

## Focus

### II. Accumulated household debt – a counterpart to rising house prices in the euro area

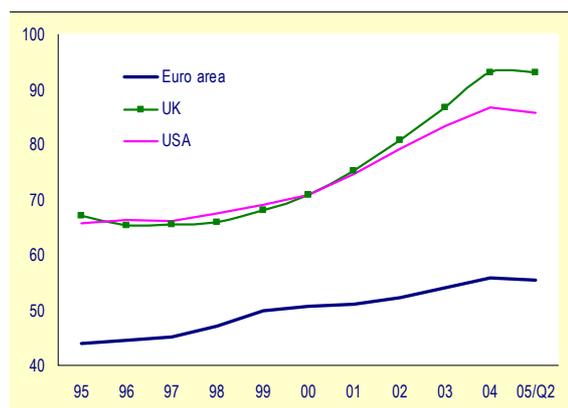
*A counterpart to the sustained rise in house prices within the euro area in recent years has been the accumulation of household debt, much of which has been secured against house purchases. These related phenomena have been facilitated by favourable financing conditions, reflecting historically low interest rates and supply-side changes in mortgage markets which have expanded access to credit. A rise in the level of debt increases households' exposure to changes in house prices as well as to economic shocks affecting income growth and interest rates. It may also lead to overstretched balance sheets that require a period of consolidation and spending restraints. For the euro area as a whole, risks to growth related to household indebtedness appear quite low at this juncture. However, developments in household debt have been characterised by considerable heterogeneity at Member State level and the situation may be less benign in some Member States where rapid debt accumulation has been associated with fast growth in household spending, deteriorating balance sheets and soaring house prices. These Member States appear to be more vulnerable to economic shocks such as a rise in interest rates, a correction in house prices or a downward revision of domestic growth prospects.*

The steady rise in household indebtedness within the euro area in recent years – which contrasts with the process of debt consolidation observed in the corporate sector – is increasingly a focus of attention among analysts and policymakers. This focus section reviews the factors which have led to the rapid accumulation of debt by households since the beginning of the decade and assesses the associated risks to economic growth in the euro area. Section 1 examines recent developments in household debt and their likely causes. Section 2 reviews the various channels through which high indebtedness may affect economic growth. Section 3 then proposes an assessment of the current debt situation in the euro area and in the euro-area Member States. Based on this examination and the channels identified earlier, Section 4 discusses a number of potential risk factors – of global and euro-specific origin – to households in the euro area. Section 5 concludes.

#### 1. Recent developments in household debt

Household indebtedness has increased steadily in most Western countries since the mid-1990s. In the euro area, the ratio of household debt to GDP climbed from 44% in 1995 to 56% in 2004 (Graph 22). The accumulation of debt was even more rapid in countries such as the UK and the USA, where the debt to GDP ratio increased by about 20-25 pp over the same period.

Graph 22: Household debt, euro area, UK and USA  
(Ratio to GDP in % – 1995 2004) (1)



(1) Euro-area data do not include EL, IE and LU.

Source: Commission services, US Federal Reserve System.

Rapid debt accumulation in Western economies may be attributed to a combination of macroeconomic, demographic and structural factors.

At the **macroeconomic level**, historically low interest rates have been a key driver of credit demand. In addition, demand for housing and mortgages – which accounts for most of the increase in total household lending – has been boosted by a stable and low-inflation environment.<sup>22</sup> In some countries, there is also evidence that rapid rises in house prices have

<sup>22</sup> High inflation raises the financial burden of a loan in the early years of repayment.



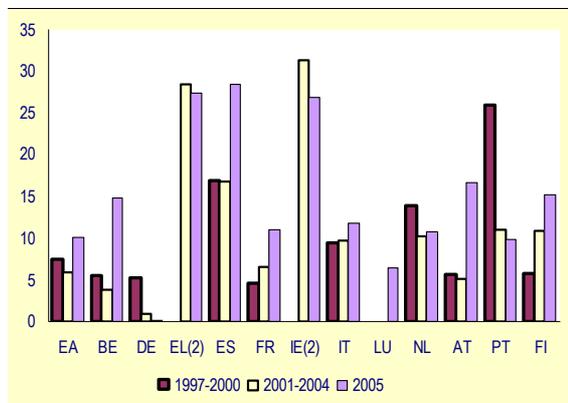
encouraged borrowing by raising the value of collateral and easing credit restrictions.<sup>23</sup>

In addition to favourable macroeconomic conditions, **demographic developments** have also tended to be supportive of the housing market in many countries. Population growth and the demographic developments that affect the number of households have implications for the demand for housing and for mortgages. Large immigration flows, falls in the average size of households, rises in the share of population of household formation age and increasing female participation in the labour market all have potentially important implications for household credit demand.

Finally, increased household borrowing also reflects **structural changes** both on the supply side and the funding side of the mortgage markets, which have presented households with expanded access to credit for house purchase and eased liquidity constraints. Among those changes affecting the supply of mortgage financing has been the increased availability of: (i) extended maturity of contracts, providing borrowers with more time to repay a given amount borrowed; (ii) higher loan-to-value ratios, opening up enlarged borrowing opportunities for borrowers with limited capital of their own; (iii) an increasing share of variable interest rate loans, typically offering lower-cost borrowing when compared with longer-term fixed rates; and (iv) interest-only loans as well as – in some cases – equity withdrawal possibilities, permitting households with limited resources to acquire a house and enabling house owners to borrow against equity acquired in their house. There have also been changes on the funding side of the mortgage market, including the growing availability of both mortgage bonds and debt securitisation, which have allowed mortgage financing institutions to source their funding beyond their retail deposit base.

