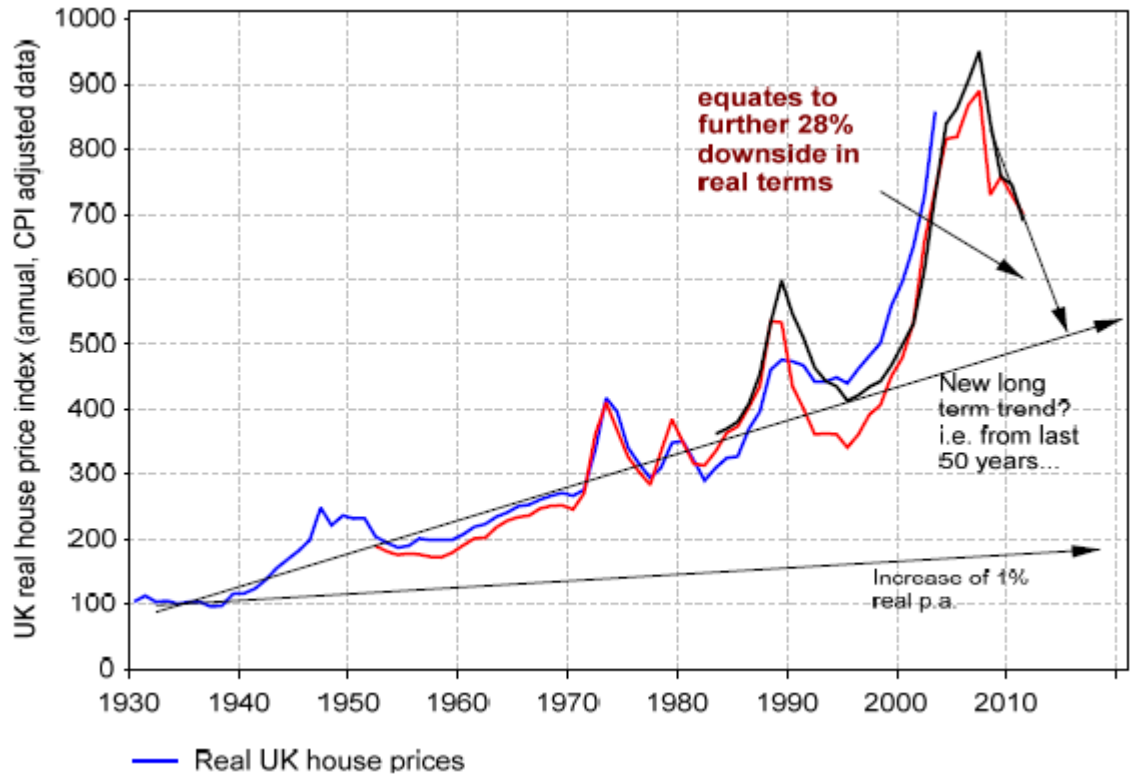
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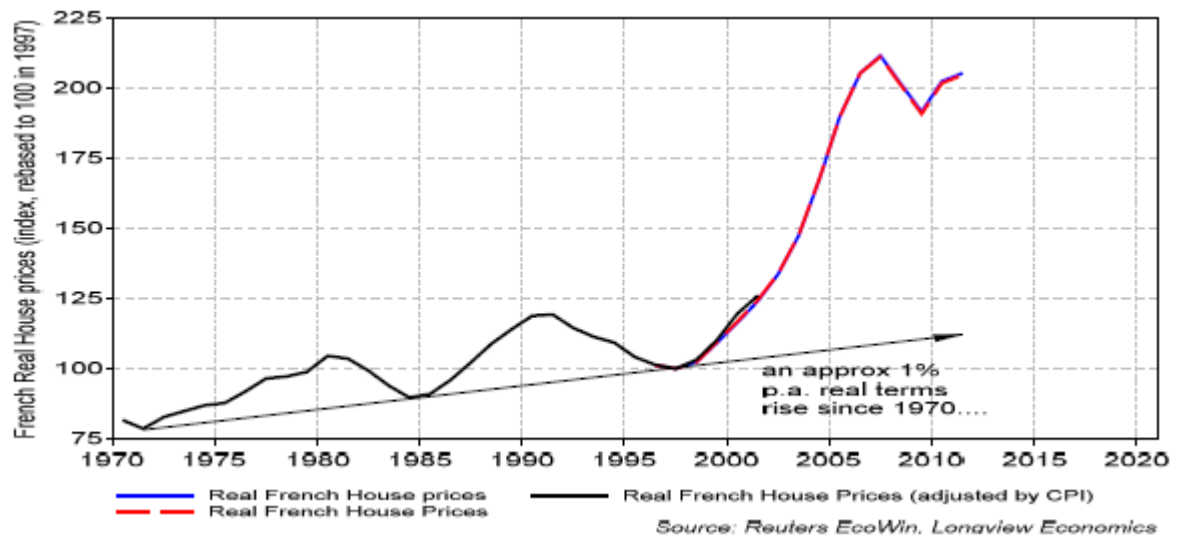


