L'UNION SOCIALE POUR L'HABITAT

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European Semester

EC Country-specific Recommandations 2012-2013
and in dept review
30 may 2012[1]

Housing market - Rent regulation - Social Housing

Sweden

Recommandations

Take further preventive measures to strengthen the stability of the housing and mortgage market in the medium term, including by fostering prudent lending, reducing the debt bias in the financing of housing investments, and tackling constraints in housing supply and rent regulations.

Justifications

The Commission's in-depth review under Article 5 of Regulation (EU) No 1176/2011 confirmed that Sweden has a rather high level of household debt. While the situation in the housing and mortgage market stabilised in 2011, several structural distortions persist that threaten the stability of these markets in the long-term. Relevant measures have been taken to strengthen the resilience of the financial sector. However, there are currently a number of policies in place that may contribute to the volatility of the Swedish housing market and mortgage debt accumulation, which have received less attention: generous tax deductibility of interest payments and low property taxes, little amortisation and stringent rent regulation. On the supply side, local planning monopoly, lengthy zoning processes and a lack of competition hinder the flexibility of housing supply.

IN-DEPTH ANALYSIS OF the housing market

Although house prices seem to have developed in line with fundamentals, the Swedish housing market represents an area where imbalances may emerge. Some policies and features, such as supply bottlenecks and rental regulation in combination with changes to the tax system, may have created an upward bias in house prices. These

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[1] http://ec.europa.eu/europe2020/making-it-happen/country-specific-recommendations/index_en.htm

policies and institutional features imply distortions or represent imperfections that carry an economic efficiency cost and could have a destabilising effect. Their interaction with tax policies and institutional features in the Swedish mortgage market, such as generous interest deductibility on mortgages and little amortisation, could also potentially increase the cost of these.

In this context, **the in-depth review concludes that Sweden is experiencing macroeconomic imbalances, which are not excessive but need to be addressed.** In particular, certain macroeconomic developments regarding private sector debt and the housing market deserve attention so as to reduce the risk of adverse effects on the functioning of the economy.

The policy response could include measures to foster prudent lending, reduce the debt-bias in housing taxation, strengthen mortgage amortisation requirements and promote the use of fixed interest rate mortgages. Possible measures to improve the flexibility of housing supply include simplification of the planning and zoning processes, fostering competition in the construction sector and further easing the regulation of the rental market.

Housing market development

From the second half of the 1990s until the onset of the financial crisis, house prices in many countries, including Sweden, rose sharply. When the financial crisis hit, house prices started to fall, though their correction proved fairly muted and since 2009, house prices resumed their strong up-ward movement reaching a new all-time high in 2010. The strong rebound in house prices in 2009-10 explains why Sweden was the only member state, except for Finland, for which house price inflation exceeded the 6% threshold in the MIP scoreboard in 2010.

During 2011, however, house prices in Sweden have been rather stable, with some downward movement accelerating in the fourth quarter of 2011. Strong economic growth was not enough to offset higher mortgage rates, increasing uncertainty about the economic outlook and, possibly, the introduction, in the autumn of 2010, of a cap on the loan-to-value ratio. There are some tentative signs that prices may stabilise again in 2012, as mortgage rates have come down somewhat, the economic outlook has stabilised and household optimism about future house price developments has returned.

There is no straightforward way of assessing whether house prices are now at a level in line with fundamentals. At least on some metrics, house prices now look richly valued (e.g. price-to-rent ratio, affordability ratios). The price-to-disposable-income-per-capita ratio is still some 25% above its mid-1990s level and close to its recent peaks. On the other hand, other indicators as well as econometric estimates suggest that the steady increase in house prices over the last 15 years may well be justified by fundamentals, such as strong disposable income growth and low interest rates coupled with limitations on the supply-side. Caution is however needed in interpreting these results, as fundamentals may change and past relationships may not hold.

Both demand and supply factors have contributed to the rise in house prices and their recent relative resilience. On the demand side, disposable income has risen strongly over the last decade and a half. The quick recovery from the 2008/09 recession, which was helped by significant monetary and fiscal stimuli, and a relatively resilient labour market explains why disposable income has continued to rise at a respectable pace also in the more recent period. Some specific tax measures favoring housing (such as significant decrease in property taxation and deduction schemes for home improvement services) have also added to demand for owner-occupied housing, as has rental regulation. The trend decline in mortgage rates, in combination with reduced amortization requirements, also fuelled demand over the last decade. On the supply side, a number of factors have contributed to a rather muted supply expansion over the same period. The effects from the crisis of the early 1990s and the 1991 tax reform lead to a sharp contraction of the construction sector, which has taken a long time to recover from. Poor competition and administrative uncertainty in relation to zoning and issuance of building permits may also have held back supply by raising costs. Thus, contrary to Spain and Ireland for instance, Sweden did not experience an overexpansion of the construction sector, as increased demand for housing mainly manifested itself in higher prices and less in increasing volumes.

Given the sharp increase in Swedish house prices since the mid-1990s and the many cases of booms turning to busts in other countries in recent years, it is worth looking closer at the Swedish housing market to assess the sustainability of current price levels. Although, some indicators point at a substantial overvaluation of house prices, others suggest Swedish house prices have developed in line with fundamentals. In addition, some policies and features in the Swedish housing market may well have contributed to the strong rise in house prices and their relative resilience in recent years. Some of these policies and institutional features may imply distortions or represent imperfections that carry an economic efficiency cost. Taken together, a further analysis of the Swedish housing market therefore seems warranted.

The Swedish housing market

As noted in section 2a, the persistent high level of Swedish house prices may point to the existence of an imbalance implying risks for macroeconomic stability. Thus, this section provides a closer look at house prices developments and an analysis of their level and of factors that might explain it.

Development of Swedish house prices

During about a decade house prices in Sweden rose sharply. Between the trough of 1996 to the pre-crisis peak of 2007, Swedish house prices had climbed in real terms by almost 140% or by an average of 8% per year (Graph 18). When the financial crisis hit, house prices started to fall in most countries that previously had seen strong increases, including Sweden. In contrast to most of the other countries, however, the house price correction proved fairly muted in Sweden, with prices falling by only 6% from peak to trough in real terms. Moreover, after bottoming out in early 2009, house prices subsequently

resumed their strong up-ward movement. By the third quarter of 2010 real house prices had risen by 12% to reach a new alltime high. This compares with much sharper corrections in countries such as Ireland, Denmark, Spain, the UK and the US, where only very recently real house prices in some cases have shown signs of bottoming out.

During 2011, real house prices in Sweden have trended slightly down in real terms with the fall accelerating in the fourth quarter of 2011. Strong economic growth, at least until the third quarter, was not enough to offset higher mortgage rates (both due to Riksbank tightening and wider spreads), increasing uncertainty about the economic outlook and, possibly, the introduction, in the autumn of 2010, of a cap on the loan-to-value ratio. House price expectations of households have been very volatile, swinging from strong optimism in the spring of 2011 to deep pessimism at the end of 2011, only to swing back to significant optimism in the spring of 2012.

Are Swedish house prices over-valued?

Estimates of fundamental house prices in Sweden yield very different results depending on the assumptions made and methods used. On the crudest of measures, such as an unadjusted price-to-rent ratio, Swedish house prices now look significantly over-valued by 30-40% depending on the length of the data series used (see Graph 17)11. Similarly, various measures of affordability, such as the ratio of house prices to disposable income, indicate that house prices are at relatively high levels in a historical perspective. The ratio of house prices to disposable income is currently at roughly the same level as in 1990, before house prices fell sharply. However, comparing with historical average values does not capture any possible structural shifts in the user cost of home ownership which could justify higher prices than the historical norm, such as a trend decline in mortgage rates and lower taxes on home ownership.

More sophisticated approaches attempt to control for structural changes. In a survey of risks in the Swedish housing market published by the ***Swedish Riksbank***, both an econometric model and a general equilibrium model, estimated on Swedish data, are used to explain the strong rise in house prices and assess whether houses now are overvalued. The econometric model includes three explanatory variables (household real disposable income, an average after-tax real mortgage rate and household real financial wealth), which together explains very well the variations in house prices over the last 25 years. Since the mid-90s, the rapid rise in households' real disposable income explains about half the rise in house prices, with a further 35% explained by lower real mortgage rates12. In the general equilibrium model, there are nine exogenous variables, which together explain 100% of the fluctuations around the long term growth in house prices. It turns out that shocks to the demand for housing compared to other consumption explain 70% of all house price fluctuations, with another 20% explained by monetary policy shocks, i.e. changes to monetary policy not explained by a Taylor rule. According to the model, house prices are now 20% above its trend level. By definition, the model cannot explain why there has been this shift in preferences towards housing to relative other consumption. A study co-authored by the Chief economist of the ***Financial Supervisory Authority*** found no over-valuation,

citing strong income growth, a structural decline in real interest rates on mortgages, easier access to mortgage finance due to lower down payment requirements, lower property taxation and subdued construction of new houses over the last decade as main explanatory factors.
To provide an indication of possible peaks and troughs in real house prices in 2011 and 2012, the ***OECD*** has estimated two separate probit models using data for 20 OECD countries. Although the OECD warns that these models can raise false alarms, they show that Sweden is the only country for which a peak in real house prices is predicted to occur in either 2011 or 2012 in both of the scenarios used in the exercise.

According to Commission calculations, an adjusted price-to-rent ratio, taking into account the evolution of the user cost of home ownership15, would reduce the estimated overvaluation to practically zero in 2011. The estimates also suggest, however, that houses were overvalued by some 25% in 2007. The user cost of home ownership reflects the after-tax mortgage rate, the property tax, depreciation and expected capital gains/losses. If the user cost declines over time, as was the case in most countries due to a structural decrease in mortgage rates, this may imply a higher fundamental price-to-rent ratio. In the left-hand graph of Graph 19, the fundamental ratio is based on loans with a five-year maturity, whereas in the right and graph, all maturities are taken into account. In the latter case, the large share of variable rates is reflected in the high volatility of the fundamental price-to-rent ratio, as the user cost has changed in tandem with the large swings in interest rates observed in recent years.

Using **an econometric approach**, where an equilibrium house price is estimated on the basis of an equation which expresses the real house price as a function of disposable income per household and the real after-tax mortgage rate, **yields a similar result**, with actual house prices only deviating marginally from the estimated equilibrium price (Graph 20). Other possible determinants of house price developments, such as housing supply or population growth were not found to be significant.

Although various studies thus seem to indicate that current house prices are more or less at their fundamental values, caution is needed in interpreting these results. These calculations are based on assumptions that may not necessarily prove accurate, the studied period may not be statistically significant and historical relationships may not always hold. Moreover, the model results seem to emphasize the role of demand factors, whereas no supply factor was deemed significant to explain price developments in recent decades. As prices usually are thought of being the result of an interplay of supply and demand, this clearly points to some unresolved issues. In addition, and as was also pointed out by the Riksbank study, even if the current level of house prices seems warranted given strong fundamentals, maybe these same fundamental factors are not at reasonable levels. The exceptionally low levels of new construction and the very low real interest rates in recent years are factors that may not remain.

What explains Swedish house prices?

Specific demand and supply factors could explain why Sweden has not suffered the large
house price corrections that have been observed in many other countries since 2007, despite similarly rapid house price inflation and credit expansion over the previous decade. They are fully compatible with the view that real disposable income and real interest rates are of major importance for the determination of house prices.