<sup>23</sup> While there is a clear causal relation between credit conditions and house prices (better credit conditions fuel demand for housing and mortgages and thereby house prices), there is also empirical evidence of a reverse effect of property prices on credit growth in some countries. The potency of this reverse effect is related to structural features of the mortgage market. See Tsatsaronis, K. and H., Zhu (2004), 'What drives housing price dynamics: cross-country evidence', BIS Quarterly Review, March.

Graph 23: Household debt growth in euro-area Member States (average annual growth in %) (1)



(1) Data for 2005 refer to MFI debt growth.

(2) Growth in 2004 instead of 2001-04.

Source: ECB, Commission services.

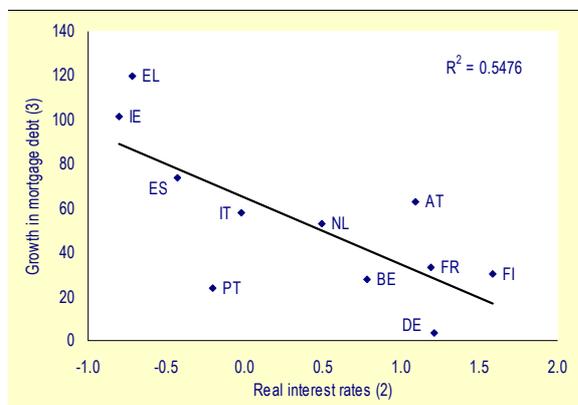
The overall euro-area picture of relatively sustained household debt accumulation conceals large differences, ranging from a near stagnation of household debt in Germany since 2000 to rapid credit growth in most other Member States (Graph 23). In recent years, household debt accumulation has been particularly sustained in Spain, Greece, the Netherlands, Ireland and Portugal. The cross-country heterogeneity of developments in household indebtedness within the euro area reflects several factors.

First, the adoption of the euro was associated with a very substantial downward convergence in interest rates and increased access to external bank lending in several Member States (notably in Greece, Spain, Italy and Portugal). Over and above favourable global liquidity conditions, these factors have contributed to a surge in household credit in most of the countries concerned.

Second, in some Member States, comparatively higher inflation (due to either the so-called Balassa-Samuelson effect or different cyclical positions) has further depressed real interest rates, providing an additional boost to credit demand (Graph 24). The pro-cyclical effect of real interest rates may have been reinforced by the mutual interaction between real interest rates and house prices (low real interest rates fuel demand for housing, leading to a rise in house prices which pushes up growth and inflation via

wealth effects and further depresses real interest rates).

Graph 24: Household mortgage debt and real interest rates, euro-area Member States (2002-04 – in %) (1)



(1) No data for LU.  
 (2) Average real short-term interest rates (consumption deflator) 2002-04.  
 (3) Growth in mortgage debt between 2001 and 2004.  
**Source:** European Mortgage Federation, Commission services.

Third, demographic developments have been more supportive of demand for housing and mortgages in some Member States than others due, for instance, to significant immigration flows (e.g. Ireland and Spain) or faster growth of the population of household formation age (e.g. Ireland, Spain, Netherlands and France).

Finally, structural differences in mortgage markets and in the fiscal treatment of housing have also contributed to the observed dispersion of developments in household indebtedness. For instance, Member States where mortgages are predominantly at variable rates have tended to experience faster credit growth in recent years (Greece, Spain, Ireland and Italy). There have also been cross-country differences in the pace of mortgage product innovation and of structural change in the mortgage markets.<sup>24</sup> In particular, some Member States with relatively underdeveloped mortgage markets seem to have entered a catching-up process and recorded comparatively faster credit growth.

<sup>24</sup> For a review of recent mortgage product innovation in selected countries see OECD (2005), "Recent house price developments: the role of fundamentals", OECD Economic Outlook, No. 78, Chapter 3, December.

## 2. The implications of household debt for economic growth – reviewing the channels

An increase in household debt is not per se a source of concern for economic performance, but excessive accumulation of debt can create vulnerabilities to adverse shocks. While even the accumulation of high levels of debt may simply be a sign that households are responding optimally to positive changes in their economic environment, three main considerations need to be taken into account.

A rapid increase in borrowing may lead **households to accumulate a higher-than-desired level of indebtedness**, inducing a subsequent cut in household spending so as to improve their balance sheets. Typically, this situation will arise when households overestimate their long-term income prospects or their capacity to service their accumulated debt.

