Box 1

FEATURES OF MORTGAGE CONTRACTS IN THE EURO AREA

Due to the current low interest rate environment, the total debt service burden of euro area households (i.e. the ratio of the sum of interest payments on the debt and the reimbursement of the principal to disposable income) has remained relatively stable over recent years, despite continuously rising levels of household indebtedness. This notwithstanding, the rise in debt has made households more sensitive to changes in interest rates. In this respect, it is often reported that the low level of interest rates has increased the popularity of variable rate loans for house purchase in several countries, implying that households' interest payments are more sensitive to future moves in interest rates. Against this background, this box looks at features of mortgage contracts in the euro area in order to assess the sensitivity of outstanding household debt to changes in interest rate conditions.

The share of existing mortgage debt exposed to changes in prevailing interest rate conditions – a crucial determinant of the interest rate sensitivity of households' debt payments – depends on the structure of the underlying mortgage contract. In this regard, a key factor is whether the interest rate paid on mortgage borrowing is "fixed" for a long period of time or "variable". A fixed rate contract implies that the interest rate is set at the time the mortgage is taken out and does not change over the life of the mortgage. Such a contract insulates households from the impact of changes in interest rate conditions, since the schedule of interest payments is determined at the outset. By contrast, with a variable rate contract, changes in interest rate conditions over the life of the mortgage will have implications for the interest payments made by households. Other things being equal, a higher proportion of variable rate mortgages implies a greater sensitivity of household interest payments to changes in interest rate conditions. The degree of sensitivity rises with the frequency at which adjustments to the interest rate can be made over the life of the contract.

While conceptually the structure of mortgage borrowing can be characterised in a straightforward manner, in practice considerable care is required in interpreting the data because definitions and the structure of mortgage contracts vary considerably across countries.[1] While in some countries the term "variable rate" is applied only to contracts in which the interest rate paid adjusts almost instantaneously to changes in short-term money market rates, in others the term refers to any contract for which the relevant interest rate will change at least once over the maturity period of the loan, even if the interest rate is initially fixed for a long period.

The available information for the euro area does not permit a comprehensive picture of the structure of outstanding mortgage debt to be developed. Nonetheless, on the basis of the official data available, complemented by national sources and other evidence, estimates of the maturity and interest rate structure can be constructed. From this exercise, it is apparent that the category of loans with a maturity greater than ten years and an initial fixed rate period of ten years appears to be of particular importance at the euro area level, reflecting the existence of this type of contract in many countries and its prominence in Belgium, Germany, France and the Netherlands.

The available estimates for 2004 suggest that the share of mortgages where the interest rate is fixed for at least ten years is around 50% of the total outstanding mortgage debt in the euro area. By contrast, the share of mortgages which are exposed to a change in interest rates in the year ahead is estimated to be around one-third of the outstanding stock. However, it should be borne in mind that, due to the underlying caveats regarding the data, these euro area-wide estimates can only be considered as benchmark indicators and should be interpreted with caution.

With regard to variable rate lending, it is also useful to understand how interest rates on variable mortgage contracts are adjusted. In this regard, the contracted mortgage interest rates can take three main forms. First, there are *referenced rates*, i.e. rates which follow an official and contractually predetermined interest rate indicator, without any intervention by the lender

1 Features of mortgage contracts are generally linked to the national mortgage market structure (including factors such as the nature of the lending institution and the source of funding of the lending activity, the competitive conditions and marketing practices, and the share of subsidised loans), as well as to cultural habits and historical factors (e.g. whether there was low or high inflation in the past), regulations and fiscal issues. For a more detailed discussion, see the publication entitled "Structural factors in the EU housing markets", ECB, March 2003.

or the borrower. Second, there are *renegotiable rates* where the interest rate can be changed following bilateral negotiations between the lender and the borrower, with these negotiations taking place at predetermined points in time. Finally, there are *reviewable rates*, i.e. rates that can be changed on the initiative of the lender (for instance, in order to match the cost of funding).

It should also be mentioned that other, more qualitative, characteristics of mortgage contracts can play an important role in dampening the overall sensitivity of household debt to interest rates. For instance, variable rate contracts may include a *cap on the mortgage rate*, defining an upper limit for the variation of the rate, which could be 1, 2 or 5 percentage points above the initial rate. This option exists in Belgium, France and, to some extent, the Netherlands. Also, the existence of *an early repayment option with a low penalty* provides households with further flexibility to handle interest rate changes. Some variable rate contracts also permit *the size of monthly repayments and/or the duration of the loan to be modified* in order to smoothen out the effects of an interest rate increase. This option could be used by some households to build up a prepayment buffer, allowing them to be ahead of their mortgage payments if they perceive a low interest rate environment as being temporary.

Overall, this box shows that the sensitivity of household mortgage debt to interest rates cannot be gauged in a straightforward way, partly because the structure of mortgage contracts still varies widely across the euro area. Quantitative estimates are surrounded by considerable uncertainty and complementary qualitative information on the features of mortgage contracts needs to be taken into account in order to gain a broader picture of the exposure of mortgage debt to interest rate risk. This notwithstanding, the interest rate sensitivity of households in the euro area has probably risen over recent years. Households which have been tempted to finance mortgages under the currently low interest rate conditions at variable rates with low initial interest payments should be aware of the risks they bear in the event that interest rates were to rise to levels more in line with historical standards.[2]

2 See for instance D. Miles (2004), "The UK mortgage market: taking a longer-term view". This study underlines a certain myopia on the part of many UK households, mostly first-time buyers, borrowing at variable rates and behaving as if the interest rate prevailing at the beginning of the mortgage was to be fixed for the entire duration of the contract, regardless of the current position in the interest rate cycle.