Demand factors

Although the Swedish economy was hard hit by the global downturn in 2008-09, with GDP falling by 5.2% in 2009, it subsequently experienced a **very quick recovery** with GDP growth reaching 5.6% in 2010 as global trade rebounded. It subsequently continued to grow strongly in the first three quarters of 2011. As the downturn never spread to the domestic side of the economy to any large extent, the labour-market reaction to the initial downturn in economic activity proved less adverse than expected at the beginning16. Therefore, consumer confidence returned fairly quickly. In addition, as the public sector was posting large surpluses before the crisis17, automatic stabilisers were allowed to work in the downturn without giving rise to discretionary consolidation measures or expectations thereof. In fact, fiscal policy became expansionary (see paragraph on tax measures below).

As noted, the incipient correction observed in Swedish house prices in the last quarter of 2008 was quickly interrupted, helped by a very substantial **monetary easing**. The Riksbank, which had hiked the repo rate to 4.75% as late as early September 2008, reversed course in the following months, bringing the repo rate down to 0.25% by summer 2009. This represented a larger decrease in the policy rate than was the case in the euro area, where the ECB brought down the policy rate from 4.25% to 1% during the same period. Perhaps more importantly, Swedish households tend to borrow at **variable rates** to a much larger extent than borrowers in other European countries and are therefore more sensitive to shifts in the repo rate. Related to this and partly thanks to policy intervention in the form of public guarantees covering bank deposits and bonds, the financial sector continued to perform its function in a normal way throughout the downturn. The pace of **mortgage credit growth**, which fell to a still high level of 9.1% by mid-2009 after averaging 14.4% in the four years preceding the Lehman crisis, reacted to the improving economic outlook and lower level of the repo rate and reached double-digit levels again in early 2010 and remained high throughout that year. (For a further discussion of this issue, see the section of private-debt.)

Tax policy changes undertaken in recent years have most likely given house prices a further lift. Most importantly, in 2008, **the property tax was lowered** from 1.2% of the cadastral value (the cadastral value amounts to 75% of the market value) to the lower of either 0.75% of the cadastral value or 6512 SEK (or roughly 700 EUR, a very low ceiling that would apply to the vast majority of houses), which drastically reduced the taxation of housing18. This reduction, which departs from the underlying principle of the 1991 tax reform of uniformity and neutrality between various investment alternatives, was undertaken to address its perceived poor legitimacy among voters, epitomised by cases of low-income liquidity constrained pensioners being increasingly heavily taxed on their property that had risen in

value. While the property tax was drastically curtailed, the deductibility of mortgage interest payments was left untouched, which tilted the incentive structure towards debt-financed investment in property. It is highly likely that at least part of this tax cut has been capitalised in house prices. In 2008, the government also introduced a **permanent deduction scheme for home improvement services**, whereby a house owner is allowed to deduct up to half of the labour cost for these services against income taxes (up to a maximum amount of SEK 50000, or about EUR 5500, per year). It is possible that this scheme, which proved much more popular than initially expected, could have contributed to driving up house prices by freeing part of the initial renovation budget to the purchase of the house itself or by enhancing the value of the stock of houses by quality-improving renovations.

In addition, during the 2007-10 period, **taxes on earned income were significantly reduced** (by roughly SEK 75 billion or 2.4% of GDP), mainly through four steps of the so called inwork tax credit scheme, but also through an increase of the threshold for paying state income tax. Although the stated objective of these tax cuts was to increase labour market participation and employment, in particular among groups with a loose connection to the labour market, it also provided a boost to household disposable income at a time of slower GDP growth19. As part of the fiscal response to the economic downturn in 2008-09, the government also undertook **other stimulus measures** with a clear supportive effect on household income, in particular extra state transfers to the municipalities. Hence, disposable income has held up well in recent years (Graph 21).

Supply factors

While a number of factors seem to have contributed to keeping housing demand at a high level in recent years, in theory this should only result in upward price pressure if supply is not able to match the increased demand. Although supply factors were not found to be statistically significant in some econometric studies in explaining the rise in house prices over the last decade or so, there are nevertheless reasons to suspect that supply and demand factors interact in the price formation process.

In a longer perspective, housing investment in Sweden has been on a downward path. Having just clawed its way back to its mid-80s level of 4% of GDP by 2007, the ensuing financial crisis hit construction activity hard and the share dropped below 3% of GDP in 2009. Although the subsequent economic recovery led to a turnaround also in building activity, the uncertainty triggered by the sovereign-debt crisis that erupted last year seems to have again dented the prospects for the sector. This suggests that building activity is very sensitive to financial conditions. In the second half of the 1980s, housing investment boomed in the wake of the financial deregulation of the mid 1980s, only to collapse as the real estate bubble burst in the early 1990s. The bursting of the bubble was exacerbated by the simultaneous implementation of a long-planned tax reform that raised real interest rates through less generous interest deductibility and broadened the VAT base, notably to cover the construction sector. In addition, an ill-timed pegging to the ecu in 1990 had to be abandoned in late 1992, further debilitating an already weakened banking sector, as the krona sank. This explains why construction activity declined in such a significant way in the

early 90s and stayed in the doldrums for much of the 1990, before recovering more noticeably in the years preceding the global financial crisis.

Apart from the sensitivity to financial conditions, existing research suggest that Sweden has one of the most price sensitive construction sectors in the OECD[20], meaning that construction activity reacts relatively positively to changes in house prices. Indeed, the boom in house prices over the last decade has gone hand in hand with an expanding construction sector, but since absolute volumes were at such a very depressed level in the 1990s, it has taken time to come back to more normal production levels.

A headwind has been the relatively **unfavourable cost developments** in the construction sector over the last decade. Official cost data, however, include both the cost of land and profits, which makes it very sensitive to the business cycle[21]. If the sector is experiencing a boom, it is relatively easy for subcontractors and input providers to hike their prices and profits, which are then passed on as higher costs to the final buyer, which raises the issue of possibly **insufficient competition** in the sector. This contributes strongly to rapidly rising production costs. As has been proposed by the NHGB[22], a more useful measure may be to look at the long-term evolution of the factor price index, which measures costs of inputs such as labour, materials, transports and machinery, to gauge the longer-term evolution of construction costs. According to their calculations, these costs rose by an average of 2.2% per year over the last decade, compared to an average of 1.3% per year during the preceding decade. The input factors that have seen the sharpest rise are transports and materials. For materials, insufficient competition could, again, be part of the explanation. In general, the Swedish Competition Authority has pointed to a lack of competition in the construction sector, with high entry barriers discouraging new entrants[23]. According to both the OECD and the NHGB, Swedish housing investment is very sensitive not only to house prices, but also to production costs[2].

Construction activity may also be depressed due to administrative uncertainty in relation to **zoning** and issuance of building permits. Processes can be lengthy and involve far-reaching commitments by the developer to provide public infrastructure such as access roads, schools and even recurrent maintenance. This tends to create uncertainty as to the final costs and favour large established firms. In addition, the **local planning monopoly** may cause a suboptimal level of construction, as there is a free-rider problem in growth regions consisting of several municipalities, where each municipality wants to limit its own outlays for complementary infrastructural investments in relation to expanding housing construction, while at the same time benefitting from neighbouring municipalities' investments. Also for major infrastructure projects, the power of single municipalities to block, delay or force costly changes to projects of wider importance is significant. Although such interference in theory can be overridden by a national interest clause, it is not always politically feasible to apply it and it does not cover housing projects. It is also possible that zoning is restricted at the local level by the desire of insiders to maintain high values of their properties by limiting supply of new housing. This could also ensure that immigration to the municipality mainly consists of high-income earners.

An additional institutional factor that may impede a rational development of the housing stock and keep house prices at an elevated level is the **stringent rent regulation** in place in Sweden. Sweden has quite restrictive rent controls for apartments, which severely limits rents from responding to market signals. This is particularly the case in large urban areas such as Stockholm, where regulation distorts the market. The only legal option to get hold of a rental contract is to sign up for a waiting list to be allocated an apartment26. These can be prohibitively long, which forces many people into buying a house or a tenant-owner's apartment27, thereby pushing up the prices of these. This has also led to a wave of conversions of rental apartment houses into tenant-owner's apartments28, with the latter expanding its share of the multi-family dwellings from less than a quarter to almost half in Stockholm over the last decade. As sub-letting of tenant-owner's apartments are subject to the approval of the other co-owners of the association, which cannot be taken for granted, it could result in a suboptimal supply of housing services. A recent government inquiry on how to make better use of the existing housing stock identified a number of factors restraining the willingness of residents of tenant-owner's apartments to sub-let the whole or part of their apartments and came up with a number of proposals to address them. These measures include a relaxation of the rules giving the association a right to deny a resident the permission to sub-let his or her apartment, more flexible rent-setting, shorter period of notice for the tenant and a strengthening of the right to reclaim the apartment from the tenant after the expiry of the rental contract.

Is the Swedish housing market in an imbalanced situation?

Despite the strong increase in house prices since the mid-90s, Swedish house prices appear to be in line with the development of their determinants. Available econometric studies point to strong growth of real disposable income and a decline in real after-tax interest rates as the main explanatory factors behind the rise in house prices. There also seems to be reasonable explanations why Swedish house prices have avoided the steep correction seen in many other countries in recent years, notably a quick economic recovery supported by expansionary monetary and fiscal policies, tax changes favouring the housing sector and more liberal lending practices by the banks. This has coincided with rather sluggish construction activity, reflecting financial uncertainty and other obstacles to construction activity, such as restrictive zoning practices and insufficient competition.

It should, however, be noted that some of the factors which supported house prices now probably have run their course and may not be able to provide the same degree of support in the future. Developments over the last year seem to indicate that wider mortgage spreads and increased uncertainty about future income growth are adversely affecting house prices. Households reacted by reducing the rate of amortisation on new loans to cushion the effect on the household budget. With already low amortisation rates, this strategy may soon be exhausted. Price expectations have also been very volatile, indicating large uncertainties regarding the future path of house prices. Should house prices start to fall in a more significant way, the fact that households have record levels of debt could be problematic, as they are likely to cut back on consumption to restore their balance sheets. Conversely, should the economic outlook improve significantly, tighter monetary

policy may limit the positive effect from rising income and reduced financial uncertainty. In a longer term perspective, should significant supply constraints remain, prices may however return to an upward trend, with adverse effects on indebtedness and mobility.

In 2011, Sweden received a recommendation to take preventive action in the field of housing market and household debt. The national authorities have so far adopted several measures in this respect, mainly the introduction of the 85% cap on the loan-to-value ratio in 2010 and extensive measures to strengthen the resilience of the banking sector, as well as a marginal relaxation of rent regulation. In its Spring Bill 2012 and the National Reform Programme 2012, the government proposes some measures to simplify sub-letting of apartments and to stimulate housing construction. These measures are certainly pertinent and seem to have already started bearing fruits in the slowdown in mortgage credit and declining house prices. Nevertheless, a number of features which contribute to the inherent instability of the housing and mortgage markets have not been touched. Given the potential risks, a more ambitious and determined policy response could seem warranted.