- Overestimation of income prospects and debt-servicing capacity may be more frequent during phases of sustained economic upswings or in periods of marked structural change. Developments in some EU Member States in the 1980s also reveal that phases of rapid financial market liberalisation and deregulation may raise the risk of a temporary build-up of excessively optimistic expectations, as economic agents (including policymakers) need time to fully understand the implications of their changing environment.<sup>25</sup>
- With respect to underestimation of a future debt burden, there are indications that households borrowing at variable interest rates may tend to form excessively optimistic expectations of future interest rate

<sup>25</sup> Increasing competition in the banking sector leads to a relaxation of credit constraints that fuels domestic demand, particularly if macroeconomic policy is slow to respond to implications for growth in the short term. The associated pick-up in growth may generate excessive income expectations and may also be reinforced by rapid growth in house prices. These factors seem to have been at play in the UK and Nordic countries in the 1980s. See Debelle, G. (2004), 'Macroeconomic implications of rising household debt', BIS Working Paper No. 153, June.



developments when monetary policy is accommodative.<sup>26</sup>

In any event, a period of excessively optimistic expectations is typically followed by a period of spending retrenchment during which households restore overstretched balance sheets by restraining their expenditure.

A higher level of debt makes **households more vulnerable to economic shocks** affecting disposable income and interest rates. A rise in the overall debt levels may be associated with an increase in the share of households for which the debt-servicing costs represent a substantial portion of disposable income. In that case, an unexpected loss in income – especially if it takes the form of an increase in unemployment<sup>27</sup> – can lead to a rapid rise in the number of households forced to raise their level of precautionary savings because they face a high probability of default. A related argument is that a high level of indebtedness restricts the possibility of using further credit for consumption smoothing and therefore raises the sensitivity of consumption to fluctuations in disposable income. A higher debt level also means greater exposure to unexpected changes in interest rates. The size of this impact and the speed of its transmission will vary substantially across countries, depending on the sensitivity of debt-servicing costs to changes in interest rates. In countries where mortgages are predominantly at variable rates, households will be directly exposed to an increase in interest rates. In countries where rates are mostly fixed, banks will bear more of the exposure to the interest-rate risk, depending on their financing structure.

A higher level of debt may be associated with **higher exposure to changes in house prices**. A recent study has identified a strong cross-country correlation between the strength of

housing-wealth effects on consumption and the size of the mortgage market.<sup>28</sup> Such a correlation may partly reflect a causal link. A fall in house prices will entail an increase in the probability of default for heavily-indebted households and an increase in precautionary savings. To the extent that an increase in the aggregate level of indebtedness is associated with a rise in the share of heavily-indebted households, it will also mean higher sensitivity to house price fluctuations. More generally, mortgage markets tend to be larger in those countries where they are more liberalised and the correlation is also likely to be an indication that the size of housing-wealth effects depends on the degree of sophistication of mortgage markets.

### *3. Assessing household borrowing trends in the euro area*

#### **The euro area as a whole**

Debt and balance-sheet data would tend to ease any immediate concern about the level of household indebtedness in the euro area as a whole. Although the euro-area household debt ratio has climbed significantly in recent years, it remains well below the corresponding ratios in the United States and the United Kingdom. Moreover, the debt-to-financial-asset ratio has risen only moderately (Graph 25) and debt-servicing costs have actually been declining as a proportion of disposable income (Graph 26).<sup>29</sup> Finally, survey evidence suggests that the bulk of the debt is held by high-income households who also tend to enjoy a relatively sound financial position.<sup>30</sup>

<sup>26</sup> For evidence on the UK mortgage market see Miles, D. (2004), ‘The UK mortgage market: taking a longer term view – Final Report and recommendations’, HM Treasury, March.

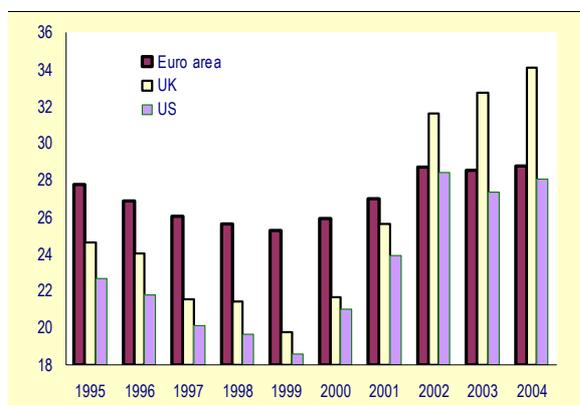
<sup>27</sup> A rise in unemployment usually means a large drop in income for a limited number of households. Other possible sources of a change in income (e.g. increased taxation, fluctuations in wages rates) tend to be less concentrated on a small part of the population.

<sup>28</sup> Catte, P., Girouard, N., Price, R. and C., André (2004), ‘Housing markets, wealth and the business cycle’, OECD Economics Department Working Paper No. 394, 7 December.

<sup>29</sup> Ideally, the assessment of household balance sheets should not be restricted to financial assets and should include developments in tangible assets such as the housing stock. Unfortunately, data on tangible assets are not available for the euro area as a whole.

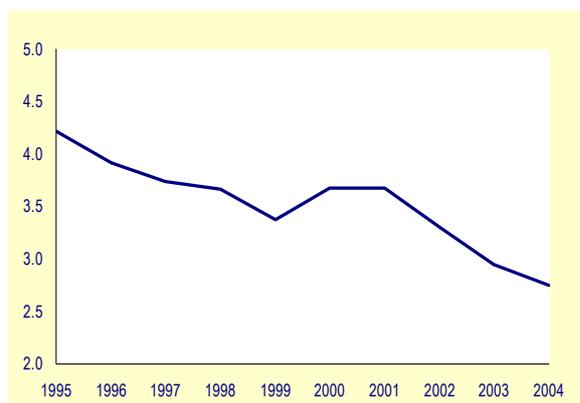
<sup>30</sup> European Central Bank (2005), ‘Financial stability review’, December.

