Stabilising and Destabilising Factors in 14 EU Housing Markets

Wieser, Robert

June 2012

Robert Wieser

Stabilising and Destabilising Factors in 14 EU Housing Markets

(Condensed version of a study carried out on behalf of the Austrian Federation of Limited-Profit Housing Associations)

Vienna, June 2012

ABSTRACT

In Europe, residential properties represent a large part of an economy's overall net worth. They constitute important assets and liabilities for both credit institutes and private households. As a result, significant changes in residential property prices not only exert an influence on developments in the housing market itself, but also have noticeable macro-economic consequences. Via their effect on net worth, capital costs, balance sheets and the expectations of economic agents, they influence private consumption, the private demand for capital goods and the stability of the financial markets.

The present essay is a condensed version of a similarly entitled study that was commissioned in 2011 by the Austrian Federation of Limited-Profit Housing Associations. The study examines housing market developments in fourteen countries of the EU between the years 1995 and 2007 (the start of the crisis in the banking, finance and economic sectors), as well as during the time thereafter, up until the end of 2011. It focuses on how house prices developed in comparison to housing investments during these two periods. In most of the countries, the development of the two core housing market indicators was in some respects similar, although in others they displayed great deal of divergence. An examination will be made of how well the development of these two indicators in the individual countries can be explained in terms of the development of incomes, interest rates, demographics and other influential factors. One important element of this is the description of the changes that took place on the financial markets. Further investigation is devoted to taxes, subsidies and other public policies related to housing, as well as to transaction costs in the housing markets and changes in tenure structure and the housing mix. The conclusion of the present essay comprises an attempt to identify the actual stabilising and destabilising factors by making a comparison of the countries. On the one hand, this involves an analysis of the mispricing that occurred on some of the markets, both at the time of the outbreak of the financial crisis and afterwards. On the other hand, an analysis is made of the institutional features of three groups of countries, classified according to the development of their house prices over the whole period of study, up until the end of 2011.

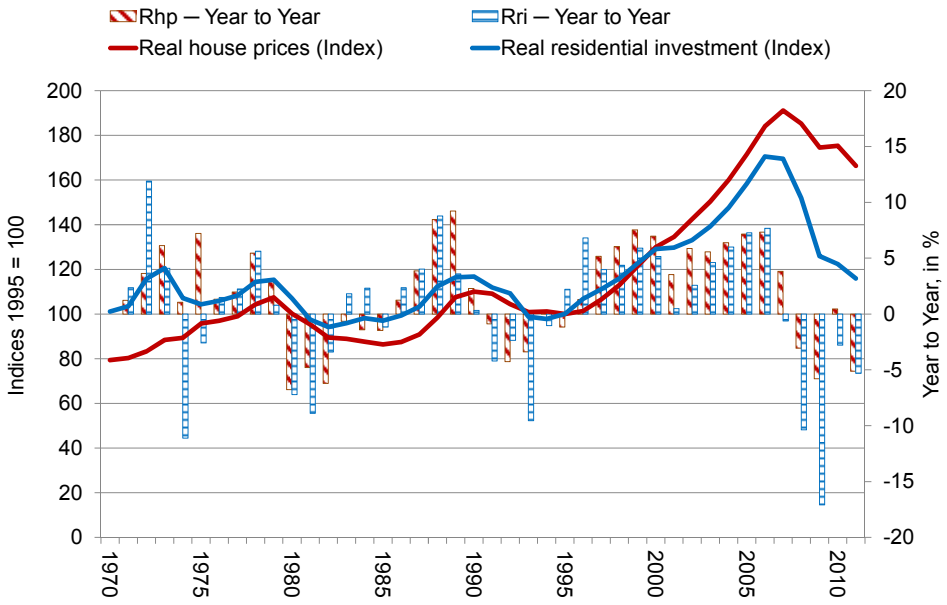
HOUSING MARKET CYCLES IN 14 EU COUNTRIES

A Historical Perspective

Over the course of time, housing markets display a distinctly cyclical pattern of behaviour, one that differs considerably from that of other markets. Housing construction reacts in a highly sensitive way to macro-economic changes. In many countries, housing investments fluctuate considerably more in the course of a business cycle than other gross fixed capital formations. Steep rises over several years are often followed by drastic slumps within relatively short periods of time. An examination of 49 housing construction cycles in 23 countries has shown that, on average, within a period of 2 years after a peak, 80% of the growth becomes lost once again (Rae and van den Noord, 2006).

If we imagine for the moment a common housing market involving the fourteen EU countries examined here, then we have gone through four housing market cycles since 1970. In each of these cycles there was, in at least one year, a discernable decline in property prices and/or housing investments. In the mid-1990s, housing investments (at constant prices) were at approximately the same level as 1970. Real house prices were some 25% higher, which corresponds to an average (geometric) growth of less than 1% per year. In the mid-90s, the longest housing cycle of the last 40 years began. Until well into 2007, prices and housing investments grew by an annual rate of 5% and more. In 2007, the first year of the financial crisis, a downturn began, which in 2009 led to a decline in real housing investments of more than 18%, the biggest slump for many decades. In 2010, as a result of the good economic situation, house prices stabilised in most of the countries, and the decline in housing investment slowed. However, in 2011, the decline set in again even more intensely, and a further decline can be expected in 2012, because of the weak economy in many countries and as a consequence of the Eurocrisis.

Figure 1: Real house prices (Rhp) and real residential investment (Rri) in EU14 – A historical perspective



Source: Author's calculation based on OECD, Eurostat, Ameco, and national house price information (see fig. 2)

A few observations are worth noting with regard to the total period under consideration. Firstly, the volatility (i.e. the average annual fluctuation of the rates of change) of housing investments is greater than that of house prices. Secondly, the connection between house prices and housing investments increased considerably. The correlation of the annual rates of change rose from 0.64 in the period 1971-1994 to 0.84 in the period 1995-2010. That means that the development of house and/or apartment prices acquired increasing significance for evaluation of the housing market as a whole.

This increased significance is directly related to the rising percentage of home-owners in Europe. In almost all countries, the share of home-ownership among all forms of housing increased, on average from 57% in 1980 to 64% in 2009. This trend was only interrupted by the continued crisis on the housing market in some countries. Many owners of residential property shied away from selling in times of falling prices. Houses were rented out, in the hope that prices would soon recover. In this way, the number of rented properties increased again. Nonetheless, this observation should not lead one to conclude that the trend towards a higher percentage of home-owners in Europe has, for the medium-term future, come to an end. Some governments continue to promote, at least in the long term, an expansion of the home-ownership sector, and many private households see the best chance of providing for the future as having a home of their own.

The third observation to be made on Figure 1 is that, since 2008, the housing investment has declined much more steeply than house prices have. This would seem to indicate that the economic and political measures that were implemented to cushion the economic crisis, in particular those measures relating to fiscal and monetary policy, were actually more successful in stabilising house prices than investment. In most of the countries examined here, the efforts made to strengthen housing investment by means of economic policy were evidently very half-hearted.

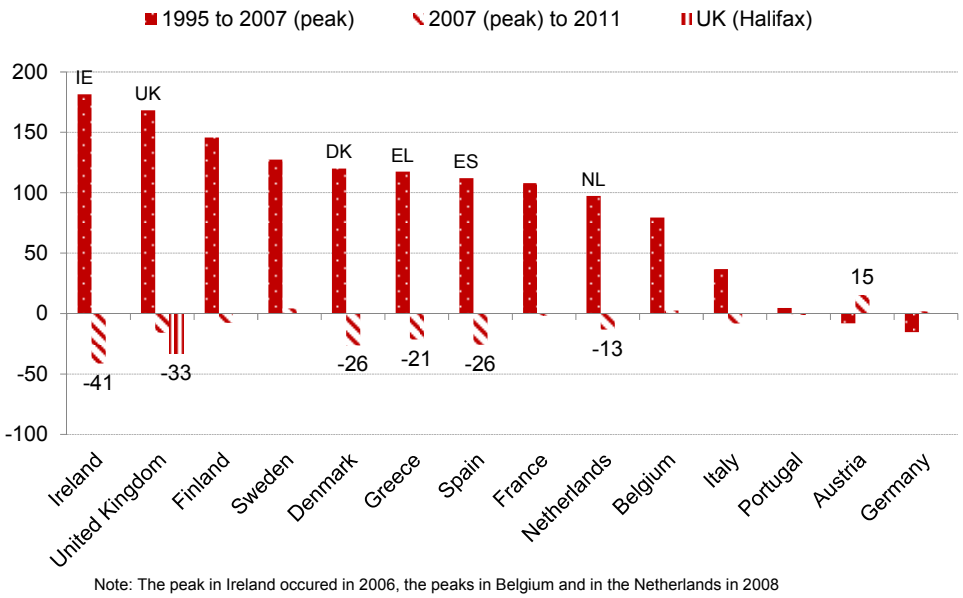
The Recent Housing Market Cycle in the EU-14

Housing market experts are largely in agreement that the last cycle of house prices reached its peak in 2007. In most of the EU 14 countries, the increase in house prices began in the mid-1990s, in a few countries earlier (Belgium 1986, Netherlands 1992), in others somewhat later (Spain 1998, France 1999). The long-lasting house price boom occurred across a broad spectrum. In eight countries, real house prices more than doubled between 1995 and 2007. Only four countries did not experience a boom. In Germany, Austria and Portugal, real house prices hardly altered at all during this period, while in Italy the increase was moderate in comparison with those markets that were booming.