To reduce the risk of an unsustainable build-up of household debt and house prices in the long-term, several measures in the areas of taxation and financial regulations may be useful. First, the debt bias in housing taxation could be corrected by lifting back property taxation or, as a second best, by phasing-out the tax deductibility of interest payments. It would not only restore neutrality among investment alternatives, but also free up fiscal space to reduce taxes that are more harmful to growth, such as labour income taxes and corporate taxes. To prevent household indebtedness from continuing to build up, minimum amortisation requirements could be envisaged for new mortgage loans. The use of variable interest rates on mortgages could be limited by imposing restrictions on interest rate movements for a particular mortgage contract or by granting variable rates only to very low-risk households. In general, policies should aim at favouring longer-term planning and reducing households' exposure to rapid changes in financing conditions.

With a view to improving the functioning of the housing market and limiting upward pressures on house prices, **measures could foster flexibility of housing supply and reduce construction costs**, ranging from a more integrated approach to planning to streamlining the zoning processes and fostering competition in the construction sector. Measures tackling the rigidities in residential construction could also help spur investment and diminish the surplus on the current account. Within the rental market, further easing rent regulation and rules on sub-letting of tenant-owner's apartments would decrease demand for houses and tenant owner's apartments, which are typically mortgage-financed. Incentives to develop the currently small market for rental houses would further boost the flexibility of the housing market in response to demand for housing.

The timing and composition of any measures in the housing sector have to be well considered so as to avoid unnecessary pro-cyclical effects by depressing house prices and household consumption in a context of slowing growth. Given the current decline in house prices and mortgage credit growth, a gradual approach would be warranted, starting with

measures to improve the flexibility of the housing supply and preparatory works for measures requiring longer administrative or legislative procedures, or wider political support.

United Kingdom

Recommandations
Address the destabilising impact of high and volatile house prices and high household debt by implementing a comprehensive housing reform programme to increase housing supply and alleviate problems of affordability and the need for state subsidy of housing. Pursue further reforms to the mortgage and rental markets, financial regulation and property taxation to prevent excessive volatility and distortions in the housing market.

Justification
The run-up to the crisis saw the housing market overheat, with house price-to-income ratios reaching historic highs in the context of a growing housing supply shortage, leading to the accumulation of high levels of mortgage debt. According to the Commission's in-depth review, high household debt constitutes an internal imbalance in the United Kingdom's economy. Due to a high share of variable interest rate mortgages, household finances are vulnerable to interest rates rises, with a potentially destabilising knock-on effect on the economy as a whole via the financial sector. A sustained and significant fall in household debt is only likely if house prices fall relative to disposable income; however, if nominal house prices were to fall rapidly it would risk pushing many households into negative equity. Residential construction remains at record lows, due both to a restrictive planning system and cyclical weakness, and wider housing market activity is also still muted. In November 2011, the government published its housing strategy for England, which aims to facilitate an increase in residential construction, but significant uncertainty remains about the net impact of the new system on housing development. Also, the housing strategy did not mention the issue of property taxation, where the UK system combines a regressive recurring tax (council tax) with a progressive transaction tax (the Stamp Duty Land Tax - SDLT), which may play a role in cyclical developments in budget revenues and financial stability. Some adjustments were made to SDLT rates in the 2012 Budget, but only minor changes have been made in this field overall.

In-Dept Review of the housing market

The high levels of household debt cumulated over the past decade are linked closely to high house prices and represent an important imbalance in the UK economy. Household debt has been increasing steadily over the past decade, though it has declined somewhat since its peak in 2009. Highly indebted households are vulnerable to rises in interest rates or in unemployment, with potentially destabilising effects – should household insolvencies be pervasive – on the economy at large, namely via the financial sector. The widespread use of variable-rate mortgages in the UK may amplify the financial risks of households as it heightens their sensitivity to interest rate rises. Household indebtedness

may be further exacerbated if house prices increase again, especially in relation to disposable income. While there are currently few indications that housing demand or interest rates would surge in the near future, the insufficient and rigid supply of housing in the UK exposes the country to higher and volatile house prices. Households are now undergoing a deleveraging process and the government has published plans on how to increase the housing supply which should reduce risks going forward, especially if disposable income also recovers. As results are only likely to be observed in the medium term, close attention to developments in the short term is warranted and additional policy steps could already be considered to reduce the emergence of further risks.

In this context, **the in-depth review concludes that the UK is experiencing macroeconomic imbalances, which are not excessive but need to be addressed.** In particular, macroeconomic developments in the areas of household debt and the housing market deserve attention, as do unfavourable but less pressing developments in external competitiveness, so as to reduce the risk of adverse effects on the functioning of the economy.
Possible areas for relevant policy responses include increasing housing supply, improving the functioning of the housing market and discouraging excessive and risky lending. The government is reforming the planning system with the aim of supporting an increase in housing supply, which should help to reduce house prices and with it the future level of associated mortgage debt. Sustained government commitment to effective implementation would ensure that the reforms announced in the housing strategy document and national infrastructure plan deliver positive results. Further simplifying the planning system or altering the property taxation system could improve the functioning of the housing market, contribute to stabilising house prices and budget revenues, and provide better incentives for labour mobility and efficient capital allocation. Fostering prudent lending, reducing incentives for households to take on excessive levels of debt, and improving their financial information and risk awareness, would lower the demand for mortgages at high loan-to-value ratios or high income multiples, which both raise house prices and leave households and the financial system most vulnerable. This can be partially achieved by improving credit frameworks, namely to better assess the financial soundness of mortgage applicants as recently proposed by the Financial Services Authority. As regards external competitiveness, the exporting sector could benefit from improved transport infrastructure given the UK's constraints in this area. Furthermore, improving training and education in order to equip more workers with high-quality vocational and technical skills could help boosting labour productivity growth in the industrial sector, which has been relatively weak in the past decade.

Housing market developments

The main issue regarding private sector debt in the UK stems from the high value of household mortgage debt. This implies that there is a fundamental link between UK private debt and the UK housing market. In fact, in the years preceding the 2008 financial crisis, the increase in household debt followed *pari passu* that of house prices, as households took on increasingly larger mortgage loans to finance the acquisition of increasingly expensive

properties. In particular, the Eurostat house price index13 rose continuously in real terms from a trough in 1995 to a peak in 2007, appreciating more than 150% during this period. A heating-up period is especially noticeable between 1998 and 2007 when real UK house prices rose on average 9.4% per year. A correction phase can be observed since 2008 when house prices started decreasing, although they have since stabilised. Graph 10 illustrates the recent evolution of UK real and nominal house prices based on the Eurostat house price index.

The UK appears to have undergone an adjustment in real house prices similar to that of most European countries which experienced a housing bubble, though with less of an impact on the external accounts. As shown in Graph 11, the upswing in the UK house price cycle was one of the most pronounced of all EU Member States, whereas the recent correction appears to be in line with other EU Member States experiencing housing market issues. By contrast, as can also be observed from Graph 12, housing market developments in the UK did not correlate strongly with the current account which, while negative, did not deteriorate markedly during the heating-up period. This differs from the experience of some other European countries where a housing bubble went hand-in-hand with a deteriorating current account.

The marked appreciation in UK house prices was a result of the interplay between a rigid housing supply and a buoyant demand. The latter was fuelled by easy access to finance, loose credit frameworks, expectations of continued increases in house prices and incomes, government incentives for home ownership and government subsidies to renters. The housing supply shortage, however, played the most crucial role in driving up prices. Graph 13 shows the evolution of building permits and residential investment as a percentage of UK GDP. The latter variable averaged 3.4% between 1997 and 2011, broadly half of the euro-area figure for the same period (6.2%).

Unlike many EU countries that were subject to a housing bubble, the UK does not face an overgrown construction sector. On the contrary, strict planning laws in the UK have significantly constrained the ability of the housing supply to meet an expanding housing demand. In fact, the UK population grew 5.8% in the decade to 2011, a figure above EU and euro area averages.14 Although building permits increased from 2001 to 2006, they did so from a comparatively low basis and have since reverted to historically low levels.

The structural features of the UK housing market reflect some unfavourable characteristics. As shown in Graph 14, while the owner occupancy rate of high income households is similar to the EU's, that of low income households is lower, reflecting the difficulties of low earners and younger households getting onto the "housing ladder" in the UK. The owner overburden rate15 is significantly higher in the UK (12%) when compared with EU or euro-area figures (8.7% and 7.1%, respectively), reflecting the high levels of mortgage debt in the UK. It should be noted that the exceptionally low levels of official interest rates currently flatter the owner overburden rate in the UK by decreasing the amount of household interest payments.

The private rental market is growing but does not appear to represent a solution to affordability problems. As shown in Graph 26 in section 3.1.2 the proportion of households in private rented accommodation has risen significantly, from 9% in 2000 to 17% in 2010. However, as set out in the next section, a growing proportion of households, more than 10%, are currently renting but aspire to own their own home. This suggests that private renting is still not seen as an attractive long term option in the UK, probably in part because most private rental contracts are short term and insecure. Social renting is concentrated among lower income households that cannot afford to buy a house and private renting among younger households who cannot fund the deposit required to take up a mortgage. Furthermore, the tenant overburden rate is more than 40% in the UK, much higher than the EU average. The high overburden rate appears to reflect the generally high cost of housing in the UK rather than any structural problems with the rental market since, as shown in Graph 24, rental yields are still significantly below their long term average and rents have been broadly stable relative to incomes. There is however scope to improve the functioning of UK housing rental markets. Rental subsidies provided through housing benefit have acted to increase effective demand and helped to bid up both private rental and sale prices of housing in high demand locations. Restrictions in and subsidies for social housing are barriers to labour mobility.

POLICY CHALLENGES

The preceding analysis has shown that the UK is experiencing macroeconomic imbalances, which are not excessive but need to be addressed. In particular, macroeconomic developments in the areas of household debt and the housing market deserve attention, as do unfavourable but less pressing developments in external competitiveness, so as to reduce the risk of adverse effects on the functioning of the economy.

As regards household indebtedness, the potentially destabilising effect of the housing cycle on the economy should continue to be addressed through reforms to the planning system and financial regulation, as recommended to the UK by the ECOFIN Council in 2011. A combination of high and volatile house prices, a shortage of housing supply, easy lending practices and abundant liquidity, as well as a large share of variable interest rate mortgages, have led to the accumulation of high levels of mortgage-related household debt and have rendered household finances particularly sensitive to interest rate rises. Household debt is only likely to decline significantly over time if house prices fall relative to disposable income. Effective reforms to the UK's restrictive planning system could facilitate an increase in the supply of housing, which would improve affordability over time and reduce the pressure on households to take on high levels of mortgage debt. The government is in the process of a controversial planning reform with the stated aim of increasing residential construction, but it is not yet clear what the impact of the new system will be. Reforms to rental markets could help improve households' response to house price and labour market signals, and provide more viable long term alternatives to home ownership. In particular, housing benefit reform can reduce the very large subsidies paid to some households living in privately rented properties, which would help to moderate

rents, and reforms to social housing would remove barriers to labour mobility. Appropriate credit frameworks and standards are key to reducing incentives for households to borrow excessively and avoid the potentially destabilising effect on the economy of periodic overheating in the housing market. Better financial information and higher risk awareness for households could also reduce their appetite for risky debt such as variable rate mortgages at a high loan-to-value ratio or a large earnings multiple. The Financial Services Authority has recently proposed a range of measures in this regard to ensure that lenders more systematically assess and stress test affordability before approving mortgage loans. Transaction-based property taxation involves significant distortions and biased incentives and generates highly cyclical revenues. Overall, the aim should be to support continued and gradual household deleveraging, endeavouring to reduce household risk exposure without unduly compressing consumption levels. Policies that support sustainable increases in disposable income and employment would obviously contribute positively to this process. The fiscal consolidation, necessary to contain government debt, will help to preserve stability and create growth-enhancing conditions over the medium term, though increasing pressure on incomes in the short term.