Graph 25: Household debt to financial assets, euro area, UK, USA (In % – 1995-2004) (1)



(1) Euro-area data do not include EL, IE and LU.  
**Source:** Commission services, US Federal Reserve System.

Graph 26: Interest paid by households as a share of disposable income, euro area (In % – 1995-2004) (1)



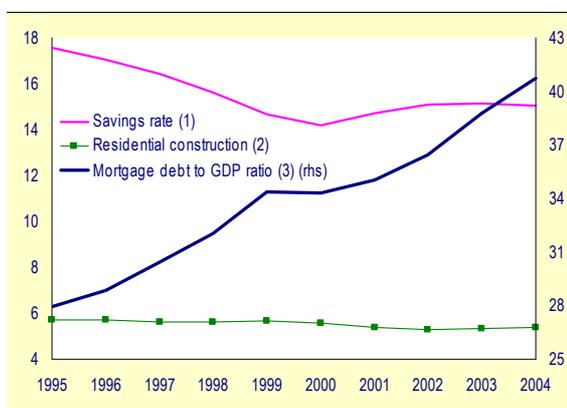
(1) Excluding IE and LU.  
**Source:** Commission services.

Analysis of the real counterparts of debt accumulation is an important part of the assessment of an economy's exposure to debt. If credit growth has fostered a spending boom and an expansion in real activity, a mere stabilisation of indebtedness could have a significant negative bearing on economic growth.

However, the exposure of economic growth to a change in the pace of debt accumulation appears fairly limited in the euro area as a whole. There is no evidence that households have borrowed substantially to consume or that the build-up of household debt has spurred a boom in residential construction. A moderate decline in the savings ratio accompanied the increase in mortgage

indebtedness in the late 1990s, but household consumption has remained fairly sluggish since 2000, despite a continued rise in indebtedness (Graph 27). Similarly, the build-up of mortgage debt since the mid-1990s has been associated with only moderate growth in euro-area residential construction. For a variety of structural reasons, the euro-area residential construction sector is characterised by the slow and relatively weak response of supply to changes in demand (see also the section on 'The weak response of housing supply to surging prices' in this issue).

Graph 27: Mortgage debt and household savings, euro area (In % – 1995-2004) (1)



(1) As a share of disposable income – EU12 excluding IE and LU.  
 (2) As a share of GDP – EU12 excluding PT.  
 (3) EU12 excluding AT and PT.  
**Source:** Commission services, European Mortgage Federation.

On this basis, it would seem that the euro-area household balance sheet is relatively robust and that, in any case, an adverse shock to disposable income or debt servicing costs would have only a limited impact on GDP growth.

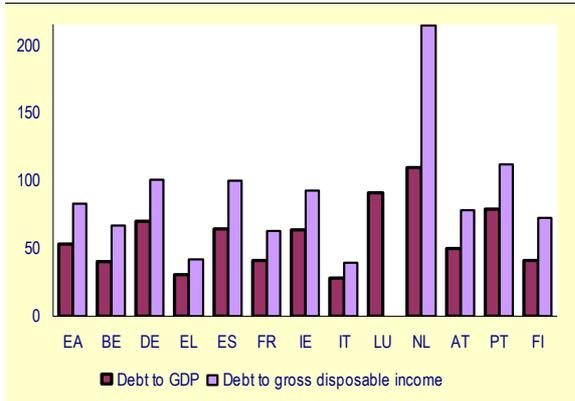
### The euro-area Member States

The assessment of developments in household indebtedness is less sanguine in some of the euro-area Member States. The euro-area average hides a large dispersion in household indebtedness across the Member States with debt to disposable income figures roughly at 100% or above in Germany, Spain, Ireland, the Netherlands and Portugal (Graph 28). In 2005, debt of monetary and financial institutions (MFI) grew by more than 25% in Greece, Spain and Ireland. Other countries recorded sharp credit



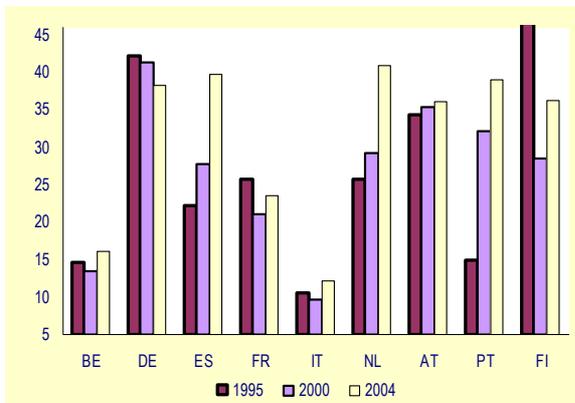
growth in earlier periods, e.g. the Netherlands and Portugal during the second half of the 1990s.

Graph 28: Household debt-to-GDP and to disposable income ratios, euro-area Member States (In % – 2004) (1)



(1) MFI debt for EL, IE and LU – 2003 debt to gross disposable income data for IE and PT  
**Source:** Commission services, ECB and Irish Central Bank.

