

Recent trends in residential property prices in the euro area

This article reviews the recent dynamics of residential property prices (hereinafter referred to as “house prices”) in the euro area and discusses their possible determinants and likely effects on household consumption and lending for house purchases. Monitoring and understanding house price dynamics is important for monetary policy, both because the housing market can be an important channel in the monetary policy transmission mechanism and because house price fluctuations are potential sources of shocks to the economy. Unfortunately, the lack of reliable and harmonised house price information in the euro area makes such monitoring and explanation of house price dynamics difficult for the time being.

In the period since 1998, euro area house prices have risen faster than consumer prices (i.e. they have risen in “real terms”), but the upswing has been less pronounced than that in the late 1980s. The decline in interest rates for loans on house purchases and sustained income growth have been important factors contributing to this upswing. Demographics and a number of country-specific factors have also influenced house price dynamics. The impact of the recent real house price increase on private consumption is believed to have been relatively modest in the euro area as a whole, though in some euro area countries private consumption may have been more strongly influenced by house price developments. Gross household indebtedness has also risen, albeit from low levels, in part as a result of house price increases.

I Introduction

The buying or selling of a dwelling is typically the largest transaction a household enters into. Changes in house prices are therefore likely to influence substantially the budget plans and savings decisions of prospective house buyers and sellers as well as their location and labour supply decisions. House price fluctuations will also have an immediate and large impact on the wealth of owners of dwellings, given that residential property is often the largest asset in their portfolio. Further, to the extent that they influence market rents, house prices affect income distribution between tenants and landlords. They also affect construction activity.

The above suggests that house price fluctuations can potentially have an impact on economic activity and price stability by affecting aggregate demand and supply, income distribution and the borrowing decisions of households. However, it is difficult to monitor and explain house price

dynamics in the euro area because of the lack of reliable and harmonised house price information (see Box I on “Data sources and limitations”) and because housing markets are geographically segmented, which means that many of the factors affecting house prices are local.

While taking account of the data problems, Section II of this article reviews recent developments in house prices in the euro area. Section III examines some likely determinants of recent house price dynamics. The following two sections discuss potential channels through which house price fluctuations may influence the rest of the economy. The article focuses on two such channels that have recently received attention, i.e. the potential effects of house price fluctuations on aggregate consumption (Section IV) and on the financial position of households (Section V).

Box I

Data sources and limitations

Harmonised data for most of the series used in the article either do not exist or only exist for a short time period. Extensive use is therefore made of national non-harmonised data series, with the caveat that these series are in principle not comparable across countries. This box describes some of the existing limitations in the data.

Residential property prices

For most euro area countries data are available since the late 1970s or early 1980s. For Spain data are available since 1987, for Austria and Portugal since 1988 and for Greece since 1994. The euro area residential property price index is constructed as the weighted average of the changes in non-harmonised national house price indicators. In the absence of information on relevant transaction values, the euro area aggregates are compiled using GDP weights. Given that national series are non-harmonised, the index can only provide an approximate indication of house price developments in the euro area.

In particular, the collection and production of residential property price statistics are not covered by any EU legislation, and available data come from a variety of public and private sources (national statistical institutes, mortgage lenders, real estate agents, etc.). They differ in terms of their geographical coverage (e.g. main cities or country-wide), the coverage of the types of dwelling (e.g. new or existing, flats or single houses), and often cover only certain types of dwelling transactions (only mortgage-financed or transactions brokered by real estate agents). National house price series are corrected to varying degrees for changes in the size of the sampled dwellings and their location. Other corrections for differences in quality between transactions over time are rare.

The impact of these methodological differences on the reliability and comparability of the house price series is difficult to judge a priori. Differences in coverage may have a particularly important effect on the short-term dynamics of the series. For example, house prices based on samples of large cities are likely to be far more volatile than country-wide data. Changes in the composition of the basket may both introduce “noise” in the series (non-systematic errors) and affect the long-term house price trend. For example, a lack of adjustment for location may introduce a downward bias in a price index for new dwellings, as these tend to be further away from the urban centres as time progresses, whereas the lack of adjustment for quality improvements is likely to give the price series an upward bias.

Sources: Various national sources and ECB calculations.

Interest rates on loans to households for house purchases

Data available since December 1995.

Source: ECB.

Estimated cost of borrowing for house purchases

The euro area cost of borrowing is estimated as a weighted average of the national non-harmonised lending rates on loans for house purchases in index form. For reasons of comparability with euro area house prices, GDP weights are used. The non-harmonised lending rates on loans for house purchases are not strictly comparable across countries because they refer to different types of loan contract.