After 2007, house prices collapsed dramatically in five countries, namely in Ireland, Great Britain, Denmark, Greece and Spain. According to the latest reports, the average nominal level of house prices in Ireland in April 2012 was already 60% below the highest level from 2007. In Spain, according to the TINSA index, the country-wide house prices in April 2012 were around 12.5% of those of April 2011. The development in the Netherlands showed a real decrease of 13% from its peak in 2007 to the end of 2011, which was not quite so dramatic. However, the latest reports show a further massive decline in house prices in the 1st quarter of 2012 and it is estimated that there will be a decrease this year of a real 7% to 8%.

In contrast, the prices have remained relatively stable in the other boom countries, despite the economic crisis. Sweden was even able after 2007, following a brief slump in 2008, to point to an increase in real house prices. All in all, the development of house prices before and after 2007 prompts an obvious categorization of the markets into three groups: boom-bust markets in Ireland, Great Britain, Denmark, Greece, Spain (and in the Netherlands); boom-non-bust markets in France, Finland, Sweden and Belgium; and non-boom markets in Germany, Austria, Portugal and Italy.

Figure2: Real house price changes (in %)



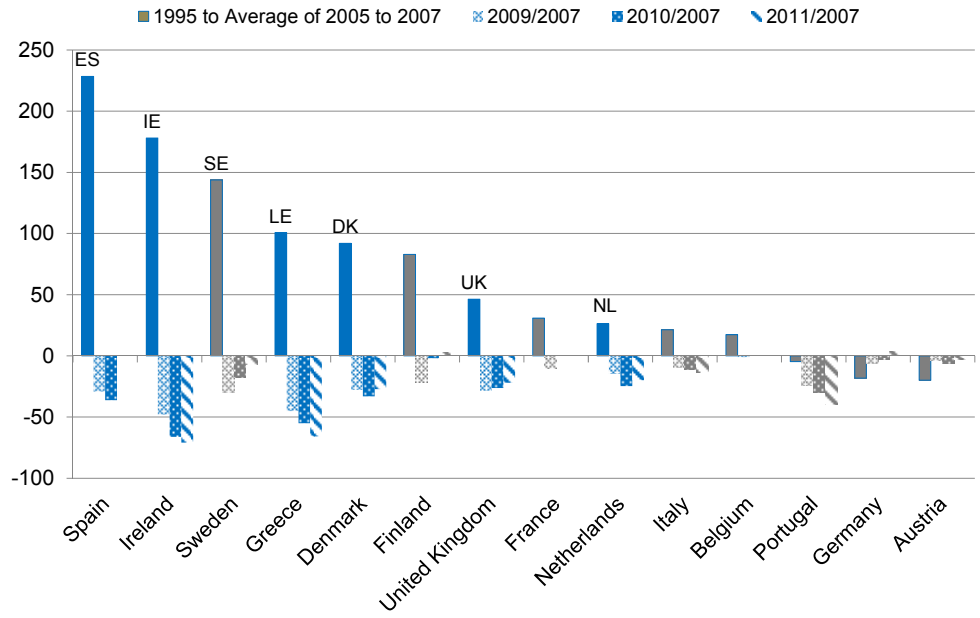
Note: The peak in Ireland occured in 2006, the peaks in Belgium and in the Netherlands in 2008

Source: Author's calculations based on data from BIS, INSEE, DEHRP und national information; the Austrian percentages are calculated on the basis of a Vienna house price series obtained from the Austrian National Bank (OENB), which were partly revised by the author.

However it was not only the house prices that rose very steeply between 1995 and 2007. In some countries there was also a distinct boom in investment. In Spain and Ireland the massive investment in housing that had gone on for many years led to a bloated building sector. The consequences were a definite loss of competitiveness, massive bank crises and a long-lasting economic depression. Even today, there is still a considerable surplus of housing in both countries. In Spain, it is estimated that there is a stock of more than 1.1 million empty new houses, in Ireland the number is more than 100,000.

There were also big increases in housing investment in Sweden, Denmark and Finland. However, particularly in Sweden the starting point of the increases was a very low level of housing construction in the mid-1990s. Measured by the share of its housing investment in the GDP, Sweden lay well below the U-14 average even at the peak of its boom, i.e. despite strong growth. The housing performance was similarly weak in Great Britain, which from 1995 to 2009 showed housing investment making up an average 3.1% of the GDP, as opposed to a 5.4% average in the EU-14. In comparison with other markets with booming house prices, housing investment in Great Britain has reacted very weakly.

Figure 3: Change in real residential investment (in %)



Source: Author's calculations based on Eurostat data

The developments in housing investment display two further conspicuous features: the slump in housing investment after 2007 shows a marked correlation with the previous boom in housing construction and house prices. In fact, one can speak of a 'double bubble' of housing prices and housing investments in Spain, Ireland, Greece and Denmark. Furthermore, it is worth noting that housing investments also slumped in those countries in which there was no housing surplus during the boom phase. In particular Sweden, the Netherlands and Portugal should be mentioned here. Another important aspect of the recent weak housing boom in most of the countries is the fact that the low level of housing investment has a supportive effect on house prices.

WHICH FACTORS WERE DECISIVE AND HOW HAVE THEY CHANGED?

One important factor that influences housing markets is the set of expectations that those people involved have with regard to the development of the economy as a whole. These include, in particular, expectations with regard to the development of income, unemployment and inflation. However, there are a number of other factors that also play a role:

- The monetary and exchange rate policy and its influence on the expectations of the future development of interest rates.
- Regulation of the finance market and banking, and the influence of this on the credit markets, in particular on credit access.
- Tax policy and its influence on transaction costs and net capital gains.

- Housing policy in the widest sense, and its influence on the structure and reaction of the housing supply; this includes subsidies for housing construction, regulation of rents, land policy, urban and regional planning, building regulations etc.
- The major protagonists and institutions; which include not only those involved more specifically in housing policy, such as private and public property developers and limited-profit building associations, but also protagonists in the financial and credit markets.

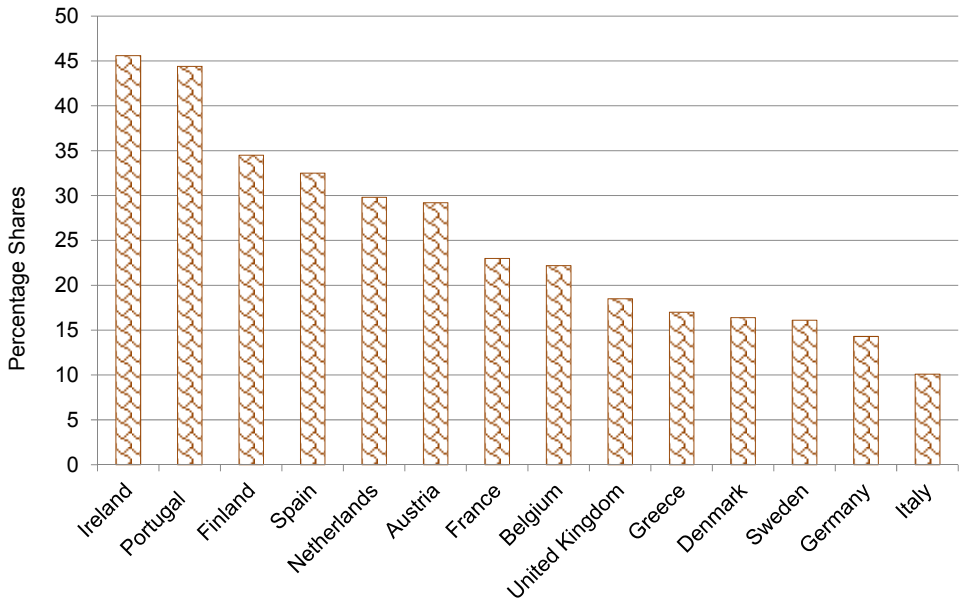
A further factor is also important for understanding the varied effects of the current crisis on the housing markets in the individual countries, namely the different market conditions prevailing at the start of the period under examination, i.e. the respective stage in the housing market cycle.

The Housing Market Situation in the Mid-1990s

The courses of the housing market cycles in the individual countries were not synchronous. In the mid-1990s, the housing market in Finland was coming to the end of a cycle, whereas the housing markets in Austria and Germany were just reaching a peak. At the beginning of the 1990s, Sweden had to contend with a serious banking crisis, triggered by a collapse in the price of commercial property. In the course of the economic slowdown, housing investment also declined steeply and since then has remained the lowest in Europe, measured in relation to GDP, even though the country has also had the strongest growth rates since the mid-1990s. A similar situation can be ascertained in the case of Great Britain, which has been fighting supply problems in housing construction for many years.