Graph 29: Household total-debt-to-financial-asset ratio, euro-area Member States (In % – 1995-2004) (1)

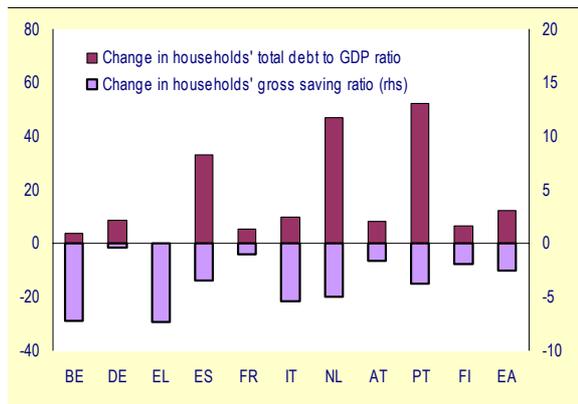


(1) No data for EL, IE and LU.  
**Source:** Commission services.

Historically low interest rates have allowed households to contain their debt servicing costs. National account data indicate that the ratio of interest paid by households to their disposable income has decreased in the past few years in all Member States, except for Greece. Nevertheless, in some of the Member States for which data are available, the increase in indebtedness has led to a deterioration in household balance sheets. For example, a sharp rise in the debt-to-asset ratio has been witnessed in Spain, the Netherlands and

Portugal (Graph 29). In this context, it should be noted that there are no data available on debt-to-asset ratios for households in Ireland, Greece and Luxembourg so it is difficult to assess the full implications of debt accumulation for balance sheets in these three countries.

Graph 30: Changes in household total-debt-to-GDP ratio and savings ratio, euro-area Member States (In % – 1995-2004) (1)



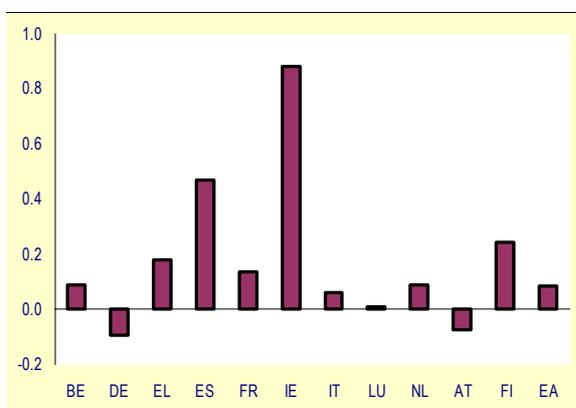
(1) Debt data are not available for EL, IE and I.U. Savings data are not available for IE and LU.  
**Source:** Commission services.

In some Member States, the rise in household debt would appear to have been partly used to finance private consumption (Graph 30). Greece, the Netherlands and Portugal all recorded a substantial decline in their savings ratio during the second half of the 1990s (no data are available for Ireland). In the Netherlands and Portugal, the consumption boom was followed by a period of consolidation in the early 2000s during which the savings ratio experienced a partial rebound. In 2004 or 2005, however, the ratio edged down again in both countries. In Greece, the savings ratio pursued its downward course in the early 2000s and has stabilised since.<sup>31</sup> This would indirectly suggest that private consumption growth in these Member States could be at risk in the event of a reversal of recent trends in credit growth.

<sup>31</sup> In contrast, the household savings ratio in Spain has moved more in line with the euro-area average during most of the past 10 years as the consumption boom in that country was mainly financed by strong income growth on the back of rapid improvements in the labour market. However, the Spanish savings ratio dropped by 3 percentage points in the past two years, when the overall euro-area savings ratio remained nearly stable.

In general, there is little evidence to suggest that residential construction in euro-area Member States has benefited significantly from the increase in household debt and so there would be little prospect of a sharp decline in activity in the event of a slowdown in mortgage credit growth. However, Spain and Ireland, where the housing sector has made a significant contribution to economic growth in recent years, may be exceptions in this respect (Graph 31).

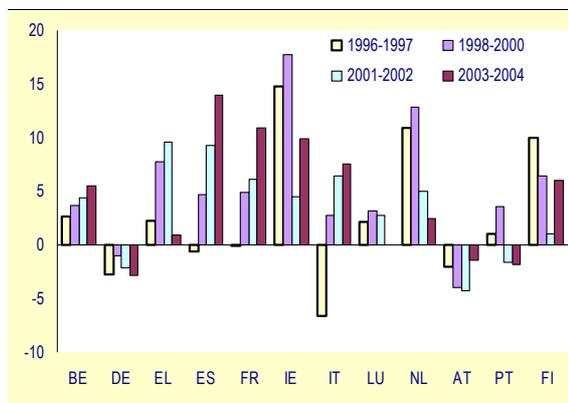
Graph 31: Residential construction, euro-area Member States (Average annual contribution to GDP growth in % – 1995-2004) (1)



(1) No data for PT.  
Source: Commission services.

While residential construction may not have benefited generally from growth in mortgage credit, a major counterpart has been rapidly-rising house prices in several Member States. Fast-growing mortgage lending in a context of inelastic construction supply has resulted in double-digit rates of increase in house prices in several Member States, peaking at an annual rate of about 18% in Ireland (1998/2000), 14% in Spain (2003/4), 14% in the Netherlands (1998/2000), 9% in Greece (2001/2002), and 11% in France (2003/4). The inflation in house prices in several Member States is unprecedented in terms of size and duration and there is a risk that housing markets may be overvalued relative to historical norms. A notable exception is Portugal, where house prices have risen at a moderate pace despite a period of rapid expansion in household credit in the late 1990s. House prices in Germany and Austria have clearly under-performed the euro-area average and this trend mirrors a relatively subdued pace of credit growth in the two countries.