As regards external competitiveness, while unfavourable developments are less pronounced than those arising from the internal dimension of the economy, policy action should be considered to improve overall export performance. Even though current and expected external developments appear to entail limited risks for overall macroeconomic stability, there appears to be scope to counteract unfavourable long term trends in external trade which are somewhat more marked in the UK than in other EU Member States. Given the poor and, until 2008, worsening external performance of trade in goods, as well as a history of low public investment, there is a case for targeted investment in infrastructure aimed at supporting the manufacturing sector, while respecting the apparent competitive advantage of the UK in the services industry. Considering the skills and educational challenges which the UK faces53, there is also scope for improvements in vocational training, human capital and R&D, especially to the extent that they can curtail increases in structural unemployment and boost the performance of the industrial sector to bring it more in line with that of the services sector, where labour productivity growth has been stronger. Given recent unfavourable developments in ULCs, action to foster productivity gains, which should outpace wage growth, would reinforce the competitiveness of the UK economy. Finally, improving access to finance in line with Council recommendations could support the expansion of the export sector, which has become more attractive following sterling's depreciation.

Belgium

While the financial situation of households is reassuring, some risks associated with the housing market deserve further consideration. Mortgage markets showed an acceleration of mortgage growth during the years prior to the crisis, encouraged by favourable loan to value ratios (sometimes above 100%). The interest rate structure, dominated by fixed interest rates

ensures somewhat protection for households to interest rate hikes risks. The lack of Mortgage Equity Withdrawal contributed to containing credit developments though.

Real housing prices have been on the rise since their trough reached in 1986 (see Graph 22), basically tripling in the last 30 years. The evolution over the last 3 years shows some deceleration and a first hint of correction in 2011. This smoothing behaviour represents a striking difference with respect to the last cycle in Belgian house prices, which peaked in 1979 (see Graph 23) and then saw a sharp correction until the mid-80s. The sustainability of the prolonged upswing together with house price future dynamics stands indeed as an important issue for analysis in Belgium. The evolution of the housing market and the main determinants behind price growth can help gauge the risks for a house price correction and its ensuing pressures on the financial sector. In Belgium, almost no housing price correction took place so far. Depending on the evolution of interest rates, unemployment or credit conditions a certain correction cannot be discarded. This, in turn, would affect the size of nonperforming loans, putting pressure on the financial sector.

Estimates of fundamental house prices, based on its main determinants, may yield different results depending on the assumptions made and methods used. Using a broad set of approaches, the National Bank of Belgium finds that, for Belgium on average, in the third and fourth quarters of 2010, house prices were overvalued by between 15 and 66 % compared to their long-term value14.

Amongst the various competing views on how to assess the existence of untenable pressures in housing prices, affordability [Price-to-income] and dividend [Price-torent] ratios have the advantage of being simpler and easier to interpret than econometric estimations. Although their findings have to be considered with caution due to their simplifying assumptions and their crude approach, they provide a useful alternative. As can be seen from Graph 22, the price-to-income ratio yields some signs of increasing pressures as it has trended upwards in the last 30 years, reaching levels above its linear trend since 2003. This picture is confirmed by looking at the price-to-rent ratio. Indeed, housing prices can also be assessed against alternative investment decisions, like renting a house. The price-to-rent ratio shows a significant increase in the cost of owning versus the cost of renting in the last 30 years.

The increase in house prices over the last decades might also have adverse effects in distributional terms. As can be seen in Graph 24, the owner occupancy rate of the low income population is relatively low in Belgium. Low income households are constrained to stay in the rental market and thus the overburden rate for tenants (% of households where the total housing costs represent more than 40 % of their disposable income) in Belgium stands out when compared with other Member States.

Denmark

Recommandations

Consider further preventive measures to strengthen the stability of the housing market and financial system in the medium-term, including by taking account of the results of the ongoing study by the Ministry of Business and Growth on the distribution of assets and liabilities across households and by reviewing the property value and municipal land value tax system.

In-Depth Review of the Housing Market

While high household gross debt is to some extent a structural feature of the Danish economy, with household assets considerably exceeding liabilities, concerns regarding high household debt arise since developments in the housing market seem to have caused the debt to move beyond levels explained by structural factors. This poses higher potential risks in terms of financial and economic stability. Elevated contributions to private pension saving schemes, large savings in real estate and a generous social safety-net provide citizens with reliable financial buffers. Nevertheless, most assets are illiquid and can only be realised at a high cost. Furthermore, the composition of mortgage loans has changed since 2003, with instalment-free and adjustable-rate loans gaining in popularity over fixed-rate loans with instalment. Thus, for a given debt level, households are more sensitive to interest rates hikes and fluctuations in property prices now than they were a decade ago.

Risks to economic stability seem more pronounced, as the consequences of excessive swings in house prices and high debt have already been exposed. The latter have contributed to large fluctuations in private consumption, currently constraining the economy's ability to recover as households are deleveraging. Changes to interest deductibility rules over the coming years should gradually exhibit a stronger downward pressure on the household debt level. However, relevant measures to avoid future housing bubbles and the associated excessive indebtedness in the medium term should be considered.

In this context, **the in-depth review concludes that Denmark is experiencing macroeconomic imbalances, which are not excessive but need to be addressed.** In particular, certain macroeconomic developments, notably underlying the external competitiveness and the potential risks related to household indebtedness, deserve attention so as to reduce the risk of adverse effects on the functioning of the economy. Possible areas for relevant policy responses could include the removal of obstacles to competition and improving the quality of the educational system in order to tackle the problem of slow productivity growth. In order to get a clearer understanding of the household debt situation in terms of risks to financial stability, the distribution of the type of assets and liabilities across households would need to be investigated. Furthermore, with a view to correcting the pro-

cyclical effects of and the debt bias in housing taxation, a realignment of the property value tax to actual market values or, as a second best option, a further reduction of the tax deductibility of interest payments could be considered. This could also restore neutrality among investment alternatives. In addition, removing the ceiling on the annual increase of the municipal land value tax could prevent future pro-cyclical effects of lagged tax increases. Such changes could be introduced gradually, taking into account the current need for stabilisation in the housing market.

Potential sources of imbalances

Housing market developments

As in many other countries, Denmark experienced a period of easing credit conditions and falling structural unemployment rates between the mid-1990s and the outbreak of the economic and financial crisis. The Danish housing market experienced a period of almost continuous house price increases between 1993 and 2007, with accumulated growth in house prices of 183% over the period. According to the average annual growth of house prices, the period can be divided into two sections (Graph 1). Moderate growth was present between 1993 and 2003 (5.6% on average) while the recent cycle gained speed between 2003 and 2007 (11.4% on average). The introduction of instalment-free mortgages in 2003 and the property tax freeze since 2002 may have contributed to this development. Accordingly, nominal house prices rose by 54% between 2003 and 2007 when the bubble burst.

The amplitude and the duration of the house price cycle between 2003 and 2007 are comparable to the previous cycle that peaked in 1986 (Graph 2). However, contrary to the evolution in the 1980s, the acceleration in house prices in 2003 materialised after 10 years of previous moderate growth. While estimations of equilibrium house prices suggest that the moderate growth in house prices between 1993 and 2004, approximately, can be explained by evolutions in interest rates, disposable income, financial wealth and taxes etc., model calculations suggest that house price growth between 2004 and 2007 was excessive and, thus, represented a housing bubble (see Skaarup and Bødker (2010) and Dam et al. (2011)). The subsequent correction was sharp with a fall in real house prices of around 20% from 2007 to 2009, among the largest in the EU. After a break in 2010, house prices continued to fall by 6% last year against declining credit flows for housing purposes and worsening economic conditions and are now considered to be close to their equilibrium value.

The high-growth period of accelerating house prices caused a rise in the ratio of prices of properties on the market relative to the cost of constructing new houses and, hence, was accompanied by large property investment by the private sector (Graph 3). Accordingly, the weight of housing investment in total investment reached 29% in 2007 compared with 25% in 2003 and 20% in 1993. This represented a significant diversion of productive resources towards the construction sector. Employment in construction surged by almost 20% between 2003 and 2007 whereas employment in the private sector grew by 8%. When house prices plummeted from 2007 to 2009, the share of housing investment in total investment fell below

the pre-boom level and in 2010, employment in the construction sector was back at the 2003- level.

Future prospects for housing prices are uncertain. On the one hand, affordability as measured by price-to-income lies below its long-term average (Graph 4), pointing to easing downward pressures on the demand for housing. On the other hand, tight credit access for households, a historically high stock of houses for sale and a relatively low number of sale transactions point towards a further downward adjustment in house prices.

Although the financial crisis, the rise in unemployment and the sharp correction of the housing bubble have taken a toll on wealth and disposable income, the net financial asset positions of households remain comfortable. However, the composition of mortgage loans has changed since 2003, with instalment-free and adjustable-rate loans gaining in popularity at the expense of fixed-rate loans with instalments (Graph 8). For a given debt level, households are therefore more sensitive to interest rates hikes and fluctuations in property prices now than they were ten years ago.

Financial risks related to the build-up of household debt and the housing bubble have to some extent been addressed by the government and financial institutions. The Ministry of Business and Growth is currently undertaking a study on the distribution of the type of assets and liabilities across households, which will shed light on the potential vulnerability of households in the event of different shocks to the economy. Danmarks Nationalbank is carrying out a similar study with regard to financial stability. The results of these studies should clarify if any vulnerabilities exist and pinpoint the precise action needed to address them. To counter risks related to the large amount of adjustable-rate loans that used to be refinanced in December, mortgage institutions have taken measures to spread auctions refinancing adjustable-rate loans over the year so as to reduce the refinancing risk and a working group has also been set up to address the issue.

Furthermore, in order to meet the EU's new capital requirement directive, the mortgage credit institutes are currently undertaking measures to ensure the provision of additional collateral which will effectively limit the share of instalment-free and adjustable-rate loans. For instance, in 2012, Nykredit (Denmark's largest mortgage institute) is introducing a so-called two-layer system where the loan-to-value ratio of instalment-free and/or adjustable-rate loans is limited to 60%. The remaining 20% has to be covered by fixed rate
loans with instalments. Furthermore, a working group, consisting of relevant trade associations, Danmarks Nationalbank, the Danish Financial Supervisory Authority and the Ministry of Business and Growth, has been set up to examine the consequences of the requirements for additional collateral.

Economic risks related to the build-up of debt levels in conjunction with the housing boom have been addressed to some extent since changes to interest deductibility rules over the coming years are expected to attenuate the incentives to hold debt thereby gradually bringing down the household debt level, at least compared to what it would

be otherwise. Indeed, as pension saving schemes are expected to continue to be expanded over the coming years, this should create an upward pressure on the gross debt level without necessarily affecting the net financial assets of households. Such a build-up of gross household debt should be sustainable and not harmful to the economy.