There were also differences in the demand for new construction and in the age structure of the housing stock. In 1990, the average number of people per household varied between 3.4 in Ireland and Spain and 2.1 in Sweden. If one assumes approximately similar preferences of the population in relation to housing comfort, then there was a considerable backlog demand, above all in the southern countries and in Ireland. This factor may have contributed to the pronounced housing boom in some of these countries. At any rate, the average size of households there decreased more markedly than anywhere else.

Figure 4: Age structure of the housing stock – Share of dwellings constructed since 1980; Figures from (circa) 2001



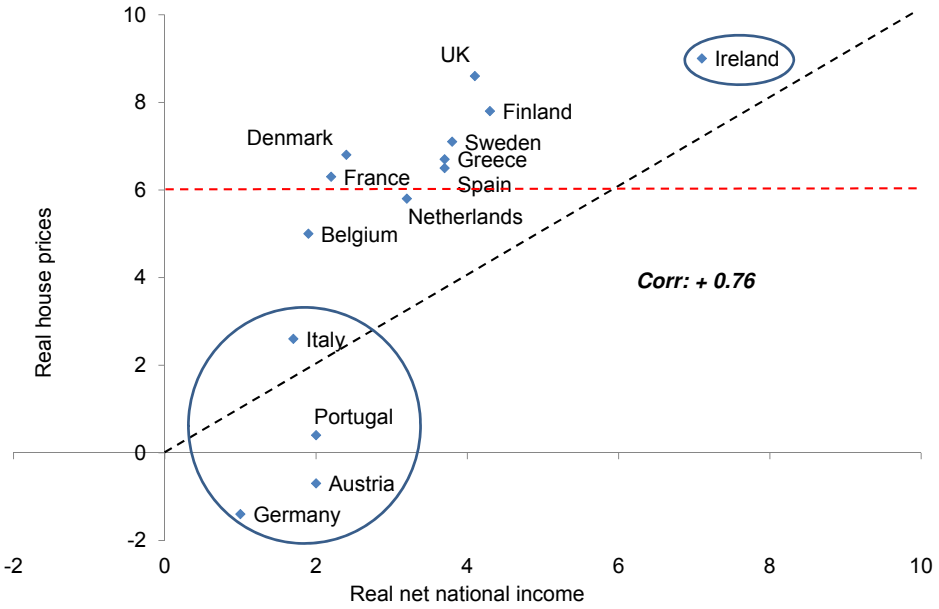
Source: *Housing Statistics in the European Union (2003)*

Development of Income and Interest Rates

During the period 1995 to 2007, there was an extremely strong connection between house prices and income growth, measured by means of the development of the net national income. Taking an average across the countries the correlation amounted to +0.76. Ireland stood out on account of its remarkable macroeconomic development. The (geometric) growth of the real net national income in Ireland was more than 7% p.a., which was easily double the average for the fourteen countries.

In the majority of the countries, the ratio of the average annual growth rates of house prices to income amounted to more than 2, i.e. house prices increased more than twice as much as income. The difference was greatest between the growth of house prices and income in Denmark, France and Belgium. At the other end of the scale were Germany, Austria and Portugal, three countries with a relatively slow development of real income and, at the same time, stagnating or even declining house prices.

Figure 5: Real house prices vs. real income – Geometric growth rates from 1995 to 2007, in %



Source: Author's calculations based on Eurostat data and house price sources (see fig. 2)

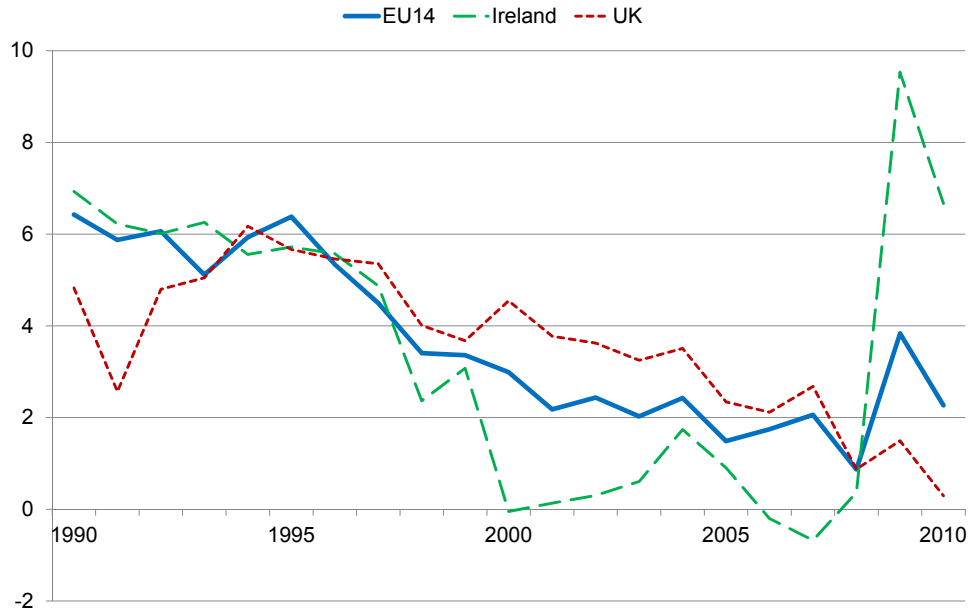
Figure 5 shows that, between 1995 and 2007, the average real growth in house prices was higher than 6% in a good half of the countries. This is remarkable insofar as, according to the European Commission's new early warning mechanism for macro-economic imbalances, exceeding the annual real growth in house prices by 6% indicates an internal imbalance and could lead to more detailed investigations of the countries concerned (European Commission, 2012).

A central common feature of the last housing market cycles in the EU-14 was the occurrence of great changes in the financing conditions. Since the beginning of the 1990s, and in particular in the period before the introduction of the Euro, both the nominal and the real interest rates have decreased considerably in Europe. On average in the EU-14, the long-term real interest rates (yields on government bonds) have fallen from 6% in 1995 to less than 2% in the years from 2005 to 2007.

The fall in interest rates was particularly steep in Ireland, where the real interest rates lay consistently below 2% after 2000. Entrance into the currency union, access to international liquidity, increased competition in the banking sector and periodic above-average high inflation all contributed to this. In Great Britain, the real interest rate was always above the EU-14 until well into 2008, although afterwards it lay distinctly below it. The strong growth of house prices before 2007 therefore indicates a relatively strong reaction of house prices to interest rate changes. The fact that house prices – measured against the development of income – have stayed at a high level despite the

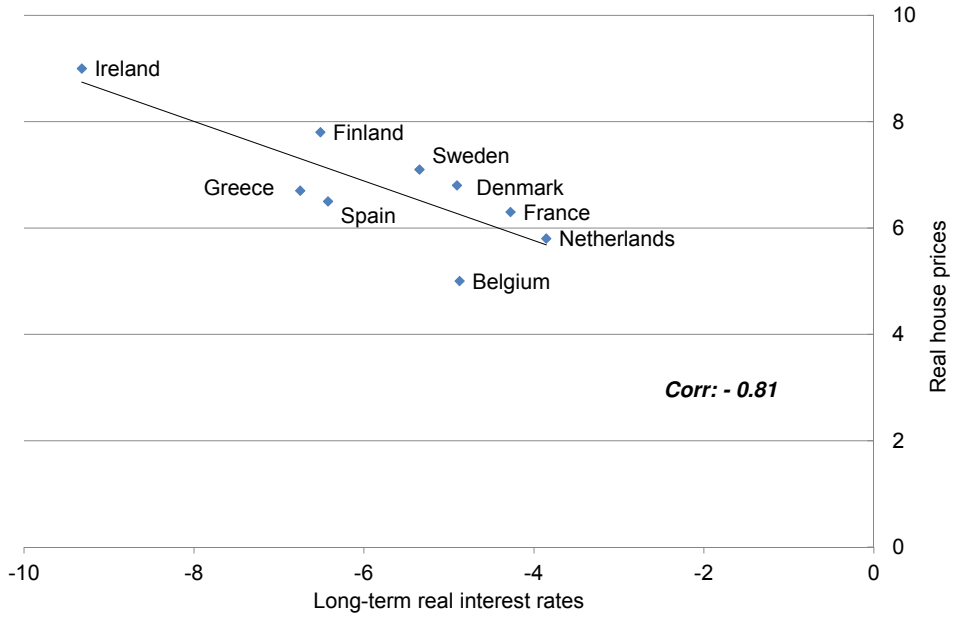
considerable decreases in recent years, is certainly a consequence of the enduring historically low level of nominal and real interest rates, supported by a continuing weakness on the supply side in some markets.

Figure 6: long-term Real Interest Rates (%)



Source: Author's calculations based on Eurostat data

Figure 7: Real house prices vs. Long-term real interest rates – Av. annual change in % — 1995 to 2007



Source: Author's calculations based on Eurostat data and house price sources (see fig. 2)

The connection between the average annual changes in interest rates and the average annual changes in house prices was in general weak for all the fourteen

countries. However, if we ignore those countries where the house prices were stagnating or rising relatively moderately, (Austria, Germany, Portugal and Italy), and also Great Britain, which is the country with by far the strongest reaction of house prices to interest rate changes, then the result is a very strong connection. The house prices rose most steeply in those countries in which there was the greatest decline in real interest rates. Nonetheless, one should not overlook the fact that countries such as Ireland, Spain, Finland and Sweden had also displayed a very steep increase in real income. In these countries, the surrounding conditions for the housing demand were in general particularly good.