Graph 32: Real house prices, euro-area Member States (Annual average changes in % – 1995-2004)



(1) 1997 only in the case of FR.  
Source: ECB, European Mortgage Federation for LU, Commission services.

In sum, while the aggregate indebtedness of households in the euro area is not a cause for concern, evidence suggests a need for vigilance in some euro-area Member States where households have accumulated debt at an exceptionally rapid pace. In these Member States, the combination of rapid debt accumulation, weakened balance sheets, decreasing savings ratios and soaring house prices would tend to heighten the vulnerability of households to adverse shocks. Possible sources of such shocks are examined in the next section.

#### 4. Risk factors associated with high household indebtedness in some euro-area Member States

In identifying possible adverse shocks to highly indebted households in some euro-area Member States, the main focus is on likely developments in interest rates, economic growth (as a determinant of disposable income) and the housing market.

#### Revised expectations of interest rates and economic growth

While the outlook for the euro-area economy is the brightest for several years, the extent of current financial imbalances in the global economy presents a continuing risk to a sustainable recovery. The low level of short-term



interest rates and the global decline in benchmark long-term interest rates to historically low levels has been accompanied by an even greater decline in risk premiums, raising concern that an investor search for yield in an environment of ample global liquidity may have resulted in widespread mispricing of risk. If risk has been mispriced by the markets, the current constellation of global and euro-area interest rates would be vulnerable to an abrupt change in investor sentiment, particularly if global liquidity conditions were to tighten further.

While the near-term prospect of an abrupt rise in interest rates is low, the possibility cannot be ruled out entirely. Financial markets remain concerned about the US external deficit and the associated risk of disorderly adjustment in the US dollar exchange rate. If interest rates were to move sharply higher as imbalances unwind, the prospects for growth in the global economy – including the euro-area economy – would be undermined and euro-area households could be hit by the twin effects of higher-than-expected debt servicing costs and lower-than-expected growth in their disposable income.

Irrespective of developments in the global economy, assessment of risks to interest rates and economic growth must also take account of special circumstances within the euro area. In several Member States, euro adoption was associated with a downward convergence in interest rates and better access to external bank lending. These factors have contributed to a surge in household credit often reinforced by pro-cyclical movement in real interest rates. While this phenomenon reflects rational inter-temporal smoothing on the part of economic agents, the consequent rise in household debt has been unusually sharp and could be an indication of overly optimistic growth expectations that would leave the Member States vulnerable to a domestically-generated slowdown in growth. Rapid cyclical growth – typically associated with rapid financial balance sheet deterioration and household spending booms – which is mistaken as a change in permanent income tends to be associated with credit misallocation on a large scale.

### Correction in house prices

In a central scenario of sustained recovery in the euro-area economy, a gradual cooling in housing markets seems the most likely outcome in the medium term, but important risk factors remain linked to the specific nature of the current phase of increasing house prices.

First, house prices in several euro-area Member States are experiencing their longest phase of increase since the 1970s and have reached historical highs. These features suggest that the associated expansion in mortgage credit may extend to a larger-than-usual share of the population, possibly altering the overall risk profile of household debtors. As house price inflation has far exceeded the growth rate in disposable income, it is likely that the leverage of individual household debtors has risen significantly. In such circumstances, there is a risk that, although survey evidence suggests that the bulk of mortgage debt in the euro area is held by households with a sound financial position, the “marginal” mortgage taker could be in a more vulnerable financial situation.

Second, typical indicators of house price developments could understate the extent of overvaluation in localised “hot spots”. These indicators are normally constructed on a national basis and therefore might not reflect the huge price rises recorded in agglomeration centres. In such circumstances, house prices in some urban areas might be more out of line with historical norms than suggested by official figures and consequently more prone to correction.

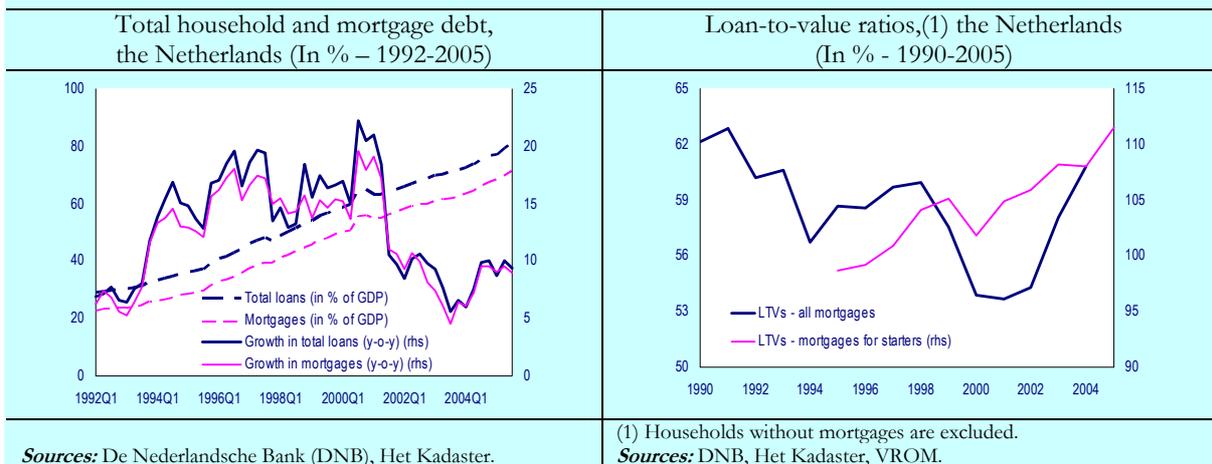
Third, while many valid arguments can be brought forward in defence of recent house price and credit developments – including population growth, catch-up factors, financial liberalisation, etc. – one cannot exclude the possibility of excessive optimism among households, implying an overestimation of long-term income prospects and an underestimation of future debt burdens. A recent review of available estimates of fundamental price levels for a limited number of countries by the OECD suggests possible house

