## The UK Mortgage Market: Taking a Longer-Term View

**Final Report and Recommendations** 

David Miles March 2004

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Final Report and Recommendations

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#### LETTER TO THE CHANCELLOR OF THE EXCHEQUER

Imperial College London TANAKA BUSINESS SCHOOL

The Rt Hon Gordon Brown MP Chancellor of the Exchequer

Charcellor

A year ago you asked me to:

- undertake analysis of supply and demand side factors limiting the development of the fixed-rate mortgage market in the UK to establish why the share of fixed-rate mortgages is so low compared to the United States and many other EU countries;
- consult with key stakeholders to establish views and inform analysis;
- examine whether there has been any market failure that has held back the market for longer-term fixed-rate mortgages and consider associated opportunities, risks and potential costs; and
- deliver an interim report by autumn and a comprehensive report and recommendations by Budget 2004.

You received my Interim Report at the time of the Pre Budget Report in December of last year. I now attach my Final Report. In this Report I make recommendations that I believe will help make the UK mortgage market work better. There are good reasons to think that if the UK market did work better many more mortgages would be at rates that were fixed for periods longer than is currently common, and those reasons are spelled out early in this Report. More borrowers would then be insulated from the impact of unexpected changes in interest rates at times when the stock of their debt was large relative to their incomes and when the impact of changes in interest rates on the affordability of their mortgages is great. I believe that this would be a consequence of the market working better – a consequence of people better understanding the risk and cost characteristics of mortgages, of those mortgages being priced in a sustainable, transparent and fair way and of obstacles that might exist to the most efficient means of funding such mortgages being removed. Making the market work better is the goal; more longer-term fixed-rate lending would be, I believe, a likely consequence of that.

None of this should be taken to imply that the way the UK mortgage market operates is deeply flawed. I do not believe that this is so and in my Interim Report I described the strengths of the UK mortgage market. But I also outlined problems. I presented evidence in the Interim Report that:

• When choosing between mortgages a great many households attach enormous weight to the level of initial monthly repayments. Consideration of where short-term interest rates might move in the future, and of what this implies for affordability, seems to play a far smaller role than it would if households considered the likely overall costs of borrowing over the life of a loan. Average loan to income ratios on new borrowing have risen greatly in recent years; the dangers of more and more borrowers taking on debt that may be manageable at current interest rates, but where affordability could become a real problem should interest rates move up by even relatively modest amounts, are real.

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- The risk characteristics of mortgages are subtle and complex. Many households find it difficult to assess these risks and may not be much helped by the kind of information and advice they receive.
- The structure of mortgage pricing generates cross-subsidisation from many existing borrowers, a significant proportion of whom are paying standard variable rates (SVR), to new borrowers taking out discounted variable and short-term fixed-rate mortgages. This creates unfairness and makes the market less transparent than it could be. It plays to a tendency of many borrowers to focus on the initial monthly payments on a mortgage and it makes medium-term and longer-term fixed-rates appear expensive.
- Many lenders feel that they are severely constrained in the type of charges they can make for early repayment of fixed-rate mortgages; understanding of the nature of some types of charge amongst borrowers, and of the rationale for any charges, has not been high and as a result types of mortgage that might be suitable for many households are not offered.

There are also supply-side issues that could affect the ease with which some lenders are able to use certain types of funding. Some of the issues are particularly relevant for building societies (the so-called nature limits which place a ceiling on the use of wholesale funding) while others (for example uncertainty about the regulatory regime for covered bonds) will affect lenders in general. The capital treatment of different sorts of loans also mean that decisions that will need to be made by regulators will affect the pricing of different sorts of mortgages. The depth of markets in some forms of derivatives – swaps, swaptions and calls on underlying fixed income securities – is currently limited at the longer maturities that are relevant for the funding of longer-term fixed-rate mortgages. The recommendations in this Report address all of these issues.

The responses to the Interim Report, and the ongoing consultation I have undertaken since its appearance with a great many organisations and individuals, have informed the recommendations I present here (a list of those with whom I have had detailed discussions is given in Annex C). In the consultation process since the Interim Report I have received a great many suggestions on what changes need to be made in the UK – and a great many suggestions about why changes in certain areas are not needed. A great many lenders and other financial intermediaries have broadly agreed with the analysis of the market that I have summarised above. The most widely reported parts of the analysis in the Interim Report were about cross–subsidisation generated by the pricing structure adopted, often reluctantly, by many lenders. On this subject – as with the analysis in the Interim Report of the behaviour of many households and with the wide range of funding issues – people who work in the mortgage sector have not fundamentally taken issue with the analysis. The Building Society Association, for example, commented:

'Building societies are sympathetic to the concern expressed by Miles that it is possible that the market is trapped in a bad equilibrium...Building societies support the view that cross-subsidisation of the type described in the report is likely to be occurring (in many, but not all, lenders) and is undesirable.' (BSA submission to the Miles Review, January 2004)

And the Council of Mortgage Lenders commented:

'The fact is that many lenders are uncomfortable about the pricing strategies that the demand-led market in the UK has created, although views amongst the industry are mixed' (CML submission to the Miles Review, January 2004).

#### The structure of this Report

Section 1 of my Report sets out the aim and scope of the Review. Section 2 considers optimal mortgage choice. Section 3 summarises the potential macroeconomic implications of more long-term fixed-rate lending. The recommendations for how the market can be made to work better are then presented in the main body of this report, in Sections 4 to 7. **Recommendations are summarised in Section 8**. They cover a great many different topics. If acted upon, I believe these recommendations will:

- improve the information and advice households receive (Section 4);
- make the pricing of mortgages in the UK more transparent, fairer and sustainable (Section 5);
- remove some potential obstacles to the emergence of new types of contract to hedge interest rate risk (Section 6); and
- improve the ways in which fixed rate mortgages can be funded and the ways in which risks they generate can be hedged (Section 7).

The recommendations fall broadly into two groups: first, those that are aimed at improving the advice and information that borrowers receive and at creating a fairer and more transparent pricing structure (recommendations 1 to 10); second, those that are aimed at helping lenders fund mortgages and handle risk in the most cost-effective way (recommendations 11 to 20). Many of the recommendations in the first group reflect the current best practice of lenders and financial advisors. The second group of recommendations have the potential to reduce the cost to lenders of offering several different types of mortgage.