However, to reduce the risk of an unsustainable build-up of household debt by preventing future house price bubbles in the medium-term, further measures in the areas of taxation could be useful. First, the pro-cyclical effects of and the debt bias in housing taxation could be corrected by realigning the property value tax to actual market values or, as a second best, by phasing-out further the tax deductibility of interest payments. This would not only restore neutrality among investment alternatives, but would also free up fiscal space to reduce taxes that are more harmful to growth, such as labour income taxes and corporate taxes. In addition, removing the ceiling on the annual increase of the municipal land value tax could prevent future procyclical effects of lagged tax increases.

The timing and composition of any measures in the housing sector have to be considered

so as to avoid unnecessary pro-cyclical effects by depressing house prices and household consumption in a context of slow growth and a fragile housing market. Given the current decline in house prices, a gradual approach could be warranted.

As confirmed in the in-depth review under Article 5 of Regulation (EU) No 1176/2011, while the high household gross debt to some extent is a structural feature of the Danish economy, with household assets considerably exceeding liabilities, concerns regarding high household debt arise as developments in the housing market seem to have caused the debt to move beyond levels explained by structural factors. Furthermore, the composition of mortgage loans has changed since 2003, with instalment-free and variable-rate loans gaining in popularity over fixed-rate loans with instalment. For a given debt level, households are therefore more sensitive to interest rates hikes and fluctuations in property prices now than they were a decade ago. This poses higher potential risks in terms of financial and economic stability. Relevant measures have been taken in Denmark to address vulnerabilities in the mortgage system. Moreover, the Ministry of Business and Growth is currently analysing the distribution of assets and liabilities across households and their potential vulnerability in the event of different economic shocks. However, measures should also be considered to prevent pro-cyclical developments in the housing market in the medium term, preferably by realigning the property value tax with actual market values. Removing the ceiling of the annual increase of the municipal land value tax could also prevent future pro-cyclical effects. Such measures should be introduced gradually, taking into account the current need for stabilisation in the housing market.

Spain

Recommandations

On the housing market, removing distortions which promoted past disequilibria is important. Measures aimed at promoting the rental market would go in this direction. A larger, more efficient rental market would provide more geographical flexibility to the labour force and, therefore, would improve the adjustment capacity of the Spanish economy. Possible measures could include re-balancing of tax incentives from home ownership to house rental and strengthening of the institutional framework of the rental market.

Review of the Housing market

With regard to the origin of the current imbalances, the existence of an abundant availability of external financing at low cost, allowed a significant increase of investment - notably in real estate - and consumption. This triggered a sharp rise in external deficits and private debt. A significant part of these financial resources was channelled into the non-tradable sector, especially the construction sector. Generous financing, combined with demographic pressures and incentives favouring housing investment, created significant housing demand, pushing up house prices and ultimately leading to a housing bubble.

House prices continue to fall in Spain. The bursting of the housing bubble exposed a significant oversupply of new housing, leading to an accumulation of a large stock of unsold houses. This – together with the selling pressures being exerted on banks by the new bank regulation measures with respect to their real estate repossessions – continues to exert downward pressure on house prices with potential adverse effects on private consumption and financial stability.

In this context, **the in-depth review concludes that Spain is experiencing very serious macroeconomic imbalances, which need to be urgently addressed.** In particular, macroeconomic developments, notably related to the significant level of private sector debt, the large negative external position and the financial sector, which were influenced by housing market developments, require close monitoring and urgent economic policy attention in order to avert any adverse effects on the functioning of the economy and of economic and monetary union. Moreover, correcting the disequilibrium in the housing market is essential.

The reduced cost of capital and easier access to credit, combined with policy incentives promoting house ownership, fuelled housing demand. Indeed, the reduction of the country risk premium and high availability of foreign capital implied very low nominal interest rates (and even negative real interest rates) during some periods. Housing supply followed but only with a lag. As a result, house prices started to accelerate since 1998, registering annual increases of more than 10% up to 2006 and smaller but positive rates of growth until the second half of 2008. The emerging housing boom was underpinned by demographic factors. Population growth - both total and working age –accelerated from 1999

to 2008, and the number of households rose. This had its origin in the entrance of the 1970s baby-boom cohorts into the labour force, an increase in female labour force participation, and large immigration flows. Thus, while the immigrant population accounted for 2% of total population in 1999, its weight reached 10% by 2007. Finally, economic growth started to generate significant job creation (averaging 3.7% of growth between 1997 and 2007), further adding to the demand for housing.

The combination of low interest rates, accessible financing2, demographic pressure, rising house prices and the perception that these higher prices would be sustained, making house purchases appear to be a safe investment, fed a housing bubble that produced a sharp increase in housing production and prices. House prices almost tripled between 1997 and early 2008, while production of housing more than doubled from the 1995 level. Over 6.5 million new homes were built between 1996 and 2009. As a result, the weight of investment in construction reached 22% of GDP in 2006-2007, compared with 15% in 1995. This represented a significant diversion of productive resources towards the construction sector. Construction employment reached 14% of total employment in 2007, compared with 9% in the years before the expansion period.

Finally, the economic crisis has brought to the fore imbalances in the housing market. The fall in housing demand exposed a significant oversupply of new housing, the volume of which is estimated up to one million units. This reduces the availability of significant financial resources for alternative productive activities.

Housing market imbalance

The Spanish housing boom has been characterised by its long duration (eleven years between 1997 and 2007), a significant increase of house prices (which almost tripled between 1997 and early 2008), and a huge expansion of production capacity (during the boom period the house production grew at the annual rates twice the size of its the preboom levels). The boom in the Spanish housing market was driven by several factors, including abundant availability of external financing at low cost. In addition, demographic factors played an important role. Population growth accelerated due to large inflows of migrants. The working age population recorded a particularly strong increase due to these migration flows (as the majority of migrants were of working age) but also due the entry into the labour market of the baby-boom cohorts of 1970s. Additionally, female participation in the labour market increased, which gave an impulse to labour force growth. All in all, the demand for housing increased rapidly, while the supply of houses responded with a lag, thus putting upward pressure on house prices. Population factors continued feeding significant housing demand and pushing the prices upward, creating an illusion that residential investment was a safe asset, with significant potential capital gains and hardly any risk. Finally, these housing needs were easily converted into actual housing demand as financial institutions relaxed their credit conditions at the same time as the increase in house prices boosted the value of available collateral for mortgage loans.

Econometric evidence supports this explanation about the process of the Spanish housing boom. The QUEST model calibrated for Spain reveals the important role played by the reduction of interest rates. Graph 31 shows the shock decomposition of historical deviations from the stationary steady state for the ratio of residential investment to GDP. Among the different shocks, the reduction of interest rates (international capital flows in the Graph 31) played an important role in the early stages of the housing boom. The role of the housing bubble (captured by the variable "housing risk premium shock") was rising until 2007, when prices started to decelerate. Lending conditions (captured by the variable "collateral shock") fuelled the housing boom mainly from 2005 onwards, and made a negative contribution following the onset of the financial crisis.

supply. On the demand side, Spain displays a high incidence of home ownership (85% compared with 64% for the whole EU). Empirical evidence22 shows that changes in home ownership produce higher volatility in house prices. The high incidence of home ownership has been encouraged by the existence of tax deductions for house purchase. Even though in 1998 tax deductions for mortgage payments were reduced from 30% of total payments to 15% (and deductions for secondary dwellings were abolished), these deductions remained in force, independent of the household's income, until 2010. In 2011 this kind of tax deduction was limited to households with incomes below EUR 24,000. But the original tax deductions were re-introduced – also retroactively – in November 2011. On the supply side, the creation of the so-called "development agent" in 1994, together with the Law of Land of 1998, made a large quantity of new land available for building purposes.

The extremely high incidence of home ownership has, as a counterpart, the underdevelopment of the rental market. Only 15% of all houses are rented, compared to 36% for the EU as a whole. As a result, rental prices are high and there is a lack of transparency in this market. The underdevelopment of the rental market is linked to tax incentives for home ownership, tight regulations which favour tenants (i.e. tenants have more flexibility to either lock a rent for up to 5 years, or re-negotiate it, depending on the developments on the housing market), and insufficient protection of landlords' rights by the judicial system. The small share of the rental market discourages regional labour mobility.

According to the MIP scoreboard, Spanish house prices fell by 3.8% in 2010 compared to a threshold of 6% growth. Data for 2011 record a sharper fall of 5.6%23. However, the recent evolution of house prices is the result of the burst of a previous housing bubble. Indeed, in the period 1995-2007, nominal house prices experienced cumulative growth of 200%. Additionally, the construction of new dwellings augmented significantly and more than 6.5 million of dwellings were completed between 1996 and 2009.

The strength of building activity triggered a significant deviation of economic resources to the construction sector. Thus, employment in construction reached 14% of total employment (2007), compared to 9% in the years prior to the boom period; and residential investment reached 12% of total GDP in 2007, against 6.5% in 1995. However, it was not just economic resources that were channelled to the construction sector; financial resources were deflected as well to finance building activities and house purchases. Thus, in

2006, 61.5% of total credits were devoted to these activities, while this share was under 40% ahead of the boom period.

With the onset of the current economic crisis, some of these imbalances started to adjust.
As mentioned above, house prices have been falling. According to INE, house prices are almost 22% below peak levels (2007 Q3) in nominal and 29% in real terms (Graph 34). The economic resources devoted to building activities have been reduced significantly. In 2011, the weight of residential investment in GDP was 6.9%, close to the level pre-boom (Graph 33). Employment in construction accounted for 7% of total employment in the fourth quarter of 2011, below the level recorded before the boom period and the lowest level since 1976. Loans to construction and real estate activities and for house purchase have been falling; the fall was around 3% in 201124.

While the adjustment in construction activity has been fast, a large stock of unsold dwellings remains to be absorbed. Indeed, the current crisis has produced a sharp contraction of housing demand. Given the tightening of credit conditions and the sharp rise in unemployment, effective demand for housing was reduced. As a consequence, the number of sales went down from more than 400,000 of new dwellings in 2007 to around 125,000 in 2011. In parallel to this contraction in demand for housing, the completion of housing projects, started before the crisis, continued to add new dwellings to the house supply. Specifically, more than 1.3 million new dwellings became available during the period 2008-2010. As a result of this disequilibrium between falling demand and increasing supply, the stock of unsold houses has increased significantly to between 700,000 and 1 million dwellings.

The remaining large stock of unsold new homes implies further downward pressure on house prices. The extent to which house prices have been or are currently overvalued in Spain is contested. According to some estimates house prices are broadly in line with fundamentals25. However, looking forward, some of these fundamental factors (employment levels, interest rates, potential growth) are set to deteriorate. House prices are therefore expected to fall further in the coming quarters and may even undershoot their long-term equilibrium levels.

The path leading to the reduction of the stock of unsold new dwellings is not straightforward. Part of the stock is composed of secondary dwellings, some of which are inconveniently located. The reduction of the remaining part of the unsold stock should be more manageable. Due to the sharp adjustment in construction, production capacity has decreased to less than 100 thousand dwellings. On the demand side, housing needs are estimated to exceed 200 thousand dwellings per year (considering the evolution of population and the recent trends in home composition26). To the extent that these housing needs are converted into an effective housing demand, the stock of unsold dwellings could be absorbed in a period of five to six years.