Sources: NCBs and ECB calculations.

Loans to households for house purchases by monetary and financial institutions (MFIs)

Data available since 1997.

Source: ECB.

Estimated lending for house purchases from all types of lender

For most euro area countries data are available since the early 1980s. For Ireland data are available since 1992, for Luxembourg since 1997 and for Austria since 1995. Depending on the country, the data used here refer to loans to finance house purchases and repairs or, alternatively, to loans secured by housing assets. The coverage may also vary. In some countries, housing loans refer only to loans granted by MFIs, while loans granted by all types of lender are included in other countries.

Sources: NCBs and ECB calculations.

2 Overview of house price dynamics in the euro area

House price inflation remained relatively high in the euro area in 2002. Early estimates suggest that house prices rose by 6.7% in 2002, approximately the same rate as for the previous year.¹ Deflated by the Harmonised Index of Consumer Prices (HICP), real house prices are estimated to have increased by close to 4.5% in 2002. This was the fourth consecutive year in which euro area real house prices rose by between 4.2% and 5.2% annually.

House price developments varied across the euro area countries (see Table I). Since 1998, Greece, Spain, Ireland and the Netherlands have experienced the highest average annual rises in real house prices, ranging between an estimated 7.6% and 10.9%. By 2002, real house price increases in Ireland and the Netherlands had decelerated, having previously peaked at rates close to or above 20%. Early estimates suggest, however, that Greece and Spain experienced double-digit real house price increases in 2002.

In Belgium, France, Italy, Luxembourg and Finland there was also an upswing in real house prices, but average annual growth rates are estimated to have remained at or below 6.5% in the last four years. (Data for Luxembourg extend only up to 2000.)

However, house price inflation in this group of countries showed some signs of acceleration in 2002.

Germany, Austria and Portugal are the only euro area countries in which nominal house price rises have remained close to or below consumer price inflation in recent years, but data for Austria only extends up to 1999. In the last four years real house prices remained relatively flat in Portugal and fell in Germany. The fall of real house prices in Germany is often attributed to an oversupply of new dwellings after the unification of Germany. However, longer periods of falling real house prices had already been observed in Germany in the 1980s.²

The steady rate of growth of euro area real house prices since 1998 differs from the house price dynamics observed during the last upswing in the euro area housing markets in the late 1980s (see Chart 1). In that

¹ See the box entitled "Residential property prices in the euro area" in the October 2002 issue of the ECB's Monthly Bulletin, pp. 25-26.

² It should be noted, however, that the negative long-term trend in real house prices in Germany is not confirmed by information from the Federal Statistical Office in Germany on either construction land prices or building costs. See the ECB's publication entitled "Structural factors in the EU housing markets", March 2003.

Table I

Real house prices in the euro area

(average annual growth in percentages)

	Euro area ¹⁾	Belgium ²⁾	Germany	Greece ²⁾	Spain	France ³⁾	Ireland ³⁾
1998-2002	4.5	3.6	-0.6	8.6	10.9	6.5	7.6
2002	4.3	5.1	-0.8	10.1	12.5	6.5	0.5
	Italy	Luxembourg ⁴⁾	Austria ⁵⁾	The Netherlands	Portugal	Finland	
1998-2002	5.4	5.1	-3.4	9.1	1.4	3.0	
2002	7.0	n.a.	n.a.	2.2	-2.5	5.5	

Sources: National sources, ECB estimates and calculations. See box on "Data sources and limitations".

1) ECB estimate for 2002 on the basis of national house price estimates for that year.

2) ECB estimate for 2002 on the basis of information for the first two quarters of the year.

3) ECB estimate for 2002 on the basis of information for the first three quarters of the year.