It has never been the purpose of this Review to make a series of recommendations with the aim of forcing or bribing households to take out long-term fixed-rate mortgages. It has been the aim to analyse how the market works, to assess whether there are parts of it that do not work as well as they might, and to make recommendations that will make the market work better. I believe that the recommendations I make in this report will help to do that and that this will be to the advantage of all borrowers. The benefits of greater understanding of risk and increased scope to deal with it are particularly great for new borrowers.

Households that want to become homeowners in the UK face difficulties – house prices have risen greatly relative to incomes over the past ten years, though nominal interest rates have fallen to, historically, low levels which has, in itself, boosted affordability. Some view with scepticism the idea that more long-term lending can help households – particularly younger households. They argue that the structure of lending and pricing of mortgages that we have in the UK – with little longer term fixed rate lending and a great many new borrowers taking out discounted variable rate mortgages – works to the benefit of borrowers.

It is important to be absolutely clear about what is, and what is not, problematic with the pattern of pricing we have in the UK. Mortgages whose initial monthly payments are lower than they later become are not undesirable. Far from it. In an environment where many people are credit constrained and where many hope - but cannot be sure - that their incomes will be higher in the future then there are advantages in having the profile of payments gently rise. But how the profile of payments can rise needs to be transparent. How such mortgages are made commercially viable should not rely on price discrimination and cross-subsidisation. And if those low initial payments can rise both as a result of a planned rise in the mortgage interest rate margin over market rates *and* because of a rise in the general level of market rates then the risks need to be well understood.

It is clear that these conditions do not generally exist now in the UK mortgage market.

It is also clear that fixed-rate mortgages are not inconsistent with a profile of repayments which starts at a lower level than it later becomes. It is profoundly mistaken to believe that the only way that new borrowers can have a profile of payments that matches their likely income is one that also exposes them to substantial interest rate risk. This is why the notion that any shift away from the type of lending that has been common in the past few years will be bad for new borrowers is mistaken. In fact the advantages of the insurance given by fixing the interest rate on borrowing for several years are likely to be greatest for those that borrow a great deal and for whom income risks are large – a group likely to contain a high proportion of first-time buyers. If borrowers were encouraged and helped to take a more forward-looking approach in deciding how much to borrow and which type of mortgage to choose this would also make monetary policy easier to operate. Monetary policy will be easier to manage if households make wellinformed decisions about mortgage products that are priced in a transparent and sustainable way and where the risks of different types of mortgage are well-understood. The risks of overindebtedness, the scale of problems of debt affordability triggered by interest rate rises, and the degree of excess volatility in the housing market will be reduced. Those problems have made monetary policy more difficult to operate. Reducing them is desirable, whether or not the UK adopts the euro.

In very many ways the UK mortgage market works well. It is a dynamic and innovative market. Competition is intense for new business; new products emerge at regular intervals. Because of this the market can change quickly; changes do not happen overnight but on many occasions in the recent past the market has evolved significantly in the space of a few years. I believe the recommendations I make in this report have the potential to change the UK mortgage market and make it work better. This will be to the benefit of borrowers, lenders, other financial intermediaries and the savers whose funds are intermediated through the market.

Acknowledgements: This Review has benefited enormously from discussions with lenders, regulators, financial advisors, central banks, investors, academics, investment banks and trade associations. All those consulted have been enormously generous in giving their time, sharing their knowledge of the mortgage market and providing detailed information and data on a huge range of issues. The discussions I have had with all those consulted have been completely open and I thank all those who have willingly shared information – much of which has been commercially sensitive.

The team which worked with me on the Interim Report have continued to play a major role in this Review. Ana Lasaosa, Andrew McKay and Adrian Richards have consistently worked with skill and dedication to tight deadlines. Tim Riddington made a major contribution since he joined my Review team after the Interim Report. I have been fortunate to work with such enthusiastic, determined and insightful colleagues. They have helped make the Review a rewarding experience and I am glad to have been given the opportunity to undertake it.

Anit K. M. Les

March 2004.

### Aim and scope of the Review

1.1 This Final Report makes recommendations on how the mortgage market in the UK can be helped to work better. It builds on the Interim Report that was published at the time of the Pre-Budget Report in December 2003. Reactions to that Interim Report and continuing consultation have had a significant impact on the recommendations made in this Final Report.

1.2 It has been the aim of this Review to analyse how the UK mortgage market functions and to assess whether parts of it do not work as well as they might, potentially to the detriment of households, lenders, other financial intermediaries and savers whose funds are channelled to borrowers. To understand the market one needs to analyse the mechanisms that link a borrower wanting to raise money to buy a house to a saver wanting to earn a return. These links are many are varied. They are illustrated in Figure 1.1



**1.3** The way in which this market has worked in the UK has generated a stock of mortgages where interest rates are either variable or, for the minority of mortgages where rates are fixed, typically become variable usually within a year or so. Chart 1.1 shows the type of mortgages in the UK at December 2003.



1.4 This Review did not presuppose that problems existed in the way the UK mortgage market works. Nor did it take as its goal that it should make recommendations with the aim that the vast majority of households in the UK should borrow with mortgages where the interest rates are fixed for 25 years. There are two reasons why that would not have been appropriate. First, longer-term fixed-rate mortgages do not just include debt contracts where the fixed period coincides with the period over which the loan is repaid (which is often 25 years or 30 years). Second, and more fundamentally, the fact that few people take out longer-term fixed rate mortgages now does not in itself show there is a problem. If informed consumers made choices based on a good understanding of the characteristics of a wide range of products which are transparently priced and funded efficiently there would be few reasons to worry about the outcomes.

**1.5** But there is strong evidence that there are problems in the UK market and these generate obstacles to the emergence of forms of lending that could benefit all.

- 1.6 There is clear evidence that:
  - A great many households particularly amongst first-time buyers attach overwhelming weight to the initial monthly repayment on mortgages. They focus much less on where the burden of debt repayments might be some way ahead, even though mortgage debt is long-lived. And where debt is at variable rates there is great uncertainty about how affordability will evolve.
  - Many borrowers have a poor understanding of the risks involved with different mortgages. The risk issues are subtle and complex, so it is no easy task to assess them. Since mortgage debt is long-term the risks come from unexpected movements in incomes, in interest rates and in house prices over an extended period – a period that most definitely extends beyond a year or so ahead. The information people receive on mortgage products often does not help them greatly in assessing whether the risks they are taking are really acceptable to them.