The effect of interest on developments in the housing markets must always be seen in relation to the respective phase of the housing market cycle, as well as to income expectations and to the other framework conditions on the finance and credit market. On markets with a chronic oversupply of housing or weak income expectations, steeply falling interest rates will not trigger a boom in housing construction, whereas in markets with housing shortages and steeply rising income a fall in interest rates can cause considerable additional impulses. Furthermore, the reaction of the house prices and housing investment to interest rate changes can also be influenced by means of tax policies, such as the possibility of writing off the interest paid for housing expenses within the framework of the income tax. In times of credit rationing the nominal interest rate acquires increased importance in comparison to that of real interest rate.

Mortgage Markets

Up until the beginning of the 1980s, the mortgage markets in Europe were very strictly regulated. The right to grant mortgage loans was reserved for specialised institutes, above all building and loan associations and similar forms of organisations (e.g. the building societies in Great Britain). It was not only interest rates that were regulated, but also the loan-to-value ratios and the repayment arrangements, as well as the loan maturities. In many countries, such a stringent form of regulation led to credit rationing.

As a result of the deregulation and liberalisation of the last 30 years, increasingly easy access to housing loans has become possible for private households, caused by a higher number of different providers and a greater range of products on offer. The actual amount of credit rationing declined considerably, on the one hand due to higher loan-to-value ratios, and on the other hand through extended loan maturities. The latter mean that, on a given income, private households are faced with lower annuities than was recently the case with shorter repayment times, i.e. the affordability of loans increases. This combination of higher loan-to-value rates and longer credit periods in the

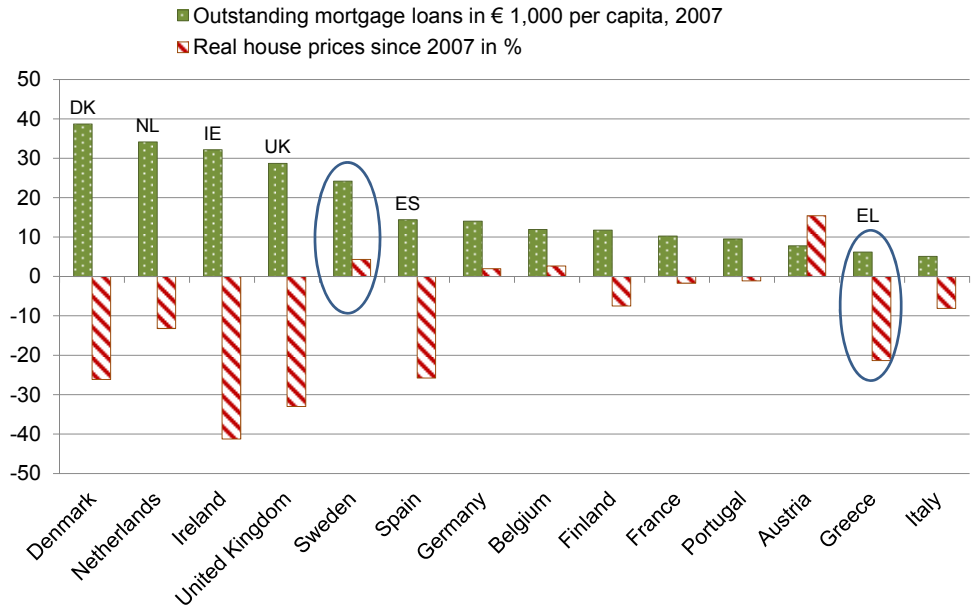
end also made it possible for financially weaker households to gain access to loans.

A second phenomenon, which has emerged in the course of deregulation and liberalisation in some countries, is the granting of mortgage-backed credit for non-residential consumption (*equity withdrawal*). In times of steeply rising house prices, the lending basis for such credit also rises, which in some countries may have contributed to an accumulated growth in consumption. Furthermore, in many countries there were regulations which effected a reduction of the charges for early loan repayment. In this way, it became more cost-effective for borrowers to refinance once more when interest rates were falling, i.e. to replace existing loans at higher rates of interest with new ones at lower rates of interest.

A reciprocal relationship exists between changes in house prices and credit volumes. Easier access to credit resulting from liberalisation of the credit markets, even for households with lower incomes, increased the housing demand in many countries and raised prices because there was usually a delay in supply. Financing higher house prices on incomes that were rising at a comparatively slower rate in turn required more outside capital. This mutually escalating process led to higher debt on the part of the households. The process was additionally supported by more flexible practices in granting loans, longer credit periods and higher loan-to-vale ratios.

In fact, the debt level of private households has indeed increased tremendously in many countries of Europe since the turn of the millennium. The stock of outstanding mortgages in the Euro region, for example, has increased from 27% of the GDP in 1999 to 42% of the GDP in 2007 (ECB, 2009). The following Figure 8 shows that house prices have declined since the outbreak of the crisis, above all in those countries in which the per capita mortgage debt was particularly high. Only Sweden and Greece constitute exceptions here. Sweden has not experienced any lasting setbacks in house prices, despite a relatively higher per capita debt in 2007. In Greece, house prices have dropped considerably, despite a lower per capita debt. One should mention, however, that growth of private household debt in Greece was the highest among the countries under investigation.

Figure 8: Outstanding Mortgage Loans and real House Price Change



Source: Author's calculation based on *Hypostat* (2010) and house price sources (see fig. 2)

Along with the steep rise in debt among private households, it could also be observed that in some countries there was a notable trend among lenders towards the use of more market-based instruments for refinancing loans. At the end of 2007, RMBS (*Residential Mortgage-Backed Securities*) and MCB (*Mortgage Covered Bonds*) comprised 21% of all mortgage refinancing. The outstanding amount of *true-sale securitisation*[1] in the Eurozone rose from less than 50 bill. Euro in 1997 to more than 750 bill. Euro in 2007. Nevertheless, the share of securitisation in all the outstanding housing loans was only 7% in the Euro region, compared to c. 50% in the USA. True-sale securitisation had a high or greater share of the housing loans in Spain (31%), the Netherlands (25%) in Italy and Portugal (respectively about 20%) and in Ireland (10%) (ECB, 2009).

One implication of the increasing use of market-based instruments in refinancing the banks was that investors and savers had to bear a greater share of the risk, since these forms of investment are not subject to deposit protection. Further consequences were that the average loan maturity was extended and access to foreign capital facilitated. In particular, this was the case in those countries where the credit volume had risen steeply, for example in Spain, in the Netherlands and in Portugal. The Spanish Central Bank has

[1] *True-sale securitisation* comprises the sale of a pool of claims by an originator to a *Special Purpose Vehicle* (SPV), which then issues asset-backed securities, the repayment and interest payments of which are tied to the cash flows of the liable assets. If all the risks and claims have been transferred to the SPV, they are then derecognised from the originator's balance sheet.

estimated that, at the end of 2007, 66% of all the secured bonds that were issued by Spanish finance institutions were in hands of foreign investors.

Capital market instruments such as *Residential Mortgage Backed Securities* (RMBS) facilitate the banks' management of their e*xposure* to maturity mismatches, interest rates and liquidity risks. However, such instruments not only have an insurance function, but also involve a high degree of hazard. *Covered bonds* have proved themselves to be a comparatively more stable instrument in the crisis, because of the double insurance afforded by the issuer and the cover pool, the high-quality collateral, the generally high liquidity, the long-term and primarily fixed interest rate issues, standardisation and the fact that loans are not removed from the issuers' balance sheets.

The European Central Bank summarised the situation as follows (ECB, 2009): the causes of the crisis lay in a over-leveraging of the bank's balance sheets, massive recourse to complex and opaquely structured products in several Euro countries, and in a broad-based underestimation of risks, which was reflected in historically lower credit spreads up to mid-2007. The banks have cut back their traditional field of business, namely the granting and servicing of loans until maturity, and instead of that concentrated their activities on the repackaging and sale of loans to other agents on the financial markets. This model has theoretical advantages, such as an improvement of risk allocation, wider distribution of the financing basis and enhancements of market completeness, yet it also has massive practical disadvantages: it leads to a false direction of incentives with a series of principal-agent relationships that are difficult to tax, for example between the original lenders and purchasers of the new financial instruments. The transfer of the risk, combined with the weak powers of control within this system reduces the incentive for the lenders to adequately fulfill their traditional responsibility of risk control. An erosion of the practice of granting credit leads to the awarding of suboptimal loans with higher ex-post risks. Two further disadvantages are the problems of information and incentives on the side of rating agencies, which led to the poor ex-post performance of the ratings of structured securities, and the maturity and liquidity mismatch between the underlying assets (loans) and liabilities (securities) that occurs through outsourcing them to a vehicle outside of the banks' balance books.