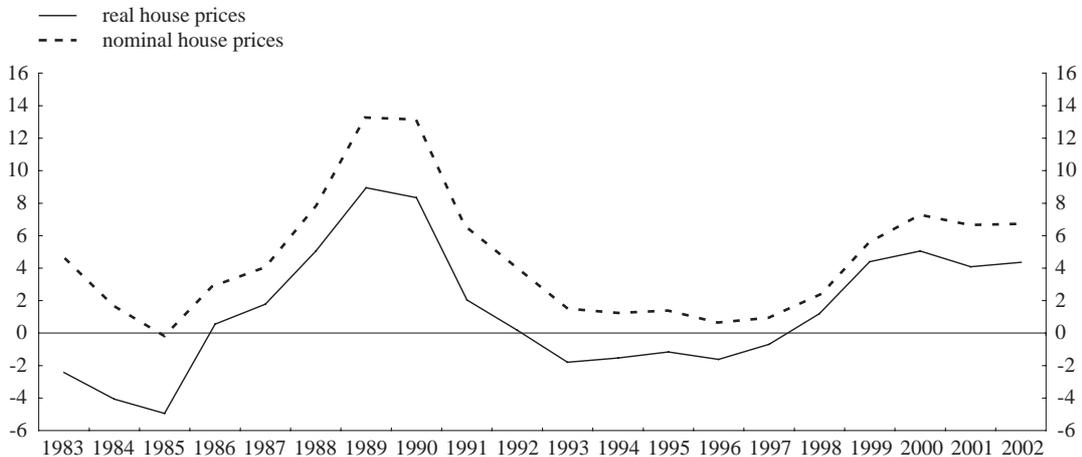
4) Data cover the period 1998-2000.

5) Data cover the period 1998-99.

Chart 1

Euro area nominal and real house prices

(annual growth rates in percentages)



Sources: National sources and ECB calculations. See box on "Data sources and limitations".

Notes: GDP-weighted average of annual percentage increase in nominal and real house prices. The coverage of euro area countries varies over time, depending on data availability. Real house prices are calculated as the ratio of the nominal house price index to the HICP.

upswing, real house price growth increased throughout the period from 1986 to 1989, reaching nearly 9% in 1989. A number of euro area countries experienced spells of double-digit growth in real house prices, and in Italy and Finland real house prices rose by more than 20% per annum at the peak of the cycle. The upswing ended abruptly in 1991

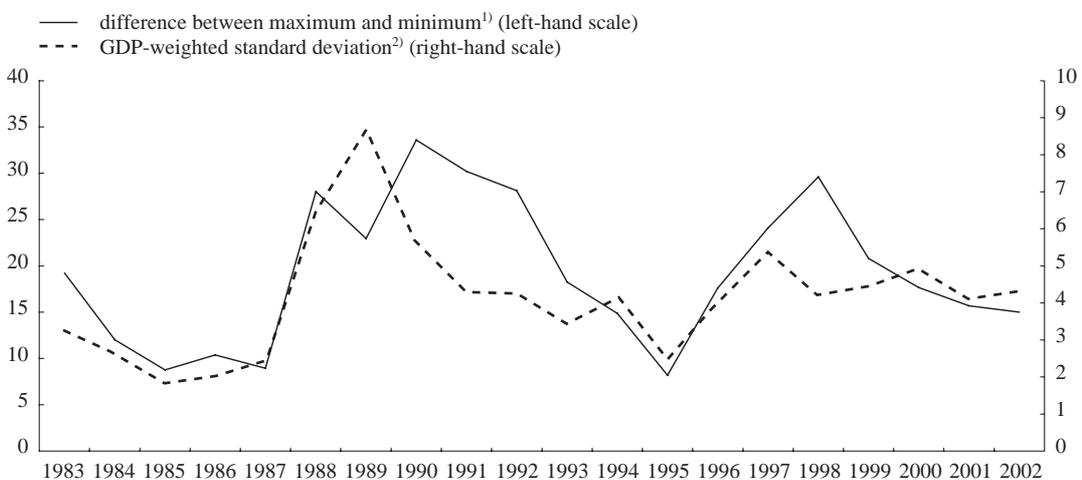
and was followed by a period of falling real house prices up to 1997.

The dispersion of real house price growth within the euro area has also remained relatively stable in recent years as compared with the upswing of the late 1980s. Chart 2 shows two dispersion indicators, the

Chart 2

Dispersion of real house price growth in the euro area

(in percentage points)



Sources: National sources and ECB calculations. See box on "Data sources and limitations".

1) Difference between the maximum and the minimum of real house price growth rates. The coverage of euro area countries varies over time, depending on data availability.

2) GDP-weighted average standard deviation of the annual percentage growth rates of real house prices. Greece, Luxembourg, Austria and Portugal are not included for reasons of data availability. For the same reason, Spain is also not included prior to 1988.

weighted standard deviation and the difference between the maximum and the minimum growth rates of real house prices. Both indicators show that growth rates of real house prices diverged across the euro

area during the upswing of the late 1980s. Compared with that period, the house price upswing in most euro area countries has tended to be more synchronised in recent years.