- Many short-term fixed and discounted variable-rate mortgage deals are crosssubsidised by other variable-rate mortgages paying much higher interest rates. Cross subsidisation from established borrowers, for example those paying standard variable rates that could be as much as 200 basis points above the lowest rates, is intrinsically undesirable and unfair. The pricing structure it supports plays to a tendency for many borrowers to focus on the lowest initial monthly payments. It also makes medium and longer-term fixed-rate deals that have a flat pricing structure, with level payments over the period for which rates are fixed, look expensive.
- There are also a number of detailed funding issues which while unlikely yet to have held back a deeper market in longer-term fixed-rate mortgages could do so if the demand for such products were to rise. These include difficulties in hedging prepayment risk, limits on the use of wholesale funds by building societies and issues related to capital requirements on lenders.

1.7 The recommendations in this Report aim to make these problems less significant. If these problems were reduced the market will work better. As a result of the market working better there are strong reasons to believe that more longer-term fixed-rate borrowing would emerge. More fixed rate borrowing is not an end in itself. It will – however – be a consequence of the market working better. Making the market work better is the real aim.

**1.8** What do we mean by making the market work better and why should one expect that if the market did work better more lending would be at rates which are fixed for a significant period? To gauge that we need to consider what an ideal market would look like. In such a market:

- there would be a range of mortgage products, with various risk/return characteristics and various profiles of repayment;
- borrowers would understand the overall characteristics of various mortgage products and make decisions in an informed, forward-looking way. Borrowers would not just focus on "the best deal" by looking at one characteristic of a mortgage (for example the initial monthly payment) and without looking at costs and risks in the future;
- products would be funded efficiently and risk parcelled out (or removed) in a way that makes the cost minimal while generating acceptable returns for providers of financing and those that accept risk; and
- costs of intermediation would be minimized there would be no unnecessary switching of mortgages, which generates costs, if there are better ways to achieve the same ends.

The UK market has some of these characteristics but it does not have them all. Why 1.9 should one believe that if the market worked like this we would see substantially more borrowing with rates fixed for a substantial period – and for more than the two to five years that is common with most fixed-rate mortgages currently sold in the UK?1 One possible answer is that in many developed countries where there are a range of products with different degrees of fixity of the mortgage rate on offer a very substantial proportion of people take out longer-term fixed-rate mortgages. But this is not really a convincing argument, since there could be national differences that account for this and in some countries government subsidies may have favoured such products. (Nonetheless it does prompt a set of questions about whether the volatility of short-term interest rates in those countries is higher than in the UK and about whether borrowers there are more averse to taking risk - neither of which seems very plausible). A much more convincing way to answer the question is to set up an idealised experiment - one in which households have perfect knowledge of products and of the risks they face and where people make informed, forwardlooking decisions. If in such a world it seems likely that longer-term fixed-rate mortgages simply are not desirable for the great majority of households then one would not expect that much more long term lending would be done even if the UK market were to work better. But if it appears likely that many informed, forward-looking households choosing between products priced in a transparent and sustainable way would favour longer-term fixed-rate mortgages then it follows that a move towards that kind of market - which would surely be desirable in itself - would bring with it more longer-term fixed-rate mortgages.

1.10 Section 2 of this Report begins with an analysis of how decisions might be made by borrowers in an ideal world of perfect understanding and efficient pricing. It extends the brief discussion in the Interim Report of results based on a model of what optimal choices made by informed, but risk averse, households would be. The main message of this section is that one can expect a significant proportion of borrowers to find longer-term fixed rate mortgages attractive if the market works with transparent pricing and well-informed households. Section 3 then considers what the macroeconomic impacts of there being more long-term fixed rate mortgages would be.

<sup>&</sup>lt;sup>1</sup> As was stressed in the Interim Report there is a continuum of mortgages in terms of the degree of fixity of repayments. Mortgages where the rate is fixed for two or three years expose borrowers to risks that rates will have moved by the time the fixed-rate period ends and at that point the outstanding balance on the mortgage will be little changed from the original loan so that the exposure to rate rises is great. For that reason we do not think of a two or three year fixed-rate mortgage as a longer-term fixed-rate mortgage. But with a ten year fixed rate on a 25 year repayment mortgage the balance outstanding at the end of the fixed period is likely to be very much smaller relative to the borrower's income, and relative to the value of a home, and so the risk characteristics are very different. For that reason we consider a ten-year fixed-rate mortgage to be a long-term fix. If rates were fixed for longer than ten years the outstanding balance at the end of the fixed period – relative to incomes and house values – is likely to be lower again than at the end of ten years.

1.11 The analysis in Section 2 suggests that decisions made by households in the UK - in the light of the range of products offered, the information they receive on such products, and the prices of those products - are different from what we might expect if the market worked in an ideal way. This reflects a wide range of factors that we consider in the main part of the Report, where we make recommendations on how the market can be made to work better. That analysis begins in Section 4 by focusing on the information and advice households receive when they make decisions on mortgages and their understanding of products on offer. Improving information, advice and understanding is central to making the market work better. When households do not have a good understanding of the characteristics of products – in terms of cost and risk – then everyone loses. Households themselves lose out. Lenders, other financial intermediaries and advisors also lose out because poor understanding of products generates risks of mis-selling. A compensation culture with profound long-term costs for everyone can thrive in an environment where customers have a limited understanding of risk issues.

1.12 How mortgages are priced clearly has a major impact on the types of debt people use. The structure of pricing reflects the costs of funds and how risks to providers of mortgages can be handled; it also reflects the incentives that lenders have to structure the terms of different types of mortgages to reflect the behaviour of new and existing borrowers. There are reasons to believe that in this area there are problems in the UK. In Section 5 the structure of pricing of mortgages and problems with it are analysed. Recommendations are presented which will help make pricing more transparent, fairer and sustainable.

1.13 In Section 6 the potential for new sorts of product that help households handle risks are described and some obstacles to their being sold are considered.