Taxes, Subsidies and Transaction Costs

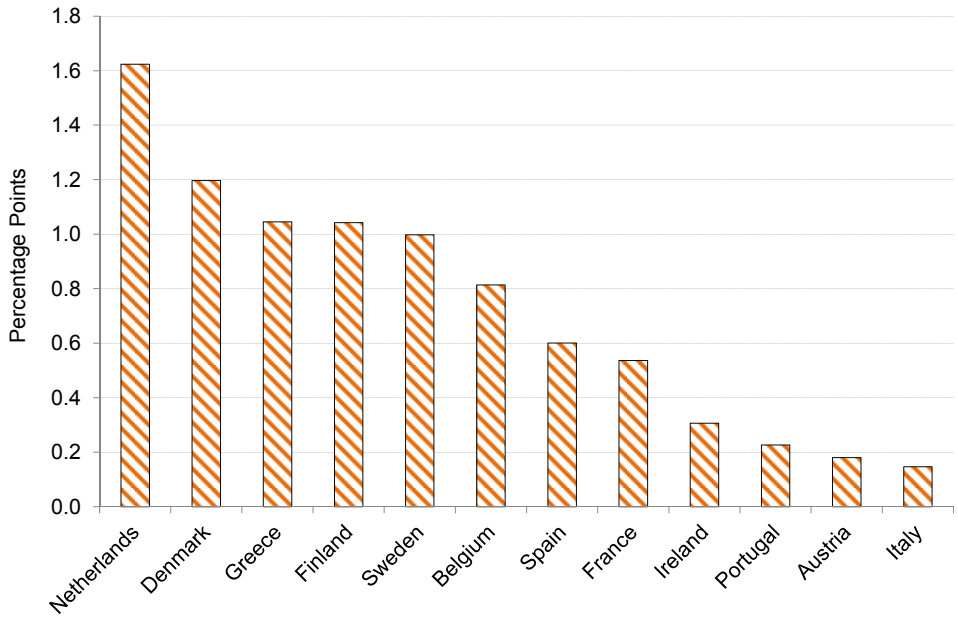
The housing markets of the EU-14 are distinguished by a variety of government interventions. The public sector intervenes directly in the form of land-use planning, land policy, public subsidies for housing construction, and rent regulation. Indirectly, it attempts to influence the behaviour of market participants by means of tax regulations and demand-side subsidies. These

fiscal interventions on the part of the state result in various forms of market distortion (ECB, 2003). They affect the following:

- The advantages of investment in property as opposed to other forms of investment.
- The advantage of property ownership as opposed to property renting.
- The incentive to construct new housing as opposed to investing in the maintenance and improvement of already existing housing.

In relation to the taxation of residential property, it should firstly be criticised that the fiscal preference for housing investments as opposed to other types of investments, which is particularly widespread in the Netherlands and in Denmark, in the form of the tax deductibility of the costs of housing loans, can (in the long-term) limit productivity and economic growth (OECD, 2009). Furthermore, from the point of view of the stability of the housing markets, it is to be expected that the providing of tax incentives for home ownership can promote speculative behaviour, because it keeps financing costs down in an almost artificial way[2]. The combination of tax incentives and deregulation of the mortgage markets can increase the volatility of the residential property prices, in particular if the supply side responsiveness to price changes is weak.

Figure 9: Tax relief on debt financing costs of home ownership, 2009



Source: *OECD* (2011)

[2]In the Netherlands, for instance, the difference between the market interest rate and the actual financing costs, after tax, which amounted to more than 1.6% points in the case of a representative mortgage interest rate of 5.7%, corresponded to a saving of 30% in financing costs.

According to assessments made by Andrews (2010), lowering the extent of tax relief on mortgage debt from such a relatively high level as that of Finland to the more moderate level prevalent in France would reduce house price rises (following a given increase in housing demand) *ceteris paribus* by 50%. A reduction of mortgage interest tax relief would also result in a reduction of possibly undesirable distributional effects. According to Matsaganis (2010), out of €100 of income tax foregone through mortgage interest deductions, between €33 (Sweden) and €57 (Greece) of it went to the richest 20% of households. In the Netherlands and Denmark, the contribution of mortgage interest tax relief to disposable income in the top income bracket (top quintile) is estimated to be 4.3% and 5.4%, respectively. Abolition of the tax deductibility of the interest on loans would increase progressive taxation in all countries, most noticeably in Greece, Denmark and the Netherlands. Due to the regressive distributional effects, precisely young households (*first-time home buyers*) would profit relatively little from this particular tax instrument (Andrews and Sanchez, 2011).

An EU-wide comparison of the extent of state subsidies for housing does not at present possess any great significance, due to a lack of good data. Government expenditure on housing benefits, for instance, is dealt with in the European COFOG99 System under the heading 'Social Security', yet is in part also included in the category 'Housing Entities and Community Institutions', as in the case of Austria. This category does not contain loans and reimbursable annuity benefits, although these do contain some subsidy elements. These are instruments which play an important role in housing grants, particularly in Austria. One claim that is more or less certain is that expenditure in this area has remained largely stable in most countries over the last 15 years. The exceptions include Sweden, Great Britain, France and Ireland. In the last three countries, the expenditure, as a percentage of the GDP, has in some cases risen considerably, although in Sweden it has clearly decreased.

The amount of transaction costs paid on the European housing markets fluctuates greatly. In 2010, they were highest in Belgium, Italy, Spain and France. A study carried out by the European Mortgage Federation, dating from 2010, shows that – in contrast to an earlier study dating from 2006 – the transaction costs in Belgium, Denmark, France, Italy, Sweden and Great Britain regressed, only in Germany and Spain did they rise slightly to 4.6% and 11.4% respectively. Belgium recorded the strongest fall, with a reduction of 17.1% to 13.4%, although at the highest level. The level of the transaction costs influences speculative behaviour. Andrews et al. (2011) come to the conclusion that house prices in countries with higher transaction costs tend to be less volatile (there are exceptions, see Germany), although the effect seems to be minor in comparison with the effects of stricter banking supervision. Moreover, the negative effect of higher transaction costs on the mobility of

households tends to be negligible, according to the conclusions of Andrews and Sanchez (2011).

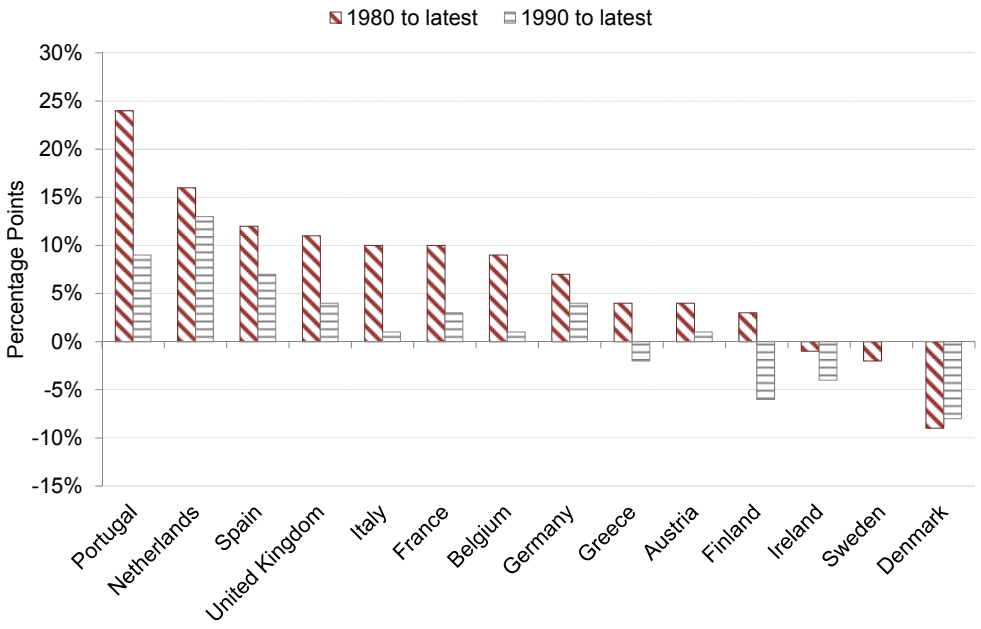
The Property Market and Land-Use Planning

The regulation applying to the property market and land-use planning measures, in particular, have an influence on the strength of the reaction on the supply side of the housing market. The Barker Reviews of 2004 and 2006, for example, criticised the British planning system as complex, incalculable and slow. In the Netherlands, ever-increasing green belt protection and false incentives on the part of local councils are blamed for the weak supply reaction. The NIMBY (*Not In My Back Yard*) behaviour of the local councils has also been documented in France and in Spain, both of which are accused of having long construction phases. Andrews et al. (2011) show that not only the temporal reaction but also the quantitative reaction of the supply side to price changes tends to be weakest in those countries where there are very long construction phases, or where it is particularly time-consuming to obtain building permits. Of the countries examined here, those countries that can be included in this group are Italy, Spain, the Netherlands, Great Britain, Belgium and Austria.