3 Determinants of house price dynamics

House price dynamics reflect changes in housing supply and demand. The demand for housing services depends on the number of households, expectations of future disposable income, interest rates on loans for house purchases (hereinafter referred to as “housing loans”), credit availability and a number of country-specific and local factors, including taxes and subsidies. Supply depends on the availability of land for construction purposes and on various factors affecting construction costs.

turn induce households to follow specific strategies and time their transactions according to their expectations of future house prices. Such strategies can feed back into and reinforce house price cycles.

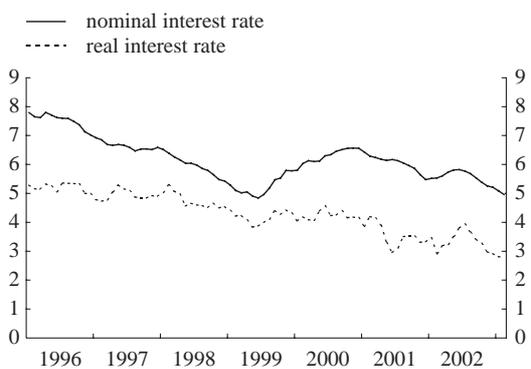
The fall in interest rates on housing loans, sustained rising disposable income and demographics explain at least part of the house price movements observed in the euro area in the last decade.

In the short run, it is difficult to adapt the supply of new dwellings to current market conditions. Thus even temporary changes, for example in taxes, may give rise to significant house price fluctuations. The longer it takes for the supply of new housing to react to changing market conditions, the larger the deviations of house prices from their long-term trend are likely to be. Furthermore, wide house price fluctuations give rise to large short-run capital gains or losses, which in

In the period from December 1995 (earliest date available) to January 2003 the average euro area interest rates on housing loans fell by close to 280 basis points. The corresponding real lending rate (after subtraction of HICP inflation) fell by around 250 basis points in the same period (see Chart 3).

Falling interest rates on housing loans combined with rising disposable income means that buying a dwelling is likely to have become more affordable for the average household in the euro area. The financial cost of buying a dwelling, as a ratio of nominal GDP (a proxy for nominal disposable income), is estimated to have decreased sharply since the early 1990s (see Chart 4).³ In 2002, the nominal house price-to-GDP ratio, a somewhat different indicator of housing affordability, stood below the level of the early 1990s, mainly as a result of this ratio having fallen considerably in Germany.

Chart 3
Euro area interest rates to households on loans for house purchase
(in percentages per annum)



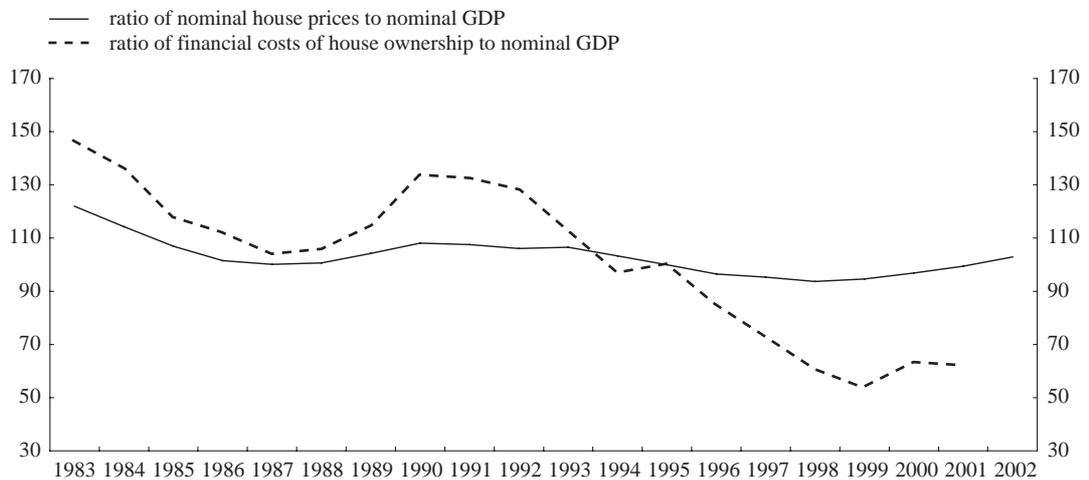
Source: ECB.
Note: Real interest rates are calculated as the interest rate charged minus HICP inflation.

3 Financial costs are estimated as the product of nominal house prices and a weighted average of euro area country-specific nominal interest rates on housing loans. See the box on “Data sources and limitations”. The same pattern of sharply falling financial costs as a ratio of GDP also emerges if the weighted average of real interest rates on housing loans is used instead. The indicators of affordability used here are only approximate measures of the dynamics of the cost of buying a house because they do not include factors such as taxes, subsidies and registration fees.