1.14 The funding issues are addressed in Section 7. The way in which mortgages are funded and risks hedged plays a major role in determining the pricing and attractiveness of products. There are issues with how covered bonds might be used in the UK, how redemption charges can be structured, how early repayment risked hedged and how derivatives can be used to that end. There are also issues specific to building societies. Recommendations are made in all these areas. The potential for the Government to affect some of the funding issues through the design of its own funding strategies is also considered.

1.15 Section 8 summarises all the recommendations.

**1.16** Annex A is an outline of how people might be provided with information to better help understand risk and cost issues with different types of mortgage. Annex B presents a statistical analysis of interest rate variability in the UK since 1950. Annex C is a list of those consulted over the course of this Review.

2.1 The question of which types of mortgage are suited to people's needs is central to any analysis of the market. This section considers what types of mortgage might be chosen by different types of borrower in an idealised world where prices and risk characteristics of different mortgages are well understood and where pricing is transparent and sustainable. It analyses the types of mortgage well-informed, forward-looking borrowers might chose if faced with a simple choice between a mortgage consisting of a series of short-term fixed periods and a mortgage with a permanently fixed rate. This is an extreme experiment in two senses. First, because it assumes a huge degree of knowledge and calculating ability on the part of households, far beyond what exists in any market. Second, because only two sorts of mortgage are available. In practice a much wider range of mortgages is available in the UK – and that is a source of great benefit; but it is still useful to assess which types of borrower might, in a well functioning market, find the advantages of being towards one end of a spectrum of contracts with varying degrees of certainty over the nominal repayment profile attractive.

2.2 An important recent paper by John Campbell and Joao Cocco (2003), discussed in Section 2 of the Interim Report, provides the framework for assessing that choice. In that model it is assumed that households own a home and they need to decide which type of debt to hold against the collateral of their house. They care about the level of consumption they can achieve today and into the future. Consumption has to be financed from current income and past savings and after any payments on a mortgage are made. Households may have the scope to switch mortgage and also to borrow more if the value of their house exceeds the outstanding mortgage. However, they cannot switch between the two types of loans analysed here. There is uncertainty about future incomes, the level of future interest rates and the future values of houses. People are assumed to discount the future to some extent and attach more value to consumption today than to consumption some years ahead. But households are also risk averse so that, other things equal, they prefer a more certain stream of consumption to a less certain one.

2.3 This section begins by describing the results of using a version of this model of household choice that is calibrated to economic conditions in the UK.<sup>1</sup> It then considers why the proportion of households that take out longer-term fixed-rate mortgages in the UK is, in the light of those results, lower than may be expected.

2.4 The central question addressed here is whether few or many would choose a long-term fixed-rate mortgage in an idealised world with perfect understanding about the types of risk people face, where people are forward-looking and where the relevant economic environment is similar to recent UK experience. If it turns out that in this idealised world a significant proportion of borrowers look like they might be better off with a permanently fixed-rate mortgage, then this suggests that if conditions in the UK market were to move towards the ideal there would be more longer-term fixed-rate borrowing. The next subsections describe the structure of the model. The description of the results begins at paragraph 2.17.

<sup>&</sup>lt;sup>1</sup> Economists at the Bank of England have done much of the work in calibrating and running this model.

#### THE MODEL OF OPTIMAL MORTGAGE CHOICE

#### What borrowers know in this model

2.5 It is assumed that households make decisions by taking into account the levels of consumption they might expect to afford over their whole life cycle. They make estimates of future incomes and take into account the uncertainty both about those incomes and about future interest rates. House prices are also volatile and uncertain. Borrowers are aware of the degree of volatility in all these factors. Households do not know what the future will be like – it is intrinsically uncertain – but they are aware of the type and degree of that uncertainty, and of how uncertainties about inflation, interest rates, house values and future incomes interact with one another.

2.6 Ideally, households would assess all these sources of uncertainty in making their mortgage choices because how inflation and interest-rates evolve can have very significant effects on the profile of real mortgage payments. The Interim Report presented several scenarios illustrating this point.

2.7 Borrowers in this model are assumed to be risk averse, and therefore dislike volatility in their payment schedule. But if removing volatility of mortgage repayments is too expensive, households would prefer to accept the risks. An assumption is made in the simulations reported here that households are averse to taking risks but not overwhelmingly so.<sup>2</sup> There are several relevant risks.

- Inflation volatility creates real capital risk; borrowers do not know what the real cost of mortgage repayments will be even if the nominal value of payments can be known when a permanently fixed-rate mortgage is taken. If inflation is uncertain, the real interest rate on a fixed nominal rate mortgage will be uncertain as well.
- Volatile nominal interest rates make the profile of payments on a series of shortterm fixed-rate mortgages volatile. Since nominal rates are approximately equal to the real interest rate plus inflation, the volatility can be due to either component. Other things equal, the more uncertain real rates are, the bigger the relative appeal of longer-term fixed-rate mortgages.

2.8 It is assumed that long-term fixed-rate mortgages are, on average, more expensive than shorter-term – more variable – mortgages. What this implies is that the interest rate on a longer-term fixed-rate mortgage is, *usually*, above the average of the short-term rates that a household will pay on a more variable mortgage over its life (assumed to be 30 years). But of course the degree of uncertainty over the nominal rate is lower with the longer-term fixed rate. (In fact since we focus here on the extreme case where the fixed rate is set for the whole life of the mortgage the uncertainty over the nominal rate is zero). Borrowers realise that the yield curve, on average, slopes upwards. The choice of optimal mortgage is sensitive to this slope.

<sup>&</sup>lt;sup>2</sup>The coefficient of relative risk aversion (CRRA) is set equal to three. It may be helpful to put this into perspective. Someone with a coefficient of risk aversion of three and for whom income is the only means of financing consumption would be roughly indifferent between accepting a certain income of £30,000 a year and an income that could be £24,000 with probability one half and £44,000 with probability one half. Someone more risk averse would prefer the certainty of a constant £30,000 income. With a CRRA of three someone judges that the certainty of an income of £30,000 a year is worth about the same as a risky income which on average is £34,000 but with equal probability will be £10,000 less or £10,000 more than that.