Home Ownership Rates

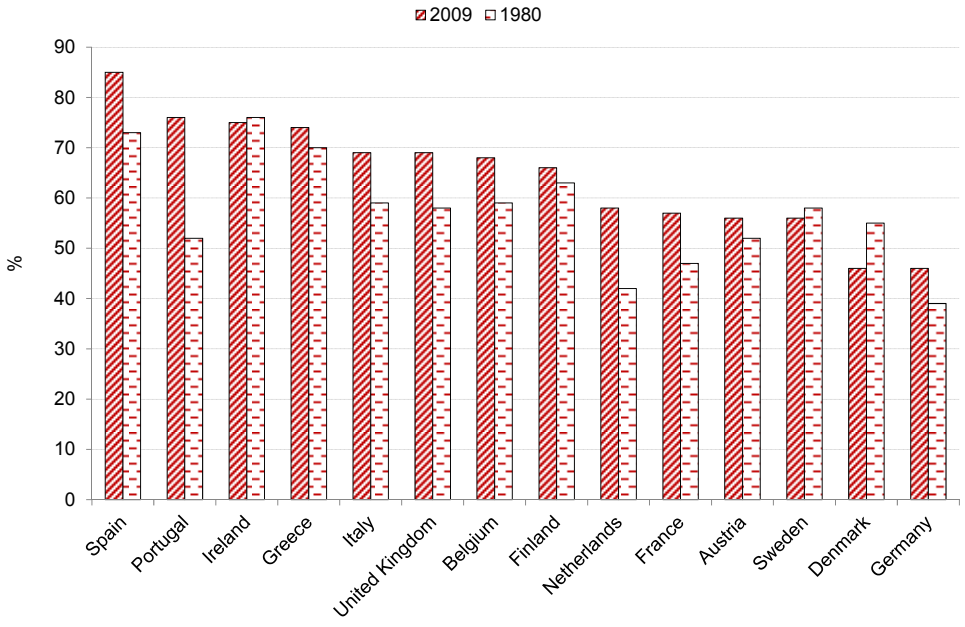
The percentage of all housing that is self-owned depends on a range of factors. These include housing market policies, tax policies, developments on the financial and credit markets, income developments, preferences, as well as family, household and age structures. Home ownership levels are not only an expression of the effects of these factors, but, in their turn, also have repercussions: on the one hand, on the operability of housing markets themselves, on the other hand, via the level of debt and the generally lower mobility of owner households and/or employees in such households, on the economy as a whole. Between 1980 and 2009 the average rate of ownership in the EU-14 rose by around 7 percentage points (PP) from 57% to 64%. A particularly steep rise could be observed in Portugal (+24PP to 2001), the Netherlands (+16 PP), Great Britain (+11 PP), France and Italy (+10 PP respectively). In Ireland and Sweden, the level of home-ownership has decreased slightly since 1980. In Denmark the decrease was more pronounced.

Figure 10: Change in home ownership rates (percentage points)



Source: Author's calculations based on data from *Housing Statistics in the European Union* (2010)

Figure 11: Home Ownership Rates



Source: Author's calculations based on data from *Housing Statistics in the European Union* (2010)

The OECD sees the increasing number of home-owners as a threat to economic development, because mobility among home-owners is less than it is for the housing sector as a whole. It is presumed that a high degree of mobility among the workforce generally improves job allocation on the labour market, and so contributes to higher employment, and therefore to a reduction in unemployment and to greater economic growth (OECD, 2011).

The increased home-ownership rates caused a decline in the percentage of rented property in the occupied housing stock. Nevertheless, in some countries, the rented property sector still represents the most important part of the housing market. It is a sector that has great significance in Germany, Austria, the Netherlands, France, Denmark and Sweden. In Great Britain, the deterioration of the rent sector was caused solely by the decline of social rented housing. Its share of the occupied housing stock fell from 31% in 1980 to 18%. In Ireland, too, and in the Netherlands, there has been a noticeable decline, whereas increases have been recorded in Austria, Denmark and Finland.

The increase in home-ownership rates affected other forms of rented dwellings (above all private tenancy) even more than rented council housing. That is remarkable insofar as there has been a liberalisation of the rent laws in many countries in recent decades. Proponents of liberalisation argue that a freer tenancy sector provides greater stimulation for housing investment, giving rise to increased supply and so *ceteris paribus* acts as a brake on the rise in rents. Opponents object that market failures predominate on the housing market, which tends to put tenants at a disadvantage with the landlords. That creates monopolistic advantages for the landlords, in particular the possibility of influencing the development of rents in their favour (Arnot, 2003).

At any rate, liberalisation of the tenancy laws, above all in the 1990s, has not itself been able to halt the rise in the levels of home-ownership. However, since the 1990s, home- ownership rates have not risen as steeply as they were doing in the 1980s. Eventually, as mentioned at the outset, in the course of the housing market crisis the percentage of tenancy has risen again in some countries, because the drop in house prices meant that house owners preferred to rent, and to wait until the house price situation changed back in their favour again.

At present, the problems resulting from the absence of a sufficiently large tenancy sector can best be seen in Spain. Given the extreme high unemployment, there would be a keen demand for affordable rented housing. Many people, above all young households, are unable to finance their own homes, due to a lack of income and also on account of the severe credit rationing as a consequence of the banking crisis. Theoretically, the large number of houses that are standing empty could be converted into rented housing, unfortunately however, the majority of these buildings are not located in places with of highest demand. The example of Spain clearly shows how important it is to have a sufficient stock of tenant housing for a generally well-functioning housing market. It is a market which, both from a welfare economics point of view and for social reasons, has to work satisfactorily, particularly in difficult economic times.

INDICATORS OF STABILITY AND INSTABILITY

Developments on the European housing markets since the mid-1990s were influenced both by global factors (financial market liberalisation, European integration) as well as by country-specific factors (macro-economic development, housing policies, institutional framework). Two indicators of instabilities on housing markets, which are frequently employed, are the volatility of house prices and of investments in housing construction. Strong fluctuations of housing prices lead to planning uncertainties on the markets and can also contribute to macro-economic instability, with corresponding negative effects on the overall welfare of society. A high degree of volatility in housing investment is also undesirable, because it increases fluctuations in economic activity. The central problem is that, in times of massive changes in demand, the volatility of housing prices can only be kept low by means of a correspondingly strong supply reaction, i.e. high flexibility and therefore also volatility in housing investment. That applies to a sudden increase in demand as well as to a sudden collapse of demand. What we have here is therefore a trade-off between house price volatility and housing investment volatility. Most of the housing market experts evidently regard strong fluctuations in housing prices as more detrimental, and advocate a supply side that is as flexible as possible (recently OECD, 2011).

House Prices and Fundamental Factors

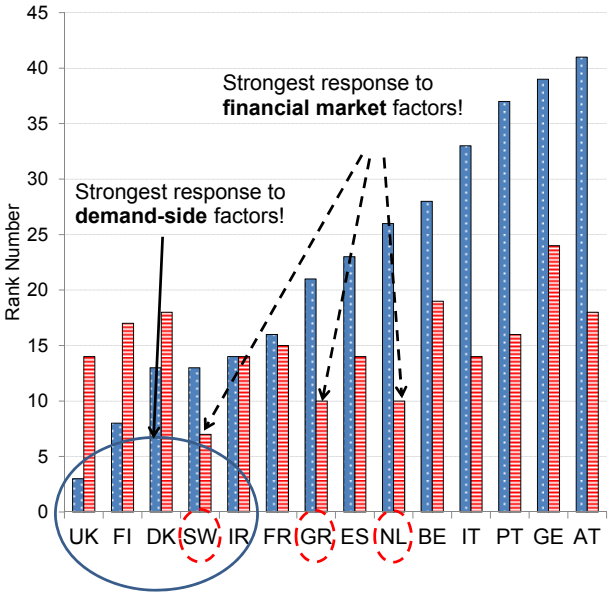
Figure 19 shows that the differences between the average growth in housing prices and the growth rates of income, rents and population were at their highest in Great Britain, Finland, Denmark and Sweden up until 2007 (recognisable by the low ranking number for the correlation of housing prices with the growth of demand factors). That entails that the development of housing prices in these countries up to the outbreak of the financial crisis could only be relatively poorly explained by real demand factors.

Figure 12: House Prices relative to Impact Factors–1995 to 2007

These indicators are based on differences of growth rates of house prices and their impact factors, respectively. A ranking for each impact factor has been made and these rankings have then been accumulated to a summary indicator. The lower the summary rank number, the higher the difference between house price growth and the average growth of impact factors.

Housing demand factors (blue):
- Net national income
- Housing rents
- Population

Financial market factors (red):
- Interest rates
- Loans for house purchase



Source: Author's calculations

On the other hand, the gap between the growth of the housing prices and the rates of change in interest rates and new loans for house purchase was lowest in Sweden, Greece, the Netherlands and Great Britain. In these countries, house prices have reacted most strongly to changes in the monetary indicators. It is worth noting that neither Ireland nor Spain emerge as extreme examples here.