Chart 4

Indicators of the affordability of housing in the euro area

(index 1995=100)



Sources: National sources, European Commission and ECB calculations. See box on "Data sources and limitations".

Note: Financial costs of ownership are estimated as the product of nominal house prices with an indicator of weighted average euro area nominal borrowing costs.

Furthermore, financial liberalisation and the increased integration of the housing credit market with the rest of the financial system have created conditions for a rapid expansion in the range of mortgage products available. They have also raised competition in the mortgage market and are believed to have reduced quantitative rationing.

While the above factors have together boosted demand for housing, demographic pressures on the housing market have eased. The growth of

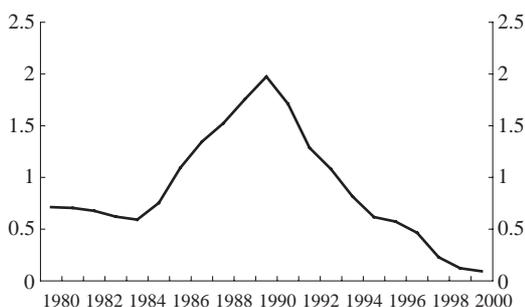
the population aged 25 to 44, a prime house buying population group, fell sharply in the 1990s, having peaked in 1991 (Chart 5). As a consequence, the growth in the number of euro area households has also fallen.

A number of country-specific and local factors, notably taxes, subsidies, planning rules and infrastructures affecting the supply of construction land, have also had an impact on house price fluctuations in certain regions of the euro area.⁴ Housing markets are geographically segmented and the forces of house price equalisation across different areas are weak. Thus, local demand or supply shocks can give rise to substantial local house price fluctuations, which are then also reflected in the area-wide house price index. For example, it is not uncommon for tight supply conditions in some large city areas to drive much of the house price dynamics, both locally and at the national level. The geographic distribution of the population and of economic activity in a country may also be a relevant factor affecting country-wide house price dynamics.

Chart 5

Growth of population aged 25-44 in the euro area

(annual growth rates in percentages)



Sources: Eurostat and ECB calculations.

Notes: Before 1991, figures include population aged 25-44 in the GDR. The data for 2000 do not include Greece.

⁴ For a detailed analysis of country-specific factors see the ECB's publication entitled "Structural factors in the EU housing markets", March 2003.

4 House prices and private consumption

House price fluctuations have attracted much attention lately because of their presumed effects on private consumption. Real house prices and private consumption have tended to vary in the same direction in the euro area, but the relation does not seem to have been either strong or very stable over time (Chart 6). Moreover, both are likely to be affected by a number of common factors, such as consumer expectations and real disposable income. Thus, any co-movement of house prices and private consumption does not necessarily imply a causal relation between the two.

The effect of house price fluctuations on consumption is in theory ambiguous. An increase in house prices will raise the wealth of owners of dwellings and may therefore induce them to consume more of their current income. A rise in house prices may also make mortgage-backed borrowing for consumption easier. Thus, house price rises are expected to have a positive wealth and credit effect on the consumption of homeowners.

At the same time, an increase in house prices will typically raise the cost of housing services

to households and, therefore, also have a negative (income) effect on consumption. When house prices increase, prospective first-time buyers need to save more in order to accumulate the necessary capital for a down-payment. Owner-occupiers also take into consideration that, if they were to sell their dwelling and realise the capital gains, they would then have to pay a higher price for a new house to live in.

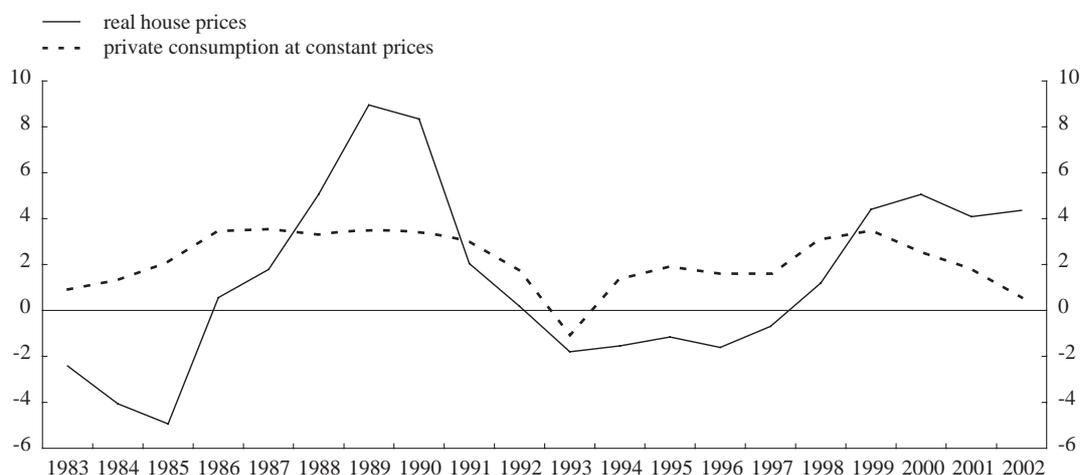
Additionally, house price fluctuations may affect market rents and, thus, the distribution of income between tenants and landlords. Depending on the propensity to consume of the two groups, rent changes can have an impact on consumption.