Financial sector and housing market

To the extent the housing needs are not converted into effective housing demand, for example due to credit restrictions, pressures on the financial sector could increase. Given that the construction of these dwellings was financed through bank lending, the deterioration in the financial situation of housing developers due to the difficulties of selling these dwellings, may lead to rising bankruptcies and loan default ratios. In any case, the reduction in the huge stock of unsold new dwellings will not necessarily reduce the exposure of MFIs to the housing market. Indeed, the main channel of reducing this stock is through purchases by households, which will require giving new mortgages to households. Under this scenario, the MFI exposure to the housing market would not change. However, credit risk would fall since, at present, mortgages to households imply much lower risks for credit institutions (if the mortgages are granted under prudential conditions) than the loans to construction and real estate firms (the repayment of their loans is conditional on their ability to sell these assets).

Despite the on-going restructuring of the Spanish financial system, including higher capital requirements, significant write-downs, and consolidation, Spanish banks still have large exposure to the real estate and construction sector. The exposure of financial system to the construction and real estate sector was EUR 307 billion in December 2011 and around 60% of this exposure was classified as problematic.

In February and May 2012, the Spanish Government adopted a set of measures, targeting the stock of legacy assets as of end-2011, which significantly increases the industry's coverage of potential losses on these assets. As a result, loan loss coverage levels in Spain will be amongst the highest in Europe. This reform addresses the challenge related to the valuation of most problematic assets such as land and unfinished property by significantly increasing their coverage. Stricter provisioning rules and the requirement of additional capital buffers for the real estate exposure should accelerate the adjustment process in the real estate and construction sector by bringing prices further down and by providing incentives for the sale of real estate assets currently held on the balance sheets of banks. However, more pronounced decline is house prices could lead to a further deterioration in the balance sheets of credit institutions due to the large volume of housing loans in their loan portfolios. Moreover, the share of problematic mortgage loans in the banks' portfolios may increase further given the persistently high level of unemployment (although the default ratio on mortgages has so far remained relatively low, below 3%).

House prices developments

The impact of the development of house prices is not restricted to the financial sector. Effects on the rest of the economy may be important, especially if there is an additional, significant fall in house prices. Indeed, private consumption may be negatively affected through a wealth effect in the form of real estate valuations. In the case of Spanish consumers this effect may be potentially important, given that the weight of real estate wealth on total households' net wealth is very high (around 84%). However, empirical evidence shows that the impact of a decline in house prices on consumption in Spain is in

line with the evidence in other countries with lower proportion of housing wealth on total wealth. In any case, international evidence suggests that the impact of significant falls of house prices may be more important than an equivalent decline in stock prices. An additional transmission channel of house prices to the real economy is through investment, and more specifically residential investment. The reduction of profitability of residential construction due to decline in house prices may lead to a reduction of house building activity, negatively contributing to the GDP growth. On the other hand, this more reduced building activity implies a re-allocation of resources from the non-tradable sector (construction) to the tradable one. The transmission of the fall in house prices through these channels is enhanced due to a financial accelerator effect to the extent the value of households' collateral is reduced.

In the current situation of the Spanish economy, the macroeconomic effects of additional falls in house prices are more based on the private consumption channel rather than on the investment one. Indeed, as discussed above, the adjustment of residential building capacity is mostly finished at this point of time and, therefore, its negative consequences have been already internalized. Notwithstanding, the future evolution of real estate prices remains an important issue due to its potential effects on private consumption, on the financial stability and on the reduction of the stock of unsold dwellings.

Gauging the future evolution of house prices is not straightforward. International and historical evidence provides only limited guidance on the origin of housing booms and busts and the institutional environment is different among countries and across the time. International evidence shows that house price adjustment takes 5 or 6 years on average. Spain would be in its fourth year of adjustment. Focusing on the Spanish historical evidence, the current house price cycle shows some similarities with the previous cycle but only in its boom phase. However, the bust phase has different characteristics, including a faster adjustment than in the previous cycles, probably due to the financial crisis that is accompanying, and possibly accelerating, the current bust period (see Box 6 for further details). Econometric evidence shows that at present real estate prices are mainly driven by their fundamentals. However, this fact does not mean that there will be no additional adjustments of house prices going forward. To the contrary, the economic recession is pushing some fundamentals related to the house prices, such as real disposable income or credits to house purchasing, to the negative territory. As a result, additional falls of real estate prices should be expected, at least in 2012-2013. However, the exact size of additional fall is uncertain. If the current house price cycle replicates past experiences, real house prices would fall by an additional 10 percentage points. In addition, other reference values, such as the ratio of house value over household's average income or the ratio of profitability of house rent over long-term interest rates, points to an additional adjustment of around 30 pps. In order for the prices to adjust to their preboom level (i.e. in 2001) a similar adjustment would be required. Finally, according to the econometric model outlined in Box 6 and considering the expected behaviour of real gross disposable of households as in the Commission Services' 2012 Spring Forecast, an additional fall of around 25% until 2013 could be predicted. Independently of the specific figure, these estimates show that there is a

high probability of additional, significant house price adjustment and, therefore, there are potentially high spillover risks for the real economy and for the financial sector.

Conclusions

The boom of housing activities implied a significant deviation of economic and financial resources to the construction sector. The adjustment of the sector, which started in 2007, was accelerated by the current international economic and financial crisis to the extent that the flow of credit was deeply reduced. Thus, households did not have access to new loans and, therefore, were unable to buy new dwellings. The same was true for construction companies that lacked financing to develop new projects. As a result, production capacity adjusted very fast, reaching pre-boom levels in 2011. The allocation of freed resources from the construction sector, mainly labour force, is one of the most pressing challenges facing the Spanish economy.

Despite this fast downsizing of the construction sector, two related significant challenges remain: the huge stock of unsold new dwellings and the large amount of outstanding loans related to real estate and construction. The reduction of the number of unsold dwellings requires additional adjustments of house prices. However, further falls of house prices imply risks for the financial system as additional depreciation in value of the real estate assets would lead to higher losses in case of default. Forecasting the future development of house prices is not straightforward. However, according to different estimates and indicators a further significant correction is likely. As a consequence, the evolution of house prices and their impact on the stability of financial sector deserves special attention.

France

French households appear less indebted than peers in the EU although the level of debt has been increasing in the last few years. With household debt representing 55% of GDP in 2010, France is clearly below the average for the EU (see Graph 12). In 2010, this debt represents over 79% of disposable income of households in France, compared to an average of 97% in the euro area. However, credit growth has accelerated in the last few years, with household debt as a percentage of GDP increasing by 12 percentage points between 2005 and 2010. Although in line with the general trend in the EU, it is high in historical terms. Furthermore, the most recent developments show that, compared to other Member states, France is among the economies where credit to households continued to increase, although at a slower pace, in 2010 and 2011. By contrast in the euro area, credit to household as a percentage of GDP started to decrease in Q2 2010. New credits to households in France, which rebounded strongly after 2009 went back in the first quarter 2012 to its 2008 level. As mortgage represents 77% of household credit in France, the financial situation of households is correlated with that of the housing sector. Indeed, higher real estate prices have pushed the volume of mortgage needed to purchase housing up. In

order to assess the sustainability of the household debt dynamics, a review of the French housing market is therefore necessary.

The decomposition of household credit shows that much of the growth since 2005 is driven by mortgage. Credit to households increased by 7.2% p.a. between 2005 and 2011. However, detailed statistics by the Banque de France show that, over the same period, mortgages rose by 9.1% p.a.. While mortgages represented 69% of total household debt in 2005, this ratio increased to 77% by 2011 although new credit slowed down considerably. In contrast, consumer finance only progressed by a modest 2.5% p.a. between 2005 and 2010. Moreover, since 2009, the stock of consumer loans seems to have reached a plateau, and in 2011 the volume of new consumer loans granted decreased significantly. The increased uncertainties as well as concerns about the level of public debt, which inter-alia contributed to the high savings ratio, are the main causes for the sharp contraction in the demand for consumer credit seen since 2010.

Due to the large exposure of French households to mortgage credit (77% of total credits to household in 2011), the main source of uncertainty relates to the evolution of the mortgage market. As in the large majority of the Member states, housing prices increased strongly in the last few years preceding the global financial crisis. In France, real housing prices rose by 9% each year between 2000 and 2007, the year house price reached their peak. The price increase was particularly high between 2003 and 2005. In 2008 and 2009, a modest correction took place, with prices contracting by 7% between 2007 and 2009. Housing price inflation before 2009 was less pronounced than in several EU economies where housing bubbles were clearly observed. However, whereas in most EU countries housing prices have continuously decreased since 2008, prices in France experienced a swift recovery. Real housing prices in 2011 were above the level recorded in 2007. In the EU, France is the economy where housing prices have increased the most in real terms since the trough. Since the summer of 2011, a slowdown of real estate price increases has been observed. This has given rise to concerns that further adjustment may be imminent (see **Graph 14**).

Despite some indications that the real estate market is cooling down, fundamental factors at play limit the potential for a strong price correction. In a context when purchasing power of households is depressed, with lower transaction volumes and, at least in some areas, stagnating prices, concerns have been raised over a potential largescale correction of prices in this sector. However, a number of elements would suggest otherwise. Long-term demographic and social trends should continue to support housing prices. Indeed, due to a relatively high fertility rate (2%) and a positive net immigration (+77 000 in 2011), the population growth in France is among the highest in the EU (+0.5% per year). Moreover, as the household size tends to decrease, the number of households increases and tends to stimulate housing prices in the long run. Moreover, despite the rising price level, the efforts required from households do not seem excessive compared to the average in the euro area. In 2010, 58% of households owned their main home and 36% had no reimbursement expenditures. Only 15% of the tenants and 1% of owners in France dedicated more than 40% of their disposable income to housing. This compares with average for the euro area of

23% and 7% respectively. In specific geographical areas (in particular in the main French cities and along the coasts), supply and demand asymmetries have put prices under pressure. A general price correction in France cannot be ruled out in a context of lower purchasing power and depressed demand and as the latest housing figures seem to show. Although housing prices developments need to be followed carefully, any price correction would remain limited because the low level of indebtedness in France prevents households from being forced to sell. In any case, a correction of real estate prices would have a limited direct impact on consumption and on economic activity as wealth effect does not play an important role in the consumption pattern in France.

Italy

There was no major housing boom before the crisis. The increase in house prices in the pre-crisis years was more contained than in many other euro-area countries and was not followed by a sharp price adjustment (Graph 9).The share of residential investment to GDP rose from 4.8% in 1998 to 5.8% in 2006 (vs. 6.9% in the euro area), before falling to 5.4% in 2011 (vs. 5.6% in the euro area).

Hongrie

The stock of private sector debt, at 155% of GDP, was just below the indicative threshold in 2010 and stands out among catching-up economies. Private sector debt almost tripled from 2000 to 2009 (when it culminated at 170% of GDP), before it declined markedly in 2010 in the context of strong deleveraging. The increase in households' debt was kicked off at early years of the last decade by the easing of liquidity constrains in the context of a rapid development of the Hungarian financial sector. In this period, the operation of a number of universal housing subsidy schemes also contributed to the substantial pick-up in mortgage lending (at the time, it was overwhelmingly denominated in forint).