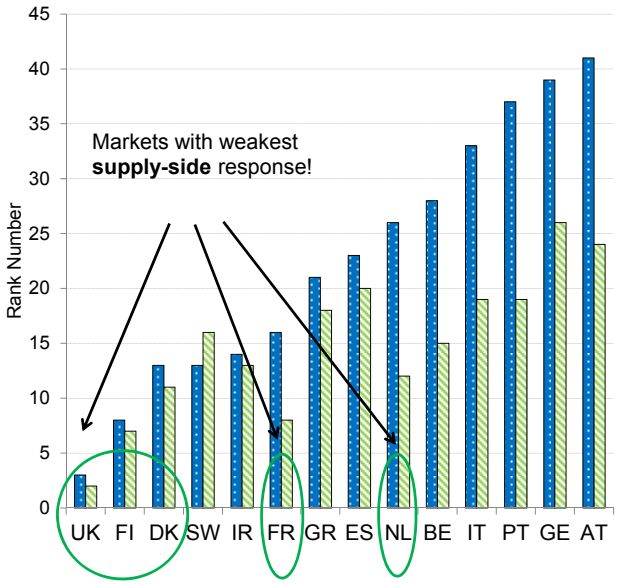
To a certain extent, the growth of house prices can only be poorly explained by taking into account the monetary developments. For example, this applies in particular to Great Britain, Finland und France. The rest of the explanation must therefore be found on the supply side. Figure 13 shows that, up until 2007, these three countries, and above and beyond them also Denmark and the Netherlands, had the greatest gap between house price growth and the growth and level of housing investment (average ratio of housing investments to GDP). In these countries, the supply side reacted most sluggishly to price developments in a country-by-country comparison.

Figure 13: House Price Development And Supply Side Response— 1995 to 2007

These indicators are based on differences of growth rates of house prices and their impact factors, respectively. A ranking for each impact factor has been made and these rankings have then been accumulated to a summary indicator. The lower the summary rank number, the higher the difference between house price growth and the average growth of impact factors.

Housing demand factors (blue):
- Net national income
- Housing rents
- Population

Supply side factors (green):
- Housing investments
- Housing investments in % of GDP (Average 1995 to 2007)



Source: Author's calculations

House Price Volatility, State Influence and Institutions

The effects of macro-economic developments on the central housing market indicators, namely house prices and housing investments, depend most decisively on the country-specific design of the system of financing housing and the numerous different facets of national housing policies. In order to identify which country-specific factors tend to be stabilising and which tend to have a more destabilising effect, an attempt has been made to rank the countries with regard to the markedness of the factors in order of priority. The factors that were examined derive from the fields of the finance market, taxes, transaction costs and direct state influence on the housing markets, and the fourteen countries were correspondingly divided up into three groups according to the development of their house prices up to 2007 and thereafter:

- *boom-bust countries*: Great Britain, Ireland, Spain, Denmark, Greece, (Netherlands)
- *boom-nonbust countries*: France, Sweden, Belgium, Finland
- *nonboom countries*: Austria, Germany, Italy, (Portugal).

The qualitative rankings are summarised in Tables 1 and 2. One plus (+) signifies that, in relation to the relevant indicators, the respective country had a pre-eminent position or a higher ranking. Three pluses (+++) accordingly signify the highest ranking or the most marked manifestation. Conversely, three minuses (---) show that a country was a straggler in relation to the relevant factor or had the least marked manifestation.

Characterisation of the countries and groups of countries on the basis of the financial market indicators leads to the following conclusions: the *boom-bust countries* present a largely homogenous picture. In relation to the liberalisation of the financial markets, they were the most advanced in 1995 and – according to the mortgage market index of 2008 – had largely complete mortgage markets. The share of the new capital market instruments (*securitisation, mortgage-backed securities*) in refinancing mortgages was relatively high, likewise the share of mortgages with variable interest rates. The degree of debt of private households and the growth of mortgages for house purchases were very high. On average, mortgages in the boom-bust countries show the longest credit periods in a country-to-country comparison.

The *boom-nonbust countries*, on the other hand, present a very heterogeneous picture. France and Sweden, for instance, were pioneers of the liberalisation of the financial market, whereas Belgium and Finland were among the stragglers. The main differences to the boom-bust countries appear to lie in the use of the new capital market instruments to refinance housing construction loans, as well as in the share of the loans with variable interest rates and in the level of the household debt.

The non-boom countries, on the other hand, present a rather more homogenous picture, which is in stark contrast to the boom-bust countries. They were sluggish in liberalising their financial markets and in integrating the mortgage markets, and the loan-to-value ratios for loans and the degree of household debt were comparatively low.

In comparison with the financial market indicators, characterisation on the basis of broad housing market indicators leads to a generally more obscure picture. There are only a few salient facts: firstly, in the *boom-bust countries*, with the exception of Denmark, there are very high home-ownership rates and comparatively liberal systems of rent regulation. Secondly, all the *boom-nonbust* countries show a high percentage of public housing. Thirdly, all the *non-boom* countries had a high rate of taxation on proceeds from the sale of property, and restrictive regulations for deducting mortgage costs from income tax. All in all, the stabilising or destabilising effects of the individual fields of the national housing market policies can be less easily identified than is the case in the field of financial market indicators. In part, this lies in the lower quality or comparability of the data, for instance in the area of state subsidies for housing. The national housing market policies display a variety of different aspects, and cannot be successfully reduced to simple distinguishing factors, so that a convincing statement is at present still lacking.

Table 1: A Characterisation based on Financial Market Indicators

	Financial Reform Index 1995 (Abiad at al. 2008)	**Mortgage Market 'Completeness' 2008** (IMF, 2008)	**Mortgage Backed Securities / Outstanding Mortgage Loans – Av. 2003 to 2006** (EMF-Hypostat, 2004, 2005, 2006,2007)	**Share of Variable Rate Loans** (ECB, 2003)	**Typical Loan-to-Value (LTV) Ratio** (ECB, 2003 a. o.)	**Level of Household Debt** (Eurostat)	**Growth of New Loans for House Purchase** (ECB, 2009)	**Typcial Loan Maturity** (ECB, 2003 a. 2009; a.o.)
Boom-Bust markets								
Denmark	+ + +	+ + +	– –	–	+ +	+ + +	–	30
Greece	n.	o	+ +	+ + +	o	– –	+ + +	15-20
Ireland	+ + +	+ + +	+ + +	+	– –	+ + +	+ +	31-35
Spain	+ + +	+ +	+ +	+ +	– –	+	+	30
United Kingdom	+ + +	+ + +	+ + +	+ +	o	+ +	o	25
As a group	**+ + +**	**+ + +**	**+ + +**	**+ +**	**–**	**+ +**	**+ +**	**27**
Netherlands	+ + +	+ +	+ +	+	+ + +	+ + +	+	30
Boom-NonBust markets								
Belgium	o	o	o	– – –	+ +	–	o	20
Finland	–	+ +	o	+ + +	o	o	o	20-25
France	+ + +	– – –	–	– –	o	o	o	19
Sweden	+ + +	+ + +	– –	o	+ +	+	+ + +	25
As a group	**+**	**+**	**–**	**–**	**+**	**o**	**+**	**22**
NonBoom markets								
Austria	– –	–	– – –	o	– – –	–	o	25
Germany	o	– –	– –	– – –	– –	–	– – –	25
Italy	–	– –	+	+	– – –	– –	+	15
As a group	**–**	**– –**	**– –**	**–**	**– – –**	**–**	**–**	**22**
Portugal	n.	n.	+ + +	+ + +	n.	+ +	o	n.

Sources: Author's calculations based on data from *Abiad et al.* (2008), *IMF* (2008), *ECB* (2003), ECB (2009), *Hypostat* (2004, 2005, 2006, 2007), Eurostat, and Government of Ireland.

Table 2: A Characterisation based on broad Housing Policy Indicators

	Capital Gains Taxes (author's calc. based on nat. information)	**Value of Mortgage Interest Tax Relief** (OECD, 2011)	**Transaction Costs of Purchasing Property** (EMF, 2010)	**Rent Regulation Index** (author's calc. based on nat. information; results broadly in line with OECD, 2011)	**State Subsidies for Housing** (Eurostat)	**Share of Social Housing in Total Stock** (Housing Statistics in the European Union, 2011)	**Home Owners Quote** (Housing Statistics in the European Union, 2011)
Boom-Bust markets							
Denmark	+ + +	+ + +	– – –	o	o	+ +	– – –
Greece	o	+ + +	+ + +	– – –	n.	– – –	+ +
Ireland	o	o	– –	– – –	+ + +	o	+ + +
Spain	–	+	+ +	–	+ + +	– – –	+ + +
United Kingdom	– – –	– – –	– – –	– – –	o	+ +	+
As a group	**o**	**+ +**	**–**	**– –**	**+ +**	**–**	**+ +**
Netherlands	– – –	+ + +	–	–	+ +	+ + +	o
Boom-NonBust markets							
Belgium	– –	+	o	– – –	– –	o	+
Finland	+	+ +	o	–	– –	+	o
France	– –	o	+ + +	–	+ + +	+	–
Sweden	+ +	+ +	– –	+ + +	+	+ + +	– –
As a group	**–**	**+**	**+**	**–**	**o**	**+ +**	**–**
NonBoom markets							
Austria	+ + +	– –	o	–	o	+ + +	– –
Germany	+ + +	– – –	–	–	+ +	–	– – –
Italy	+ +	– –	+ +	+ + +	+	– –	+ +
As a group	**+ + +**	**– –**	**+**	**+**	**+**	**o**	**–**
Portugal	+	–	+	+ + +	n.	– –	+ + +

Sources: Author's calculations based on data from *EMF* (2010),*OECD* (2011), *Housing Statistics in the European Union* (2010), Eurostat, and national information.