The above suggests that the effects of house price fluctuations on private consumption may well vary across countries and, within a country, over time. They will depend, among other things, on the source of house price fluctuations, households' house price expectations, the functioning of the credit system, the characteristics of owners of dwellings and on how widespread house ownership is.

Chart 6

House prices and private consumption in the euro area

(annual growth rates in percentages)



Sources: National sources, European Commission and ECB calculations. See the box on "Data sources and limitations".

Empirical research typically finds that, on aggregate, house prices have a positive effect on consumption in the euro area countries. There is also some evidence that these effects may have strengthened over time, but thus far these results are rather inconclusive. In particular, the estimates tend not to be statistically significant for a number of euro area countries, including Germany, France and Italy.⁵ On the basis of these empirical results, one would expect that the effects of the recent house price upswing on private consumption are likely to have been relatively modest for the euro area as a whole. Only in some countries have house price dynamics possibly had a more significant influence on consumption decisions.

One factor, in particular, that is likely to have affected the strength of the wealth and credit effects is the functioning of the house credit system. The wealth and credit effects on consumption are influenced by the ability of households to turn housing wealth gains into extra liquidity. Given that the great majority of transactions in the second-hand housing market are between households, the consolidated household sector cannot, in

general, realise its capital gains by selling its housing assets. Most transactions in the second-hand housing market and the ensuing transfer of money cancel out. Instead, the liquidity of the household sector can increase through the credit effect if it can borrow more against the increased value of its housing assets.

Rules and practices in the mortgage market are important in this respect. Households will be able to rapidly increase (or decrease) their mortgage borrowing following a change in house prices if they can do so without transacting in the housing market, e.g. without buying or selling dwellings. This type of direct “house equity withdrawal” (or “house equity injection”) is not a common practice in most euro area countries. However, so-called “house equity release” products have tended to become more common in some euro area countries, including the Netherlands and Finland.⁶ A more extended use by households of such mortgage market products in the future could allow them to tap their housing equity with minimum costs and thus strengthen the effects of housing market fluctuations on final consumption.

5 House prices and loans for house purchases

Residential property is the single most important asset in the portfolio of many households. Loans for purchases of housing assets, which are typically also secured on these same assets, represent about two-thirds of households’ total liabilities. Thus, house price fluctuations can have a significant impact on the net worth (i.e. the wealth minus the liabilities) and creditworthiness of households. House price fluctuations are believed to have played a role in past credit cycles by both facilitating extra borrowing during the house price booms and creating financial headwinds in times of house price declines, thus contributing to economic downturns and retarding economic recovery.⁷

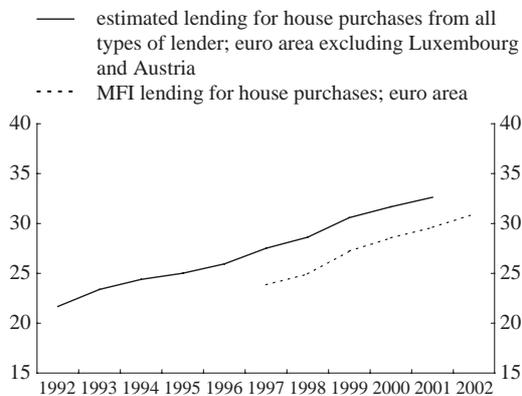
The above considerations have drawn attention to developments in housing loans and their

relation to house prices. In the euro area, the stock of housing loans (the “housing debt”) rose sharply in the period from 1991 onwards, albeit starting from relatively low levels. As a ratio of nominal GDP, nominal housing debt is

5 See, for example, Ludwig and Slok “The impact of changes in stock prices and house prices on consumption in OECD countries”, IMF Working paper 02/1, 2002; Boone, Girouard and Wanner “Financial market liberation, wealth and consumption”, OECD Working paper No. 308, 2001; Eschenbach and Schuknecht “Asset prices and fiscal balances”, ECB Working Paper No. 141, 2002.