- 2.9 It is assumed that household income evolves in a way that depends on several factors:
  - how the earnings profile changes with age;
  - the scale of permanent income shocks (unexpected events that are not reversed, such as a one-off pay rise that stays); *and*
  - transitory income shocks (random events that do not have any impact on the earnings in subsequent periods, such as a one-off bonus).

2.10 Borrowers know the average real growth rate of house prices and the volatility of the growth rate. The model assumes a fixed house size. In other words, households choose a house first and then take account of all the features of mortgages on offer, and of all sources of uncertainty, in choosing the right mortgage.

#### B) The mortgages on offer

2.11 In this stylised model, borrowers have available only two types of mortgage to choose from. One is a 30-year fixed-rate mortgage. Households can refinance this mortgage early, but this is not costless. The cost of refinancing is a fixed percentage of the original loan, which is known. This pre-payment option is paid for partly in the form of a higher spread of the long-term fixed rate over the expected average shorter-term interest rate over the life of the mortgage. But if a household does re-mortgage it also pays a cost of around one per cent of the original balance. The second type of mortgage is a succession of two-year fixed-rate contracts with no possibility to refinance during the period of the fixed rate. In the US this type of mortgage would be called an adjustable-rate mortgage (ARM). Every two years the rate is fixed to the then prevailing level of short-term (that is, two-year) interest rates. There are no limits to how much rates can vary from one fixed-rate period to the next.

2.12 The model compares a product that is not common in the UK – a 30-year fixed-rate mortgage – with a product that is – the two-year fixed-rate mortgage. It does not include the most popular mortgage in the UK: a completely variable mortgage whose rate can change at any time. The two-year adjustable–rate mortgage gives the greatest degree of variability that keeps the computational algorithm solving the optimisation problem manageable. (Even changing the number of possible interest rate changes from 15 to 30, equivalent to a succession of one-year fixed-rate mortgages, increases the calculation time exponentially). This is very much a stylised and simplified model of choice where the longer-term fixed-rate product on offer is a very long-term fix. It is obvious that in practice there are a range of products with different degrees of fixity available to households – and that with a wider choice the majority of informed households would probably not chose mortgages at one end of the spectrum in terms of the horizon over which the interest rate is fixed. This stylised model is really meant to shed light on whether one might expect many households – and which type - to favour a long-term fix if the choice was fairly stark and simple.

#### C) Assumptions about the preferences of borrowers

2.13 The model assumes that consumption of all goods yields utility to borrowers, as does the final wealth at the end of the 30-year comparison period. People discount the future to some extent and prefer things in the near future relative to the long-term future. Borrowers choose the mortgage that yields the highest average expected utility.

#### Box 2.1: Model parameters

Real interest rates are assumed to be variable and serially uncorrelated. They vary around a mean of 3.4 per cent with a normally distributed white noise shock with zero mean and standard deviation of 1.29 per cent. The inflation rate follows an autoregressive AR(1) process with a coefficient of 0.75. The mean of the inflation rate is assumed to be 2.5 per cent with a standard deviation of 0.83 per cent.

When the model assumes that there is correlation between inflation and real interest rates, it sets the correlation coefficient at 0.6 when the transitory income and the real interest rate are correlated, the correlation coefficient is -0.06. House prices grow by 5.1 per cent every year with a standard deviation of 12.5 per cent.

Earnings follow a typical time profile that at the start increases quickly with age, then the increase slows down and it decreases in the final years. The following chart depicts this typical income profile as a percentage of the maximum yearly income (achieved in year 23). Once could think of time 1 corresponding to about age 30 so income typically peaks in the early 50s.



On top of this profile, households have two types of income shocks: permanent income shocks with a mean of zero and a standard deviation of 0.05 and transitory shocks with a standard deviation of either 0.11 or 0.14. Income is taxed at a rate of 30 per cent.

Households are assumed to have a relative risk aversion parameter of three and a discount rate of 0.02 a year. The cost of refinancing a fixed-rate mortgage is one per cent of the original loan. Three different loan-to-income ratios are used: 2.25, 3 and 3.75.

Mortgages consisting of a series of two-year fixed rates are assumed to be priced at a spread of 100 basis points over the short-term rate, while permanently fixed-rate mortgages are priced 130 basis points over the average of expected future rates. In a variation of the model, the difference in the spread between the two mortgages is reduced from 30 to 15 basis points.

#### Model results

2.14 The model allows us to work out which mortgage people facing different types of risk and borrowing alternative amounts would choose. By changing some features of the model, one can assess how the different factors affect the choice of type of mortgage. It is possible to allow for various correlations between transitory income and real interest rates, and different correlations between inflation and interest rates. The value of risk aversion, of loan-to-income ratios, of the average extra cost of fixed-rate mortgages and of income risks can all be varied. Box 2.1 describes the values of the parameters in some of the different cases analysed.

2.15 The choice of mortgage turns out to be sensitive to assumptions made about how much people borrow and what the correlations between different sources of uncertainty are. The main results that emerge from using the model are:

- when there is a significant positive correlation between inflation shocks and real interest rates then households would prefer the very long-term fixed-rate mortgage at any loan-to-income ratio above about three, and the fixed-rate mortgage results in a very substantial gain for those with ratios much above 3.75. We believe this positive correlation of inflation shocks and real interest rates is the most relevant case. It is plausible in an environment where the central bank uses the short-term rate to bring inflation back towards a target level by raising interest rates when inflation is above target. Both the Bank of England and the European Central Bank use an inflation target.
- in other specifications, where the income risks are less extreme and where inflation
  and real interest rates are not positively correlated, mortgages with a series of short
  fixed-rate periods are (marginally) more favourable contracts for those who borrow
  up to about 3.75 times their income. However, this result is very sensitive to the
  cost of a permanently fixed-rate mortgage over one with a succession of two-year
  fixed-rate periods. When the average cost difference is assumed to go down from
  30 to 15 basis points, households with loan-to-income ratios slightly above three
  would prefer permanently fixed-rate mortgages to a succession of two-year fixedrate mortgages in all cases.
- somebody with an age-earning profile that grew more slowly at the beginning of their career, and dipped less from its peak when they reached middle age, would tend to find the fixed-rate mortgage relatively more attractive.
- when households have a substantial risk of unemployment or of a big fall in income a long-term fixed-rate mortgage looks preferable.<sup>3</sup>
- the long-term fixed-rate contract becomes more attractive as people start to borrow a lot. In almost all cases it is preferable at a loan-to-income ratio of 3.75 or above, though in the most relevant scenarios the long-term fix becomes more attractive at lower loan-to-income ratios.