**Box 2: Debt accumulation and growth – the recent Dutch experience**

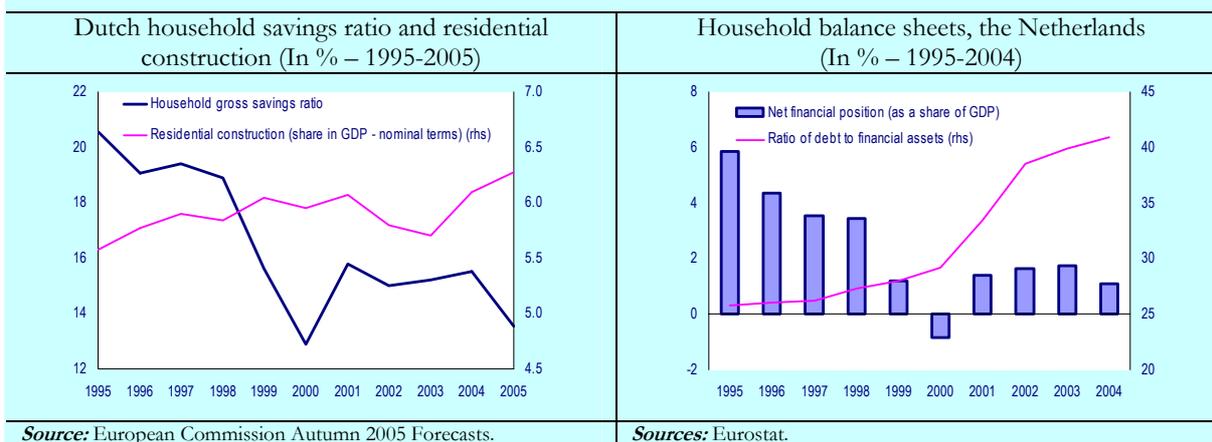
The Dutch economy posts the highest level of household indebtedness in the euro area and has experienced one of the fastest debt accumulations in Europe since the mid-1990s. The present box reviews these developments and, in particular, households’ response to the period of weak growth since 2001.

**1. Developments in household debt since the mid-1990s**

Since the early nineties the indebtedness of Dutch households has grown substantially from below 30% of GDP in 1991 to over 80% of GDP in 2005 (see left panel of next chart). Almost 90% of this debt is mortgage debt. Several factors explain the substantial increase in indebtedness.



Decreasing real interest rates as well as the interplay between surging house prices (which have tripled since the early nineties) and mortgage growth are important but do not tell the full story. A major role has been played by the Dutch fiscal regime that permits full tax deductibility of (most) mortgage interest payments at the marginal tax rate. The appearance of new mortgage products that take advantage of tax deductibility<sup>(1)</sup> stimulated the withdrawal of mortgage equity. Finally, the loosening of lending criteria, which has been attributed to stronger competition between mortgage providers, boosted the growth of mortgage debt in the late nineties. All these factors have led to an increase in the Loan-To-Value (LTV) ratio of first-time buyers on the housing market (see right panel of chart above). In recent years the Dutch government has taken some steps to reduce the generosity of the fiscal regime for mortgages.



Turning to the counterparts of household debt, rapid credit growth fuelled a surge in household spending in the late 1990s as shown by a marked decline of the savings ratio and sustained demand for residential construction (see left panel of chart above). However, given supply rigidities, the latter has tended to be reflected more in rising prices than in real activity. The period of buoyant spending was then followed by a period of consolidation. The savings ratio rebounded strongly in 2001, partly in response to falling stock prices, and the share of residential construction in GDP experienced a temporary decline in 2002-03.



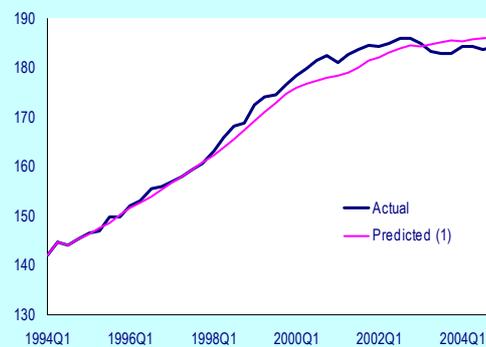
Regarding balance sheets, robust consumption and residential spending led to a marked deterioration of households' balance sheets in the late 1990s. Households' net financial surplus (i.e. the acquisition of financial assets minus the incurrence of financial liabilities) decreased steadily over the period, turning briefly negative in 2000. It recovered in the early 2000s although to a relatively low level (see right panel of previous chart). After a sharp increase in 2001-02, the ratio of households' debt to financial assets continued to increase in 2003-04 although at a slower pace.