6 See the ECB’s publication entitled “Structural factors in the EU housing markets”, March 2003.

7 In the case of highly indebted households with few assets other than their home, house price falls may result in negative net worth and geographical “lock-in” effects. The market value of their house will then be lower than the outstanding debt and selling their house will not be an option. Selling the house in order to move to other accommodation would require raising fresh capital and repaying at least part of the outstanding mortgage debt, which could prove very difficult, given the indebted households’ financial position.

Chart 7**Ratio of housing debt to GDP***(in percentages)*

Sources: ECB and NCBS. See box on "Data sources and limitations".

Notes: Lending for house purchases from all types of lender is an estimate based on non-harmonised national data. Luxembourg and Austria are excluded because of shorter time series. Lending to households for house purchases from MFIs does not include lending for house purchases from other types of lender, such as insurance companies.

estimated to have increased by about 12 percentage points since 1992 (Chart 7). Total household indebtedness also increased in the process. Recently, the nominal housing debt growth rate has fallen (see Box 2 entitled "Loans

to households for house purchases and total indebtedness of households").

High residential capital accumulation, improving income expectations, falling interest rates and favourable fiscal treatment of housing debt are all factors which are likely to have contributed to the housing debt accumulation. Rapidly rising house prices may have also contributed to this accumulation in some euro area countries, such as the Netherlands. As noted above, the higher collateral value of dwellings would have made it easier for households to take out new loans. These, in turn, may have fed back into more demand for housing as households attempted to "trade up" their houses, reinforcing the upward pressure on house prices.

Despite the recent increases in housing and total indebtedness in the euro area, households' housing and total debt levels are still deemed limited in relation to GDP (or disposable income) (Table 2). The interest service burden of households remained relatively stable in the 1990s and the consolidated household sector is a net lender

Table 2**MFI loans to households for house purchases in the euro area countries***(in percentages)*

Country	Belgium	Germany	Greece	Spain	France	Ireland
MFI loans to households for house purchases as a ratio of nominal GDP (end-2002)	24	44	15	35	22	35
Interest rate adjustment ¹⁾ (percentage of all new housing loans in 2001)	F (75) M (19) V (6)	Mainly M and F	F (5) M (15) V (80)	V (more than 75)	F/M/Other (86) V (14) ²⁾	V (70) The rest mainly M

Country	Italy	Luxembourg	Netherlands	Austria	Portugal	Finland
MFI loans to households for house purchases as a ratio of nominal GDP (end-2002)	10	32	62	15	50	22
Interest rate adjustment ¹⁾ (percentage of all new housing loans in 2001)	F (28)	V (90)	F (74) ³⁾ M (19) ³⁾ V (7) ³⁾		Mainly V	F (2) V (97) Other (1)

Sources: ECB and NCBS. See the ECB's publication entitled "Structural factors in the EU housing markets", March 2003.

1) Fixed (F): interest rate fixed for more than five years or until final maturity; Mixed (M): interest rate fixed for more than one year and up to five years; Variable (V): after one year, interest rate renegotiable or tied to market rates or adjustable at the discretion of the lender; (O): other.

2) V: interest rate tied to market rates only (other renegotiable interest rates not included). Flows of new mortgage loans granted by resident credit institutions in 2001.

3) Of existing stock of loans.

Box 2

Loans to households for house purchases and total indebtedness of households

Developments in loans to households for house purchases are the result of supply and demand factors interacting in the market, the relative importance of which is difficult to disentangle. The demand for this type of financing can be considered the result of housing demand and other factors (such as legal regulations, types of mortgage contract and repayment fees), as well as financial practices which can trigger the use of mortgage credit to finance current expenditure. At the same time, financial intermediaries who are the main providers of financing exert control over the availability of credit lines.

Loans to households for house purchases represent over 60% of total MFI loans to euro area households (see the table below). Over the late 1990s, total loans granted by MFIs to households showed an acceleration, reaching annual growth rates of above 11%, to a large extent attributable to developments in housing loans. Subsequently, after a moderate declining trend, the growth of both total and housing loans to households tended to stabilise in parallel with an increase in the relative importance of the latter (see chart below). In 2002, the annual growth rate of these loans stood at 7.6% in nominal terms and around 0.9% in real terms, using an estimate of house price growth for the euro area as a whole as a deflator.