As regards the housing sector, the pre-crisis period was not characterised by an asset price bubble in the Hungarian real estate market. Indeed, Hungary registered one of the lowest rates of house price growth in the EU from the latest trough to the latest peak, and the decline in house prices was on average 4%, while in the Baltic states and some other new member states this average is well over 10%. A gradual but protracted unwinding is still taking place: based on FHB House Price Index5 data, the decline in real prices was on average 1% over the 2005-2008 period. From mid-2008, there has been a continuous (quarter-on-quarter) nominal decrease in house prices: by Q3 2011, the size of this price reduction reached 15%. The monotonous diminution in house prices is strongly linked to the drastic fall in mortgage lending since late 2008. The decrease in residential investment had already started from 2005, and it was more than halved by 2010 measured from its peak in 2004 at 5.4% of GDP. Before the crisis, the share of the real estate sector's value added was around 8-8.5%, which was lower by one-third than the EU average. Since there has been a

continued steep reduction in the number of building permits (leading indicator for dwellings), a quick turnaround should not be expected.

Slovenia

Housing construction ticked upwards as a result of these trends, but it was public infrastructure investment, notably in highways, which caused the construction boom. In the peak year, 2008, gross fixed capital formation in construction amounted to 18.1% of total GVA, out of which the residential segment represented only 5.1%. Even if the magnitude of the boom was more apparent in terms of investment than in terms of the size of the construction sector, nonetheless the timing of the supply side response was unfortunate, with GVA and employment picking up just as demand crashed across all segments due to the coincidence of the winding down of the highway-building programme and the global crisis.

House price fundamentals remain a key uncertainty, but there are some indications of overvaluation. The size of the 2003-2008 boom is by itself suggestive of a bubble, but uncertainty as to house price fundamentals complicates the quantification of the overvaluation.8 Strong pre-crisis nominal GDP growth and convergence effects may have accounted for part of the boom. Buoyant incomes and households' low initial indebtedness also represented a latent financial capacity to bid up real estate prices, which may have been augmented by an unfortunately timed state-sponsored saving scheme. While households remain in sound financial health, the affordability of housing has declined dramatically. The ratio of house prices to per capita nominal GDP shot up between 2004 and 2010 (+44%) compared to the euro area (+14%). Based on Bank of Slovenia calculations for Ljubljana for the same period, the price-to-rent ratio increased by 27% to 1.5 for one-bedroom flats and went up by 37% to 1.2 for studio flats (with other housing categories falling between). The equivalent euro area increase was only 7% according to OECD data. Bank of Slovenia analysis of EU-SILC microdata9 shows a rapid increase in the average age of holders of mortgage loans (in part also reflecting younger generations' current poor income prospects), and there has been a rapid lengthening of average mortgage maturities, with maturities over 20 years now accounting for 54% of the stock of mortgages, up from 39% in 2007.

There has to-date been only limited adjustment in real estate valuations, with house prices currently only 10% below peak. The anticipation of likely further price falls has fostered a widely observed 'wait and see' attitude and held back both supply and demand from the market. This was especially apparent in 2008 and 2009, when transactions volumes were more than halved and prices fell by around 14%. Subsequently, the market has revived to an extent with transactions and prices recovering a little, but bankruptcy proceedings, an illiquid market and a desire on the part of banks to avoid triggering a house price correction have kept a lot of property away from the market (transactions volumes in 2011 were still 31% below the 2007 level). Labour market weakness is likely to depress the housing market for the foreseeable future, making an eventual downward price correction more likely.

However, the impact on household consumption and deleveraging is likely to be modest, given low loan-to-value ratios, low household indebtedness and the exceptionally low average frequency of household residence changes.

Finland

No evidence of housing market overheating has been found. The housing market seems to respond to structural changes in underlying supply and demand factors. Affordability of housing has decreased slightly, while fewer households are overburdened by housing costs than in the EU as a whole. In addition, house price evolutions do not provide evidence of increased volatility. In 2011, prices were stable and new construction activity decreased. No sudden drop in house prices is currently expected and risks for future overheating of the housing market seem limited.

Review of the Housing market

House prices have been climbing upwards. Nominal house prices increased by about half over the last 10 years. This high level and the continuous upward path might trigger concerns with regards to the sustainability of the housing market. Also real houses prices steadily trended upwards, after a huge decline during the crisis in the early 1990s. While there was a modest drop in in 2009, house prices rebounded in 2010 and 2011.

The Finnish housing market is characterised by features making the economy vulnerable to unsustainable house price increases. Since Finland is a small open economy, an external shock hitting the economy could lead to increasing unemployment and/or higher interest rates. Like in some of the euro area countries in the current crisis, unsustainably high house prices could in that case drop sharply and amplify the initial shock to the economy. This could happen through the loss of employment in the construction sector, losses of the banking sector from loans extended to developers and from mortgage loans, and adverse effects on household confidence through perceived wealth losses. Furthermore, certain structural features of the Finnish housing market tend to amplify price volatility. These include, for example, the tax deductibility of interest rates on mortgage loans and the high use of variable mortgage rates. House price increases are also shown by the Alert Mechanism Report, indicating a 6.8 % year-on-year change in deflated house prices for 2010, above the threshold of 6 %, although growth decelerated again in 2011.

Private sector debt and housing market developments

Private sector debt developments

Private sector debt, excluding the financial sector, reached 175 % of GDP in 2011. This level exceeds the scoreboard threshold, but falls below the levels observed in the other EU Nordic countries Denmark and Sweden. Household debt, including debt of non-profit institutions serving households, amounted to 62 % of GDP in 2011.

Households' net financial assets remain positive. After a temporary fall in 2007-08, households´ net financial assets started to increase again and have now levelled off. Furthermore, assets accumulated in pension funds, currently equivalent to about 70 % of GDP, are accounted for under the government sector. These investment returns are supporting the pension payments and could also be indirectly regarded as household assets.

The biggest part of household debt is related to housing, with mortgage loans increasing together with house prices. When the Finnish economy recovered from the crisis in the early 1990s, house prices started to increase. With real prices trending upwards, the total loan amount for housing, expressed in percent of GDP, started to rise as well. In contrast, loans for consumption other than housing remained fairly stable between 5 and 7 % of GDP. This indicates that the rising amount of loans for house purchases does not necessarily reflect a change in appetite of Finnish households for debt, but also the necessity to be able to acquire a dwelling at increased price levels.

Mortgage market characteristics imply potential risks for the Finnish housing market. Certain developments in the mortgages market, such as the lengthening of average maturities and the decreasing interest rates, enabled lending of larger amounts. The possibilities to lend larger amounts, in turn, might have contributed to higher housing demand and higher house prices and therefore again the need to take larger mortgage loans. The share of heavily indebted households, with debt levels exceeding 500 % of their annual disposable income, has more than doubled from less than 2 % in 2002 to 4 % of households in 2010. As more than 90 % of mortgage loans in Finland are based on variable interest rates, predominantly the 12 month EURIBOR rate, customers face the risks of interest rate increases in the future.

Especially when interest rates stand at a low level for a longer period of time, a development observed today, customers might be taken by surprise when interest rate hikes occur. For one third of all mortgage loans these risks are, however, attenuated by clauses that provide for the possibility to lengthen maturity in such cases, enabled by the fact that 80 % of mortgage loans in Finland carry a maturity of 25 years or less.

Tax deductibility of interest rates on mortgage loans encourages private indebtedness by favouring home ownership above renting. In order to reduce these incentives for taking out mortgage loans, the Finnish government has decided to reduce the share of deductible interest payments from 100 % in 2011 to 85 % in 2012, to 80 % in 2013 and to 75 % in 2014. This measure will reduce the debt bias but not entirely remove it.

Non-binding recommendations to minimise risks of the Finnish Financial Supervisory Authority (FSA) are not always followed. The FSA issued recommendations to assess carefully mortgage loan applicants' housing and repayment affordability and regarding loanto- value ratios in excess of 90 %, in order to minimise negative risks for households9. The customer should not use more than 40 % of his or her disposable income to service the loan (calculated on the maximum duration of 25 years), and extra careful evaluation of

repayment capacity is to be carried out if the loan-to-value ratio exceeds 90 %. While for loans to change accommodation this recommendation is broadly followed, a study on lending practices in private home mortgages finds that for first time purchasers the loan-to-value ratio is equal or higher than 100 % for almost half of all loans granted10. Where high loan-to-value ratios were approved for customers with relatively low incomes, banks were only partly able to give satisfactory explanations regarding additional incomes and personal guarantees, indicating that in several cases loans had been awarded contrary to the recommendations in force.

Interest rate increases would bring only a small proportion of households into financial difficulties. A study by Mäki-Fränti (2011) finds that an interest rate increase of 5 percentage points would bring only 3 % of households owning a house in difficulties to pay for minimum consumption while still servicing their loans. This would translate in a small increase in delinquency rates for banks and thus not threaten the stability of the financial system. While approximately one fifth of households has very little margin to adjust to a substantial loss of income from e.g. unemployment simply by reducing consumption, there are more renting households in this situation than over-indebted owner-occupier households. These findings are confirmed by the FSA, which estimates that less than 5 % of households would have to use more than 40 % of their net disposable income for loan servicing as long as the interest rate remains under 4 %. The share would rise to 20 % if the interest rate would rise to 6 %.

Finnish households are less overburdened by housing costs than in the EU. The housing cost-overburden rate shows that between 2007 and 2010 on average 12.4 % of the Finnish tenants were living in households where the total cost of housing represents more than 40 % of disposable income. This share compares favorably to the EU average, since over 25 % of the EU population finds themselves in this situation. The picture remains equally positive for house owners, where the Finnish population share of 3.2 % is again far below the the EU average of 8.7 % (Graph 19).

Recently rates for new mortgage loans have not followed the steep decline of the EURIBOR rates. Over the first months of 2012, Finnish banks have been raising the interest rate margins on new mortgage loans, according to their statements a needed move in the light of tightened capital requirements and higher costs of funding. These margin increases, of about 0.2 percentage point compared to 2011, prevented somewhat the variable interest rates on mortgage loans to follow the downward movement of the Euribor.

The evolutions in the mortgage market deserve close attention, but Finland's financial system and households' financial position are still in good health. This is particularly true compared to other European countries with high private sector debt levels such as Denmark, Sweden and the Netherlands. In the current environment, private consumption is supported by the reduction in mortgage payments thanks to historically low interest rates in core euro area countries and relatively low margins of local banks.

Housing market developments

The housing market remained stable in recent years, supporting the sustainability of private debt. As mortgange loans form the biggest share in private sector debt, housing market stability is key to preserving economic and financial stability. Negative developments on housing markets would not only pose a potential *direct* risk for economic developments, but would alsoan *indirect* one by thretening the sustainability of household indebtedness.

Since the mid-1990s, housing not only became more expensive in nominal terms, but also in real terms. House prices divided by consumer prices increased by 92 % in Finland over the years 1993-2007, indicating a relative increase in housing costs vis-à-vis consumption. In most countries, however, this increase exceeded 100 %.