## 2. Households' response to the recent period of slow growth

In recent years, the Netherlands have been an interesting case study of households' behaviour in the presence of a combination of high debt and weak economic growth. Since 2001, Dutch households have responded to deteriorating income and wealth conditions by reining in consumption and engaging in a relatively modest restructuring of their balance sheets while borrowing further but at a slower pace.

**Spending cuts.** The persistent weakness of consumption since the beginning of the decade is not necessarily evidence that spending has been constrained by excessive debt accumulation. It could indeed reflect a normal response by households to deteriorating economic growth conditions. In order to test this possibility, a standard consumption function (where debt plays no role) was estimated. Results suggest that Dutch consumption was stronger than expected on the basis of developments in wealth and income in the late 1990s, with a gap of more than 2% at the end of 2000. In contrast, it has been weaker than expected since 2001 with a maximum gap of above 1% at the end of 2003. Although these results must be interpreted with caution, they could be evidence that Dutch consumers have gone through a period of 'excessive optimism' in the late 1990s and a period of consolidation since then.

Private consumption in the Netherlands  
(Bn euro in 1995 prices – 1995Q1-2004Q4)



(1) As predicted by a consumption function relating consumption to disposable income, financial wealth, and housing wealth.

Source: NIESR, European Commission.

**Balance-sheet restructuring.** Dutch households have adjusted to weak growth conditions by raising their financial surplus and engaging in some balance sheet restructuring. These efforts, however, have remained relatively modest. On the one hand, households' net financial assets (i.e. financial assets minus borrowing) have increased again since 2003 and there are also indications that households have modified the composition of their financial wealth by accumulating more liquid assets. On the other hand, the financial vulnerability of some groups of households seems to have increased noticeably. For instance, estimates of the Dutch Central Bank suggest that a large share of homeowners in the lower income ranges would be left with mortgage in excess of their home value if house prices were to drop by 20%.<sup>(2)</sup> In addition, households seem to have been slow to lock in low interest rates. Debt is predominantly of a fixed rate nature in the Netherlands but households have first reacted to the decline in interest rates by opting for variable rates or rates fixed for a short term. Although the trend has been reversed since 2005, Dutch households seem relatively more exposed to fluctuations in interest rates than a few years ago.

Overall, the weak cyclical conditions prevailing since 2001 have not been sufficient to trigger a major debt consolidation in the Netherlands. However, high debt seems to have exerted some pressure on consumption in the past few years as households have corrected some spending overshooting of the late 1990s. Furthermore, the latest downturn was somewhat atypical as it was associated with historically-low real interest rates (which have eased the burden of the debt considerably) and steady growth in house prices (which has allowed to households to borrow against rising equity). The exposure of the economy to changes in interest rates and house prices has increased in recent years and high household debt could prove to be a more substantial drag on household spending in case of simultaneous negative shocks on interest rates and house prices.

<sup>(1)</sup> Debt is often not paid back until maturity but endowments are made on savings and investments accounts to pay back the debt. This is a major reason why Dutch debt ratios are higher than elsewhere.

<sup>(2)</sup> De Nederlandsche Bank (2005), 'Confidence, happiness and financial situation of households', Quarterly Bulletin, September, pp. 55-64.

price overvaluations in a few euro-area Member States.<sup>32</sup>

Finally, even a mere stabilisation of house prices at their prevailing high level could, in some countries, entail a significant downshift in economic growth as past gains in housing wealth wane. The experience of the Netherlands is revealing in this context (see Box 2).

## 5. Conclusion

A counterpart of the sustained rise in house prices within the euro area in recent years has been the accumulation of household debt, much of which has been secured against house purchases.

While the relevant indicators suggest that household indebtedness is not currently a major concern at the level of the euro area, the situation may be more worrying in some euro-area Member States where debt levels can be considered to be high and where rapid debt accumulation has been associated with weakened balance sheets, fast growth in household spending and soaring house prices. Moreover, the number of Member States in this situation could well expand if current trends were to persist. Highly-indebted households in these Member States are

vulnerable to a rise in interest rates which may imply a heavier-than-expected debt servicing burden, slower economic growth which may imply a lower-than-expected increase in disposable income, and a correction in house prices which may impact severely on their net financial wealth.

On the basis of the current outlook for economic growth and interest rates, none of these risks can be said to have a high probability in the short term. Nevertheless, the possibility of a less benign scenario is not negligible in light of persistent global financial imbalances and the extent to which house prices in some Member States have departed from historical norms. Furthermore, potential economic costs associated with these risks are likely to be high.

Such considerations are particularly relevant in the context of countries participating in a monetary union, where the possibility of overshooting the optimal debt level is increased by the pro-cyclical real interest rate channel which can itself be reinforced by developments in house prices. Furthermore, euro-area monetary policy will not be able to respond to the effects of expenditure retrenchment at the Member State level, unless such a retrenchment shows effects for the euro area as a whole.

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<sup>32</sup> OECD (2005), *ibid.*