MFI loans for house purchases in the euro area

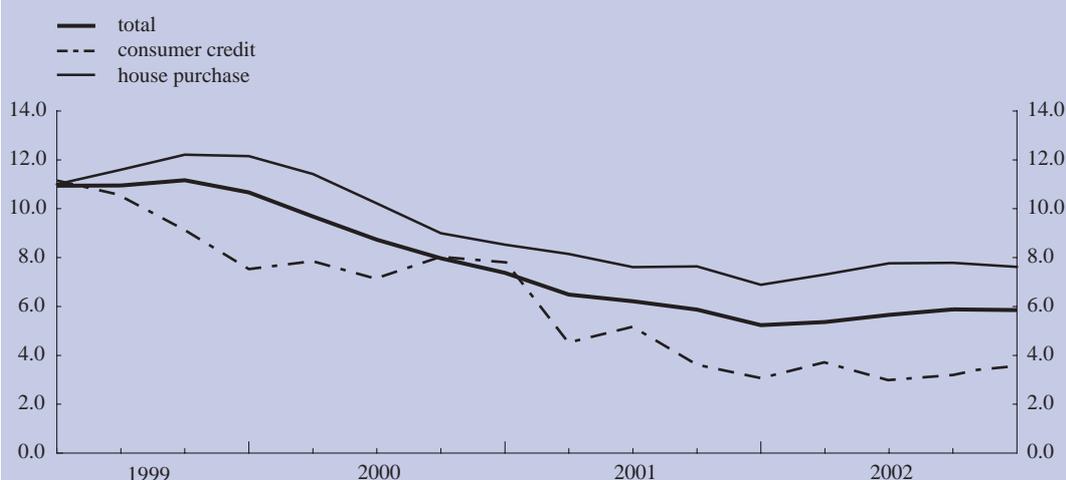
(in percentages)

	As a percentage of total loans to households	Annual growth
Dec. 1999	62.7	12.2
Dec. 2000	63.8	8.5
Dec. 2001	65.0	6.9
Dec. 2002	66.4	7.6

Source: ECB.

Growth of loans to euro area households by purpose

(annual growth rate in percentages; quarterly data)



Source: ECB.

Note: Total loans are the sum of those for house purchases, consumer credit and "other loans" (not shown in the chart).

Developments in loans to households for house purchases vary widely between countries (see also the ECB's publications entitled "Report on financial structures" (2002) and "Structural factors in the EU housing markets" (2003)). Although the dynamics of house prices help to explain the differences in the nominal

growth of these loans across countries, other country-specific factors, such as demographic issues, tax incentives, refinancing practices and housing equity releases, appear to play a role.

The increase in the indebtedness of euro area households due to housing loans has not involved a significant increase in the debt burden – interest payments on loans for house purchases as a percentage of disposable income of households – on account of the significant declines in interest rates, particularly in some euro area countries during the period prior to the introduction of the euro. Total interest payments by households – the major part of which results from loans for house purchases – represent around 5½% of disposable income of euro area households, a similar percentage to that observed at the beginning of the 1990s, according to preliminary estimates. While developments in loans for house purchases vary widely across euro area countries, over recent years, the dispersion of retail interest rates on loans for house purchases has been lower than that of interest rates on other types of loan. This notwithstanding, the cost of financing may vary across countries on account of the different fiscal treatment of mortgage indebtedness and the different fees for taking out a mortgage.

to other sectors and thus a net recipient of interest income.

Additionally, in a number of euro area countries a large share of housing debt is assumed at fixed interest rates for periods longer than five years (Table 2), thereby reducing the immediate risks to households

in the event of a rise in the interest rates on housing loans.⁸ At this stage, therefore, it would seem that the financial position of the household sector in the euro area is not a particular cause for concern, though in some countries highly-indebted households are likely to be exposed to risks from house price fluctuations.

6 Concluding remarks

Euro area house price inflation remained well above consumer price inflation in the last four years. The recent upswing in house prices has been less pronounced than that of the late 1980s. Income growth and the decline in interest rates on loans for house purchases have been important factors contributing to the recent upswing. The effects of the recent house price upswing on private consumption are likely to have been relatively modest for the euro area as a whole, though in certain countries house price dynamics may have had a more significant influence on consumption decisions. House price rises are likely to have

also contributed to rising household indebtedness in the euro area in gross terms.

House price fluctuations are the main nexus between the housing market and the rest of the economy. Close monitoring of house price movements and an understanding of their determinants is therefore warranted. In this respect, improved standards for collecting statistics on housing markets in the euro area countries are needed.

⁸ See the ECB's publication entitled "Report on financial structures", 2002.