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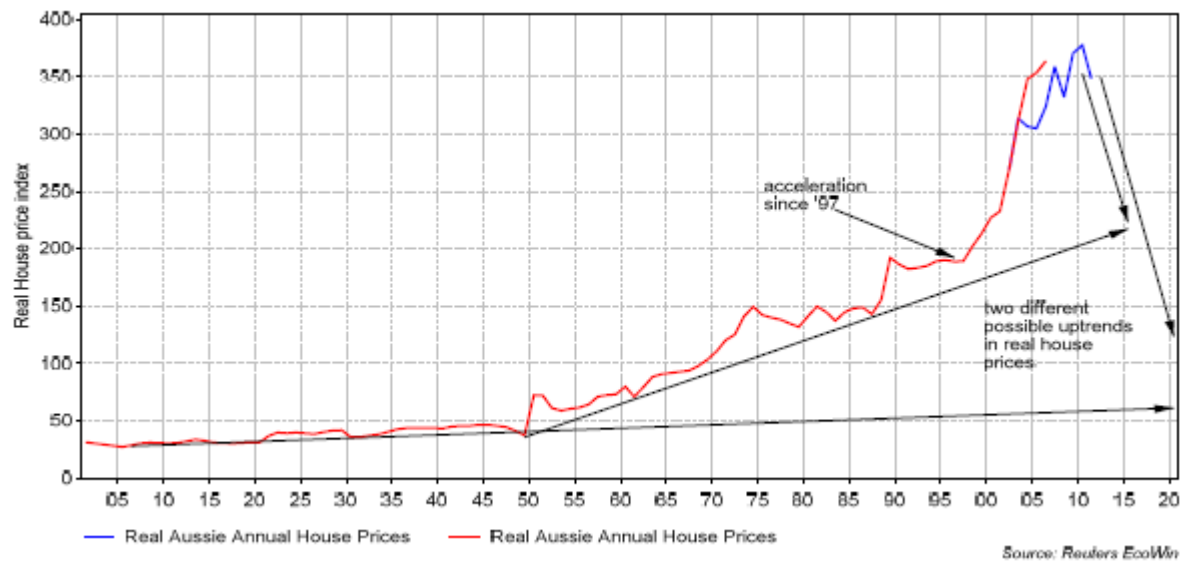


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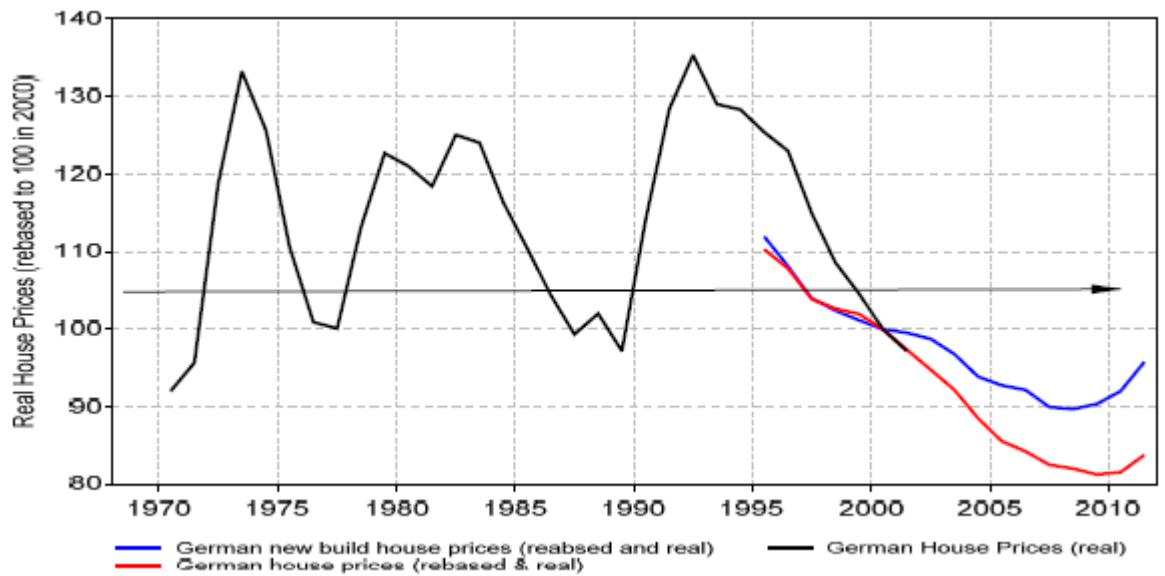