<sup>&</sup>lt;sup>3</sup>The model is used to generate a high unemployment risk by making the transitory income shock component take three values: +1 standard deviation with a probability of 0.5 each year, -1 standard deviation with a probability of 0.47 and -2 standard deviations (unemployment) with a probability of 0.03.

2.16 In brief, results show that a significant proportion of households – though probably not a majority – might be expected to find that the advantages of very long-term fixed-rate mortgages make them attractive. This fraction would be a majority if, on average over the interest rate cycle, long-term mortgages cost substantially less than 30 basis points above the average cost of a variable-rate mortgage or very short-term fixed-rate mortgages. Note that this spread of long-term fixed-rate mortgages over a series of two-year fixed-rate mortgages is *on average over the interest rate cycle*.

2.17 The comparison being made in the Campbell and Cocco work, and the version of it applied to the UK that we have described here, is not between a fully variable-rate mortgage, (for example a standard variable-rate mortgage in the UK or a tracker mortgage) and a long-term fixed-rate mortgage. Rather it is between a mortgage where the interest rate is fixed for two years and one where the rate is fixed for the full maturity of the loan. In those cases where between these two contracts, the longer-term fixed-rate mortgage is preferable to the shorter-term fixed-rate mortgage it would almost certainly be even more favourable when assessed against a fully variable mortgage. And if a 25 or 30 year fixed-rate mortgage is preferable to a two-year fixed it is highly likely that a ten-year fix is preferable to a fully variable-rate mortgage.

2.18 All of this suggests that mortgages with interest rates fixed for substantially longer than five years might be expected to be attractive to a substantial proportion of households that make decisions in an informed, forward-looking way and where the prices of mortgages are transparent and sustainable. First-time buyers – whose loan-to-income ratios are high and whose future income is often very uncertain – would be expected to value the risk reduction of fixing the interest rate for several years. Chart 1.1 showed that around one quarter of the stock of mortgages has fixed rates. But the great majority of these mortgages have rates fixed for only two or three years, with most of the remainder fixed for no more than five years. Chart 2.1 shows the proportion of all new mortgages taken over the past two years at fixed rates and the proportion at rates fixed for longer than five years. The proportion of new mortgage lending fixed for longer than five years has not reached five per cent in recent times. It has averaged about two per cent.



#### WHY IS THE TAKE-UP OF LONGER-TERM FIXED-RATE MORTGAGES SO LOW? THREE POSSIBLE ANSWERS

2.19 The results reported above suggest that households that borrow less than three times their income are unlikely to find the advantages of a very long fixed-rate mortgage compelling. So one reason why the take-up of longer-term fixed-rate mortgages in the UK is so low might be that few households borrow more than three times their income and very few borrow more than 3.5 times their income. But in fact the proportion of households that borrow more than three times their income is high and rising. Chart 2.2, reproduced from the Bank of England Financial Stability Review of December 2003, shows the proportion of first-time buyers with loan-to-income ratios in excess of three in the whole of the UK, in Greater London and in the South East. By the middle of 2003 close to 60 per cent of first time buyers in London and the South East borrowed more than 3 times their income. For the UK as a whole about 45 per cent of first-time buyers borrowed more than three times their annual income. These proportions have increased from just over 10 per cent in 1993; they are over double the levels seen at the peak of the house price and lending boom at the end of the 1980s. Amongst former owner occupiers the proportion of new mortgage loans that are three or more times their annual income is only slightly lower than amongst first time buyers. That ratio has also increased sharply in recent years.



2.20 A second potential explanation of the low take-up of longer-term fixed-rate mortgages in the UK is that *people are aware of the risks of interest rate rises with variable-rate debt but plan accordingly and have the ability to deal with increases.* For such people the insurance element of a fixed-rate mortgage would have few attractions, especially if it came at the cost of a slightly higher average cost of borrowing. 2.21 Results from a large-scale survey commissioned by the Financial Services Authority and undertaken as part of the National Statistics Omnibus Survey suggest this is not a very convincing explanation (FSA, 2004). A large sample of households was asked how they would cope with a rise in interest rates of one per cent, two and a half per cent and five per cent (from the base rate level of September 2003 of three and a half per cent - since when base rates have already risen 50 basis points). The FSA found that:

'The one per cent rise has little impact on the proportion of people who said they would fall behind with at least one of their borrowing commitments, but significantly more people would begin to struggle. An estimated one million more families reported a significant deterioration in their position as a consequence.

With a two and a half per cent increase in interest rates, less than half of people with a mortgage said they would be able to cope with all of their borrowing commitments without any difficulty, and nearly one in ten said they would fall behind with at least one commitment.

A family is considered to be over-indebted if it spends more than one half of its gross income on all debt-servicing costs including a mortgage. In the survey, this covered approximately 1.8 million families. Three fifths of these over indebted families have some difficulty with making these payments at present (that is, September 2003). With a one per cent rise in interest rates the proportion of over-indebted families saying they would have some difficulty rises to three quarters'

It would appear from these results that many households in the UK would be significantly affected by increases in interest rates of much more than one per cent from current (February 2004) levels. The evidence included in the Interim Report (see box 2.1) showed the great sensitivity of arrears and repossessions to changes in interest rates.

2.22 A third potential explanation of why so few people take out longer-term fixed-rate mortgages is that many may *pay a great deal more attention to the initial monthly cost of the repayments* than in the idealised model described above. In that model people do discount the future and are likely to have higher incomes in the future – and for both of those reasons they will pay a great deal of attention to the profile of payments and would tend to favour deals where initial monthly payments are lower. But in the model described above, households are still forward-looking and do also pay attention to the risks that come from the uncertainty over future interest rates so the initial cost, while important, is not of overwhelming importance. The model outlined above also assumes that the variable-rate mortgage is offered at an equilibrium spread over the cost of funds (set at one per cent for the calculations). In practice there are many discounted variable deals available. For households attaching great weight to the initial monthly payments this discount could be the decisive factor. Most longer-term fixed-rate deals in the UK give a flat (nominal) repayment profile and so many variable-rate mortgages can have very much lower initial payments than typical fixed-rate deals.