House price evolutions do not provide evidence for increased house price volatility. Quarter-on-quarter real house price changes show that previous decades, and notably the crisis period in the early 1990s, saw much higher price volatility than what the economy experiences at the current juncture.

The current house price cycle is likely to be milder than the previous one. The previous cycle, with a peak in 1989 and sharp drop in house prices thereafter, was linked to a series of factors that are currently no longer at play. The financial market liberalisation in Finland in the 1980s led to a large upswing in credit, which reversed at the end of the decade, also due to the collapse of the Soviet Union, traditionally an important trade partner. Another difference between the two cycles is that labour markets were in a worse shape in the early 1990s, when unemployment increased dramatically from 3 to 16 %.

Affordability of housing decreased only moderately. Real incomes have been broadly keeping up with house price increases. Consequently, affordability of housing only slightly decreased as house prices divided by household income increased by 28 % between 1993 and 2007. Compared with other countries, this increase is relatively moderate. In overheating housing markets in UK, Ireland and the Netherlands, this indicator increased with more than 90 %. In Sweden and Denmark the increase was 84 % and 120 %, respectively. Considering a longer period, 1975-2011, the price-to-income ratio for Finnish dwellings is currently below its long-term average11.

However, the comparison with historical average values does not capture the important structural shifts that increase housing demand. Three main demand factors contributed to lifting prices above the historical norm. (1) Finnish households are looking to have more square meters of living space per inhabitant, as Finland is behind other similarly developed nations in this regard. (2) The Helsinki area, where prices increased most, experiences population growth which, in combination with a relative shortage of land, seems to be a driving force. (3) The decline in interest rates has reduced the cost of ownership, making it more affordable to buy a house, and consequently has supported price rises. The increase in the price-to-rent ratio by 66 % over the years 1993-2007, for example, can be partly explained by a decline in the cost of ownership12. The decline in market interest rates, with the three month Euribor end of April 2012 at only 0.7 %, reduced interest rates on

housing loans to a record-low level in Finland. Households' expectations on interest rates developments might underestimate the possibility of interest rate increases, hereby increasing their willingness to accept higher house prices.

Housing supply did not keep up with increasing demand over the last decade. While various factors seem to have contributed to keeping housing demand up, this should only result in upward price pressure if supply is not able to match increased demand. After the crisis in the early 1990s, residential construction had to recover from low levels of activity, but the increase was rather modest. Between 1995 and 2011, residential investment rose from 5 % of GDP to 7 % of GDP, fluctuating within this band. The number of building permits granted in the period 2000-2011 was highest in 2005; nevertheless this level still remained below the number of permits granted in 1999. Employment in the construction sector is about 7 % of total employment and it has not increased significantly from the long-term average.

The recent slowdown in construction activity is limiting risks of sharp house price decreases. Residential construction investment slowed down in 2011 and is forecast to fall further in 2012, while for 2013 a moderate recovery is expected. Both residential building construction and permits granted for residential building construction are slightly declining since autumn 2011. In January 2012, the volume of residential building construction fell 1.3 % below the level of January 2011. At the same time, the cubic volume covered by permits for residential buildings diminished by 5 % year-on-year. The probability of a sharp and sudden decrease in housing prices due to an oversupply of newly-built houses thus remains low.

Conclusion concerning internal imbalances resulting from private debt and housing market developments

The high level of household debt in Finland could be a concern but risks are attenuated.
Private debtors with high mortgage loans are vulnerable to shocks such as interest rate increases, and any sudden forced deleveraging would negatively impact on growth. Delinquency rates are in that case expected to increase slightly, but remain at a level that the Finnish banking sector can absorb, as the financial system is in good health. An increase in unemployment or in interest rates would have an impact on households' ability to serve their loans, but this impact is estimated to be fairly limited. The debt levels of households do not seem to be a major threat to the Finnish economy in the near future.

No evidence has been found that Finnish house prices have reached an unsustainable level. House prices do not show increased volatility, affordability declined only gradually and households do not need to be overly leveraged in order to acquire a dwelling. Over the last decade construction activity did not keep up with increasing and housing investment is expected to remain moderately below 2011 levels for 2012 and 2013. The Helsinki area, where prices increased most, experiences population growth which, in combination with

relative shortage of land, seems to be the main driving force behind house price increases. Based on the indicators observed, no sudden drop in housing prices is expected. At the current juncture, risks for future overheating of the housing market seem limited.

Although the indebtedness of corporations is high, it does not per se constitute an imbalance. The debt-to-GDP ratio of Finnish non-financial corporations might appear high at first sight. However, there are many considerations which make it difficult to establish that corporate debt in Finland demonstrates an underlying imbalance. The debt-to-GDP ratio is inflated by the presence of multinational companies in Finland and their tax minimisation practices. The debt level of Finnish non-financial corporations lies above the European Union average, but at the same time the level is much higher in some other Member States, such as Belgium, Ireland, Portugal and Sweden, where the debt-to-GDP ratios of non-financial corporations reaches 150 % of GDP or more.

Nevertheless, high private debt relative to GDP poses a potential economic and fiscal risk. Thus, financial supervision should stay vigilant to ensure that the banking system remains well capitalized and banks follow a sufficiently conservative provisioning policy.

Financial supervision should remain vigilant and be legally enabled to establish national macro-prudential policy tools for safeguarding financial market stability where needed. With regards to private indebtedness these tools should include the possibility to set binding recommendations on the loan-to-value ratios. However, while the planned gradual reduction in tax deductibility of mortgage interest rates will reduce incentives for taking out housing loans, a complete elimination of this scheme should be considered.

The Nederlands

Recommandations

Take steps to gradually reform the housing market, including by:

1. modifying the favourable tax treatment of home ownership, including by phasing out mortgage interest deductibility and/or through the system of imputed rents,
2. providing for a more market-oriented pricing mechanism in the rental market, and
3. for social housing, aligning rents with household income.

In Dept-review of the housing market

Over the last four decades, structural distortions have built up in the Dutch housing market. In the property market, fundamental supply restrictions and tax incentives for home ownership (notably mortgage interest deductibility favouring higher-income households) have led to an inefficient allocation of capital. In the rental market, with its very large social housing segment, social policies and caps on rent levels and on rent increases have led to a

very inelastic supply of rental housing. Modifying the favourable tax treatment of home ownership would contribute to reducing the structural distortions on the Dutch housing market.

Finally, structural distortions have built up in the Dutch housing market, both in the property market and rental market, leading to a gradual increase in household leverage and an inefficient allocation of capital.

Another important structural problem lies in the housing market. Distortions have built up in both the rental and the property segment which, together with uncertainty about future reforms, weigh increasingly on the recovery of the Dutch economy. The recently announced measures are a step in the right direction, but fall far short of what is required to address the distortions in the housing market.

The economy is in need of far-reaching structural reforms in several areas (among which the labour and housing markets, pensions and public finances) in order to relaunch itself on a path of sustainable growth.

Another important structural problem lies in the housing market. Over the last decades, structural distortions have built up in the housing market as a result of a combination of factors.

In the property market, the trend increase in labour market participation and supply restrictions have interacted with tax incentives for home ownership (in particular full mortgage interest deductibility, which especially favours higher-income households), inducing a gradual increase in leverage of households. This was facilitated by high loanto-value ratios coupled with the development of interest-only mortgages. The fact that savings invested in property are taxed differently from investments in other assets and that income taxation does not treat mortgage and equity financing of property in the same way has resulted in inefficiencies in the allocation of capital. The programmes commit to policies to progressively lower the maximum loan-to-value ratio and to reduce the scope for mortgage interest payments to be tax-deductible, limiting this possibility to amortising loans, but only for new cases.

The proposal is a step in the right direction, but falls short of addressing the distortions that have built up in the property market. The limitation to new cases places the adjustment in the purchase market on younger cohorts and only entails a very gradual positive impact on public finances. Moreover, extending this measure to existing housing loans would speed up the reduction of the distortions, arguably without a marked additional drag on house prices. Finally, an overly slow transition in the purchase segment would limit the likely positive supply effects of a gradual increase in rents in the regulated rental market.

In the rental segment, the Netherlands has the largest social housing stock (relative to the total housing stock) in the EU. Social policies and caps on rents and rent increases have led to a price-inelastic supply of rental housing and have hampered labour mobility, but do not

prevent people with high incomes from benefiting from social housing. Furthermore, the special legal status of the social housing corporations does not provide incentives for the efficient use of the sizeable capital stock they own. The intention outlined in the programmes to allow differentiated rent increases again represents a step in the right direction, but falls short of a comprehensive overhaul.

Hence, on balance the measures for the housing market in the stability and in the national reform programmes fall short of what is required and could in some respects even accentuate structural problems. Against the background of negative wealth effects from decreasing house prices and rising uncertainty of reforms of the housing market, impeding the already sluggish recovery of the economy, the need for a comprehensive reform of housing policies encompassing all segments of the market has become more pressing. Reforms in the housing market should aim at phased-in changes to both the property market (modifying the favourable tax treatment of home ownership, especially mortgage interest deductibility, including existing cases) and the rental market (scaling down the scope and size of the social housing segment, allowing a more market–oriented pricing mechanism, and reviewing the status of social housing corporations).

Box : The Dutch housing market – state of play

The private housing market is highly regulated to protect tenants and make housing affordable. The regulations concern both the rental market and the property market. Substantial tax benefits exist to support home ownership. For owner-occupied housing, home owners enjoy the most generous mortgage interest rate deductibility (MID) scheme in the EU and can fully deduct interest payments on their mortgage loans from taxable income at the highest marginal tax rate (meaning that wealthier households benefit the most). Owners pay taxes on a low level of imputed rents and add only a small fraction of the value of their property to taxable income, so that owner-occupied housing capital is fiscally favoured over other forms of capital. This favourable tax treatment is reinforced by an additional deduction ('wet Hillen'). If the amount of imputed rents (that adds to taxable income) is larger than mortgage interest payments (that can be deducted from taxable income), the difference is granted as an additional deduction. The result is that home owners do not pay net taxes on their property, which especially favours wealthier households.

In the rental market, most tenants enjoy ceilings on rents and annual rent increases. Relatively cheap housing is provided by social housing corporations that serve the largest social housing sector in the EU. These housing corporations are private institutions with a statutory obligation to provide housing at regulated rents for lower income categories. This subsidised rental market covers by far the largest part of the rental segment and features long waiting periods for new applicants, especially in urban areas. The non-social housing market accounts for only a small part of the total housing stock.

The interaction of, on the one hand, tax incentives, financial innovations, bank mortgage policies and trends in the labour market, which push up demand, and, on the other hand, policies limiting supply, has driven up prices. On the other hand, restrictions to the level of

rents reduce the value of (rental) property, especially the housing stock of social housing corporations. Due to the increase in property prices, housing loans accounted for 27 % of bank assets in 2009, up from 17 % in 1997 and well above the EU average (15 %). Funding gaps have increased substantially, with concurrent mismatches and refinancing risks.

Finally, the government is exposed to the guarantees given under the national mortgage guarantee scheme (NHG), which are more likely to be drawn if unemployment increases, and the Waarborgfonds Sociale Woningbouw, which guarantees loans to social housing corporations. This comes on top of the burden to the government budget stemming from other policies in the housing market, for example the MID (2 % of GDP) and the low level of taxation of imputed rents (ca. 0.5 % of GDP).1