CONCLUSIONS

Firstly, although the liberalisation of the financial markets does not represent a sufficient condition for a crisis on the housing markets, it does indeed constitute a necessary one. All of the countries with a boom-bust cycle of real house prices examined here had largely liberalised financial markets as of the middle of the 1990s. On the other hand, there were countries with advanced liberalisation in which real house prices had not fallen, or had fallen only slightly, since the outbreak of the crisis. The question of stability or instability of housing markets does not, therefore, depend primarily on formal liberalisation of the financial markets, but rather on the institutional implementation of this process, as well as on other circumstances and, of course, on the behaviour of the agents.

Secondly, an important role is played by the general orientation of the system of financing housing construction and the predominant way in which housing loans are refinanced by lenders. Markets with a tradition of long-term financing, in which fixed interest loans are the rule, develop in a more stable way, due to the fact that such loan contracts are easier to service and control, and involve a more stable relationship between customers and banks. Systematic short-term financing of durable commodities does not make economic sense, at least in the long run. More flexibility on the side of the recipients of loans requires, in turn, more flexibility on the side of the lenders. That inevitably leads to what are, in effect, short-term planning horizons for the lenders, i.e. short-term refinancing and correspondingly higher risks. Capital market instruments such as *mortgage backed securities* (MBS) do indeed make it more feasible to have better management of the *exposure* of the banks in relation to maturity mismatch, interest and liquidity risk. However, such instruments do not only have an insurance function, but also involve high risks. During the crisis, *covered bonds* proved to be comparatively more stable instruments, due to the double coverage afforded by the issuer and coverage funds, high-quality collateral, generally high liquidity, long-term and predominantly fixed-interest issuance, standardization, and the fact that loans are not derecogniced from the issuer's balance books.

Thirdly, an eye has to be kept on the balance sheets and the distribution of debt of private households. A higher level of private debt was – and still is – an essential factor in the present crisis. With the exception of Sweden, all the countries with a high level of debt in private households have experienced a massive collapse in house prices. However, even Sweden has to fear that further shocks in the European finance system could lead to turbulence on its housing and finance markets, since at the present time a large part of the refinancing of housing credit (mortgages) lies in foreign hands.

Fourthly, in view of the experience of the crisis, the widespread strong demand for home-ownership has to be seen from a critical perspective. For a stable development of the housing markets, a critical mass of rental housing is needed. A sufficiently large rental sector has a stabilising effect on housing prices and thereby also affects the economic situation as a whole. Precisely in times of crisis, or in times of loan rationing by the banks, an adequate supply of rental housing forms the precondition for young families, in particular, to be able to set up a household. In addition, a functioning rent sector increases mobility of the households, which has a positive effect on the allocation to the labour market and on the growth of the economy. In this connection, the social rent sector plays an extremely important role, since as a rule it helps rent development to remain stable.

Fifthly, we should think of global influencing factors and country-specific factors separately. From a global perspective, it is above all the changes that have taken place on the financial markets that have had significant effects on the housing markets over the last two to three decades. All the housing markets under consideration have been affected by this, even if to varying degrees. Surprisingly, the examination shows that the development of housing prices in Ireland and Spain can be better explained by the changes in the fundamental influencing factors of population, income, interest rates, loans and housing investments than in some of the other countries. In both these countries there were significant maldevelopments, and the housing construction sector was overall too large. However, it has not been possible to sufficiently explain the dramatic collapses during the crisis by means of country-specific factors alone. This suggests that there must also have been detrimental impacts deriving from the financial sector, resulting in a more dramatic effect on the housing markets than in the other twelve countries.

Sixthly, in some countries can be seen massive weaknesses on the supply side of the market. The countries to be mentioned here are Great Britain, the Netherlands, Finland, France and Sweden. The causes of this are to some extent well-known. For instance, the strong protection of nature and the green belts in Great Britain and in the Netherlands has already been mentioned. In France, Finland and Sweden, the weaknesses on the supply side are concentrated in the urban regions, whereas in the rural areas a surplus is increasingly predominant. In part, this was caused by a subsidy system and its false promises, particularly in France. Moreover, in France there are complaints about processes for obtaining building permission, NIMBY policies on the part of local councils and high technical standards, which considerably increase the building costs. High construction costs also constitute a latent problem in Sweden and in Austria.

Seventhly, in Austria, as also in Germany, Portugal and Italy, the prices of self-owned houses and apartments and of housing investments, changed little up until the middle of the last decade. However, in Austria, we can observe that freehold prices have been continually rising above the inflation rate for several years, against the European trend. The reasons for this are presumably to be found, on the one hand, in an increased orientation of the demand towards the ownership sector, and on the other hand, in a sense of uncertainty among investors, who see property investment as a way of protecting themselves against the Euro crisis. Reassuring is the fact that price increases have so far not been connected to any great increase in the debt of private households, as was the case in other countries before the outbreak of the financial crisis in 2007. According to the data of the ECB, the growth rates of loans for home purchases is distinctly below the growth rates of the years between 2004 and 2007, and very far indeed from the growth rates in Ireland and Spain before the financial crisis. In addition, according to the latest reports of the Austrian National Bank, the share of foreign currency loans in the total stock of loans given by Austrian banks to Austrian private households has decreased considerably. However, the current cuts in government housing subsidies will lead to relatively low rates of housing construction over the next few years, above all in the field of social housing. In the face of continued strong growth of the population, above all in the east of Austria, this could also result in another steep increase in rents. Such a development would furthermore have negative consequences with regard to inflation, economic growth and social solidarity.

BIBLIOGRAPHY

Abiad, A., Detragiache, E. and Tressel, T. (2008), 'A New Database of Financial Reforms', IMF Working Paper WP/08/266.

Andrews, D. (2010), 'Real House Prices in OECD Countries – The Role of Demand Shocks and Structural and Policy Factors', OECD Economics Department Working Papers, No. 831.

Andrews, D. and Sanchez, A.C. (2011), 'Drivers of Homeownership Rates in Selected OECD Countries', OECD Economics Department Working Papers No. 849, OECD Publishing.

Andrews, D., Sanchez, A.C. and Johansson, A. (2011), 'Housing Markets and Structural Policies in OECD Countries', OECD Economics Department Working Papers, ECO/WKP/(2011)5, OECD, Paris.

ECB (2003), 'Structural Factors in the EU Housing Markets', European Central Bank, March 2003, Frankfurt am Main.

ECB (2009), 'Housing Finance in the Euro Area', ECB Occasional Paper Series, No. 1010, March 2010, European Central Bank, Frankfurt am Main.

EMF(2010), 'Study on the Cost of Housing in Europe', European Mortgage Federation, Brussels.

European Commission (2012), 'Alert Mechanism Report 2012', Com(2012) 68.

Housing Statistics in the European Union (2003), OTB Research Institute for the Built Environment, Delft University of Technology.

Housing Statistics in the European Union (2010), OTB Research Institute for the Built Environment, Delft University of Technology.

Hypostat (2003, 2004, 2005, 2006, 2007, 2010), A Review of Europe's Mortgage and Housing Markets, European Mortgage Federation, Brussels.

IMF (2008), The changing housing cycle and the implications for monetary policy, in: *IMF World Economic Outlook*, 2008, Washington.

OECD (2009), *Economic Policy Reforms 2009: Going for Growth*, OECD, Paris.

OECD (2011), 'Housing and the Economy: Policies for Renovation', Chapter 4 in *Economic Policy Reforms 2001 – Going for Growth*, OECD, Paris.

Matsaganis, M. and Flevotomou, M. (2007), 'The impact of Mortgage Tax Relief in the Netherlands, Sweden, Finland, Italy and Greece', EUROMOD Working Paper 2/07, University of Essex.

Matsaganis, M. (2010), Estimating the distributional effects of mortgage tax relief in Europe, Athens University of Economics & Business, Research Paper. Athens.

Rae, D. und van den Noord (2006), 'Ireland's Housing Boom – What has driven it and have prices overshot?', OECD Economics Department Working Papers, No. 492, OECD, Paris.

Sanchez, A.C. and Johansson, A. (2011), 'The Price Responsiveness of Housing Supply in OECD Countries', OECD Economics Department Working Papers No. 837.

Wieser, R. (2011), Stabilisierende und destabilisierende Faktoren auf den Wohnungsmärkten der EU-14, study carried out on behalf of the Austrian Federation of Limited-Profit Housing Associations, Centre of Public Finance and Infrastructure Policy, Department of Spatial Planning, Vienna University of Technology, Vienna. Download: http://www.gbv.at/Page/View/4186