2.23 It is very likely that this is a crucial factor in accounting for the take–up of different sorts of mortgages in the UK. In part it may reflect less than prefect understanding of risks, a difficulty in interpreting that when the yield curve slopes up sharply it reflects market expectations that short -term rates are likely to rise and also a pricing structure that plays to a tendency of some households to focus excessively on initial costs. We return to these important issues in later sections. But an important point to stress here is that there is considerable scope to give households the benefit of

certainty over the level of repayments in the future and to offer the kind of low initial costs generally only found amongst variable-rate mortgages in the UK. There is not necessarily a conflict between having a mortgage with certainty over the level of payments and a mortgage that makes payments lower in the first few years than later. The results described above show that those people with high loan-to-income ratios are precisely those for whom certainty is most valuable. That people do not *have* to take on uncertainty over future payments in exchange for lower initial monthly payments is important.<sup>4</sup>

2.24 Rising monthly re-payment profiles on a fixed-rate mortgage do not require that redemption penalties need to be higher. Neither do they require the outstanding balance on the mortgage to rise over time (negative amortisation). The scope for the level of repayments on a fixed-rate mortgage to rise gradually for some years, while the stock of outstanding debt does not increase, is very substantial. It means that the benefits to some households of a lower start in the profile on repayments need not require that they also take on interest rate uncertainty, nor that their outstanding balance rises.

2.25 Table 2.1 illustrates this with a simple example. Here we compare three 25-year repayment mortgages of £100,000:

- a fixed-rate mortgage where for the first two years payments are interest-only (M1 in the table);
- a discounted variable-rate mortgage where the initial rate is set at a discount of over two per cent from a standard variable rate (SVR) but then switches on to the SVR after two years (M2); *and*
- a fixed-rate mortgage where payments are initially interest-only but they then gradually move up over a five-year horizon to a level that then remains constant (M3).

We assume the fixed rate is six per cent the standard variable rate is 5.9% and that the initial discount on the SVR means that a rate of 3.75% is paid for two years on the variable-rate deal. These are figures typical for discounted, SVR and longer-term fixed-rate deals in February 2004. We abstract from uncertainty so as to focus simply on the issue of the profile of repayments and we assume there is no subsequent change in variable rates.

2.26 For each mortgage we show the annual and monthly level of repayment over time, the mortgage balance outstanding and also show how much the weekly repayment changes from one year to the next when the payment profile changes. Changes in repayments only happen at most once a year.

2.27 Even with a very substantial discount on the variable-rate deal – generating a 3.75 per cent rate for two years in an environment where fixed rates are six per cent – initial payments can be lower on a fixed-rate deal. The last block of figures (for M3) show how this can be achieved even though the outstanding balance on the mortgage with a fixed-rate always falls and there is no sudden dramatic jump in the scale of repayments. Payments on this fixed-rate mortgage rise at seven per cent each year over the first five years of the mortgage; over this period the weekly cost of the mortgage never rises from one year to the next by more than  $\pounds 10$ .

<sup>&</sup>lt;sup>4</sup>On 2 February 2004, 13 out of 358 fixed-rate mortgages (most fixed for a very short-term period) that were available in the UK had stepped rates (Source: FSA comparative tables).

	M1 – Interest only for two years on a fixed-rate mortgage		M2 – discounted variable-rate mortgage			M3 – gradually rising payment on fixed-rate debt			
	Outstanding	Monthly	Weekly	Outstanding	Monthly	Weekly	Outstanding	Monthly	Weekly
	balance	Payments	rise	balance	Payments	rise	balance	Payments	rise
year	(start year)			(start year)			(start year)		
1	100,000	500	-	100,000	519	-	100,000	500	-
2	100,000	500	0	97,517	519	0	100,000	535	8
3	100,000	677	41	94,941	637	28	99,580	572	9
4	97,872	677	0	92,895	637	0	98,685	613	9
5	95,617	677	_	90,728	637	-	97,256	655	10
6	93,226	677	_	88,433	637	-	95,227	692	9
7	90,691	677	_	86,003	637	-	92,638	692	0
8	88,005	677	-	83,430	637	-	89,894	692	_
9	85,158	677	_	80,705	637	-	86,985	692	_
10	82,139	677	_	77,819	637	-	83,902	692	_
11	78,940	677	_	74,762	637	-	80,634	692	_
12	75,548	677	_	71,526	637	-	77,170	692	_
13	71,953	677	_	68,098	637	-	73,498	692	_
14	68,143	677	_	64,469	637	-	69,605	692	_
15	64,103	677	-	60,625	637	-	65,479	692	_
16	59,822	677	_	56,554	637	-	61,106	692	_
17	55,283	677	_	52,243	637	-	56,470	692	_
18	50,472	677	_	47,678	637	-	51,556	692	_
19	45,373	677	-	42,844	637	-	46,347	692	_
20	39,967	677	-	37,724	637	-	40,825	692	_
21	34,237	677	_	32,302	637	-	34,972	692	_
22	28,164	677	_	26,560	637	-	28,768	692	_
23	21,726	677	_	20,480	637	-	22,192	692	_
24	14,902	677	_	14,041	637	-	15,221	692	_
25	7,668	677	-	7,221	637	-	7,832	692	-
			M1			M2			M3
Total F	ayments Over:								
	1 year		6,000			6,233			6,000
	2 years	1	2,000		1	2,466			12,420
	3 years	2	0,127		2	20,114			19,289
	5 years	3	6,383		3	35,408			34,504

#### Table 2.1: Stepped-up payment profiles on fixed and variable-rate mortgages (£)

M1 is a mortgage with a fixed rate at six per cent where for the first two years payments are interest-only. M2 is a discounted variable-rate mortgage where the initial rate is set at a discount of over two per cent from the standard variable rate (SVR) but then switches on to the SVR after two years (5.9 per cent). This initial rate is 3.75 per cent for two years. We assume that there is no change in the SVR over the whole 25 years. M3 is a fixed-rate mortgage where payments are initially interest-only but they then gradually move up over a five-year horizon to a level that then remains constant. The focus of this table is purely on the profile of payments so we abstract from risk. Source: Miles Review calculations.