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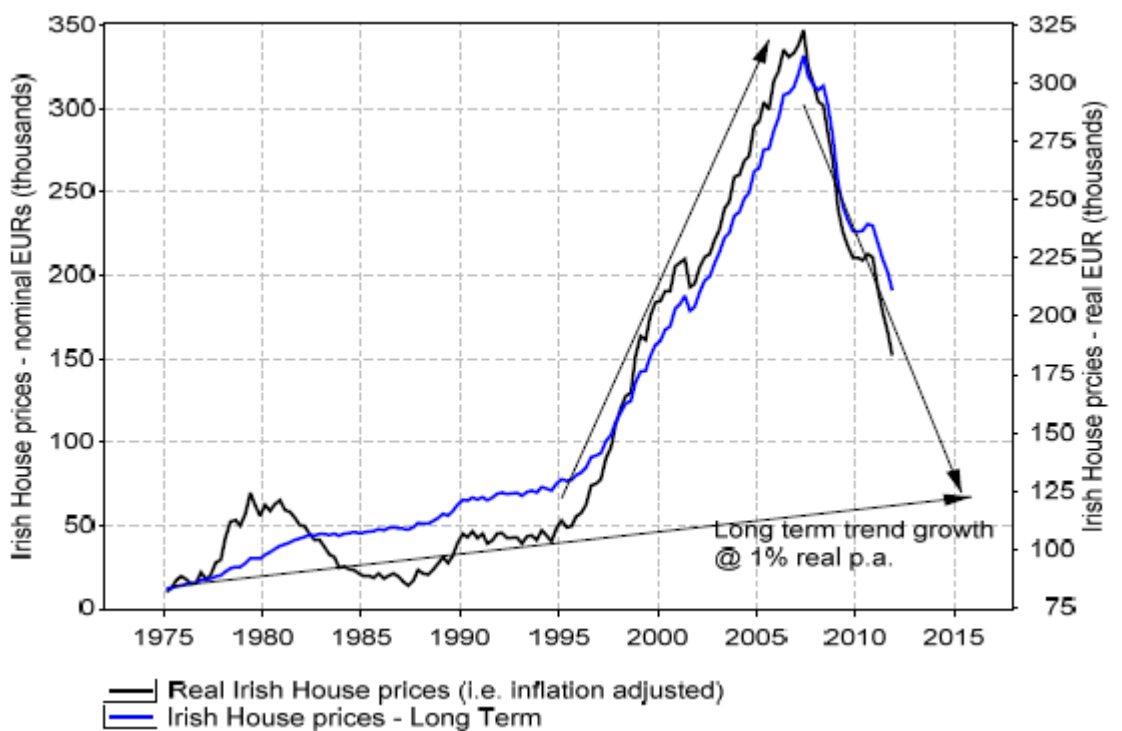


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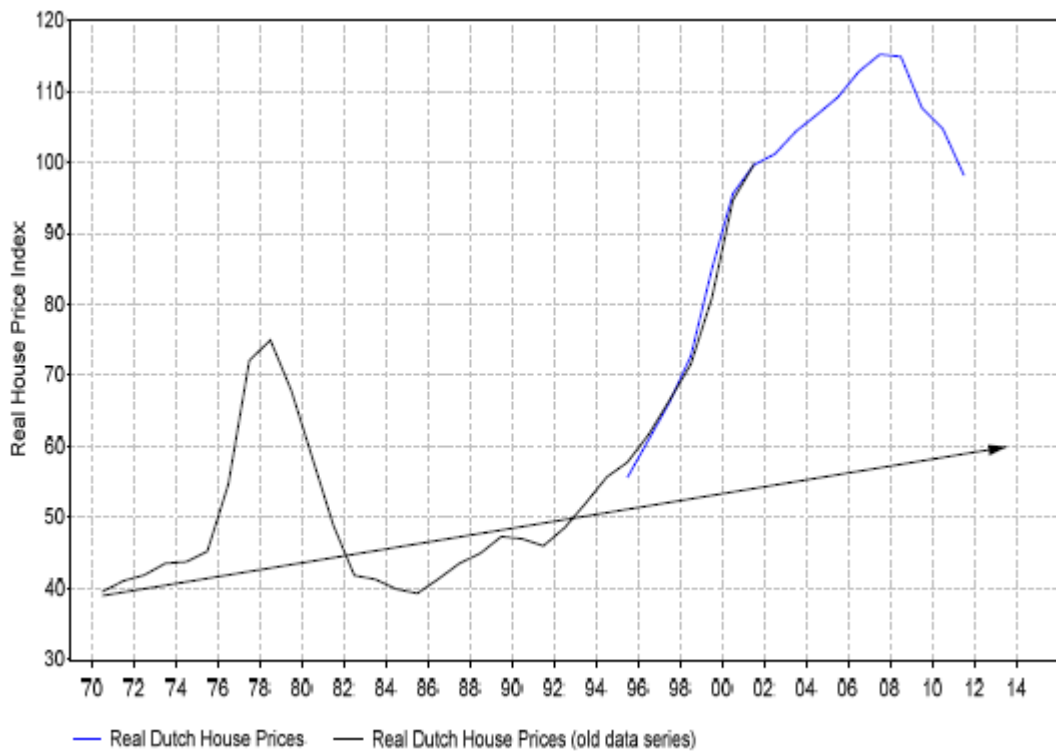


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