#### **CONCLUSIONS:**

2.28 The take-up of longer-term fixed-rate mortgages in the UK is at a much lower level that one might expect based on a model of optimal mortgage choice. That model assumes households are well informed and able to understand and assess risks. It also assumes mortgages are priced in a transparent and sustainable way. There are many potential reasons why the take-up of such mortgages in the UK may have been so low. They include imperfect understanding of risks and of the likely profile of future interest rates, a tendency to focus on initial payments on mortgages, and a pricing structure that plays to that tendency.

2.29 We take these issues up and make recommendations in the following sections.

2.30 In the light of the results described in the main part of this section it is reasonable to expect that if consumers in the UK were helped to understand better the risk and cost profiles of different types of mortgage there would be more longer-term fixed-rate lending. This would be a by-product of the mortgage market working better, rather than an end in itself. How better understanding and better information can be given to households is the focus of Section 4. But first, in the next section, we consider the macroeconomic implications of there being more long-term fixed-rate lending in the UK.

3.1 If a significantly greater proportion of mortgage debt in the UK were at longer-term fixed rates the way in which monetary policy affects the economy would be different. It is plausible that the impact of a given change in short-term interest rates upon the aggregate economy would be lower. Oxford Economic Forecasting (OEF) estimated that around a third of the impact of short rates on Gross Domestic Product (GDP) operates through the effect on house prices and another sixth operates via the impact of changes in short rates on consumption. Assuming the underlying structures of the rest of the economy remained the same, base rates would have to move by more to have the same impact on the UK aggregate economy. But there may be substantial advantages in reducing the extent to which the housing market and household finances are affected by changes in short-term interest rates. The impact of monetary policy would be less unbalanced.

3.2 UK monetary policy has been successful in recent years. There are concerns that a move to more longer-term fixed-rate lending will make monetary policy harder to operate. But those countries where mortgage lending has been at predominantly longer-term fixed rates do not seem to have found monetary policy harder to implement. For example, Germany and the United States have operated a monetary policy that, on average, has delivered less variable and lower inflation – and a much less volatile housing market – than in the UK over the past 50 years. In those countries mortgages have been predominantly long-term fixed rate. There are of course many reasons why inflation performance has been different. But history does not support the notion that countries where the mortgage stock is large and predominantly at variable rates are those where monetary policy is more successful.

Changes in interest rates currently have two effects in the UK that are linked to the 3.3 housing market. First, there is a direct effect through the impact of interest rate changes on the cost of existing variable-rate debt: this has a very substantial impact on many households' discretionary income. Many homeowners initially have debt servicing costs of around a quarter of their income; for such households the ratio of mortgage costs to income can be extremely sensitive to interest rate changes.<sup>1</sup> Second, changes in the demand for housing appear to be responsive to even temporary changes in short-term interest rates which can have a powerful impact on the initial debt servicing costs of buying a house. Reductions in short-term interest rates both increase the discretionary income of people with an existing variable-rate mortgage and generate an increase in demand for housing which is likely to be stronger in an environment where many people view the current level of payments on a mortgage as the cost of debt. As the quantity of housing is fixed in the short run (and only responds slowly even in the longer run), rises and falls in demand tend to generate significant house price changes. Real house prices in the UK have been exceptionally volatile over the last 20 years with pronounced cycles. Aggregate house prices have risen by over 20 per cent in two years (1989 and 2002) and have fallen by around 10 per cent in two others (1990 and 1993). While such volatility has partly been driven by wider economic conditions it has also contributed to macroeconomic fluctuations.

<sup>&</sup>lt;sup>1</sup> Households also have savings deposits that pay a higher nominal return when interest rates rise. Given that at the aggregate level the size of deposits and debts are similar, the aggregate effect on households' expenditure of interest rate changes, in principle, might be small. However if borrowers have higher marginal propensities to consume than savers then changes in short-term interest rates can have effects on the macroeconomy. Such differences in propensities to consume are very likely.

3.4 The Interim Report presented evidence showing that many households in the UK attach great weight to the level of current, short-term interest rates when they decide how much to borrow and what type of mortgage to take out. Less weight seems to be placed upon the likely path of interest rates some years ahead, even though the great majority of households with mortgages will still have substantial amounts of variable-rate debt for many years. Evidence from the Interim Report also showed that short-term interest rates are more volatile than longer-term rates. Annex B shows the extent to which base rates have changed over different time horizons over the past fifty years.

3.5 The impact of a change in short rates on house prices is likely to be substantially lower if there were to be much more longer-term fixed-rate borrowing. The Interim Report showed results using the OEF model which estimated that around a third of the impact of short-rates on GDP operates through the effect on house prices and another sixth operates via the impact of changes of short rates on consumption. This still leaves a significant proportion of the effect of short rates on the wider economy via their effect on, amongst other things, investment and the exchange rate. With many more longer-term fixed-rate mortgages house prices would still be affected by movements in short rates through their influence on longer rates and through the influence of short rates on other determinants of housing demand, particularly household income. The net effect, however, is likely to be substantially smaller.

3.6 It is clear that the monetary transmission mechanism would be different if a substantial proportion of mortgages were to have interest rates fixed for ten or more years. The simulations in the Interim Report provide broad indications of the possible magnitudes. While the simulations only give a rough idea of the potential effects it is possible to draw the following conclusions:

- 1. With fixed-rate mortgage lending the impact of a given change in short rates on house values and probably on consumption expenditure will be lower.
- With more fixed-rate mortgage lending a greater proportion of the overall impact of a change in short rates upon aggregate demand will stem from the effect on the cost of borrowing to companies and via induced impacts upon the exchange rate.
- 3. The impact of a change in short rates will depend to a greater extent than at present upon the induced impact on longer-term bond yields and swap rates.

It might appear that both 2 and 3 are in themselves undesirable because they make 3.7 monetary policy less effective, even if that might be a price worth paying for greater stability in housing values and less variability and uncertainty in mortgage holders' spending power. But this is far from obvious. A situation where one of the main ways in which a cut in interest rates boosts demand is via its impact on house values and, partly as a result, its impact on consumer spending both of which can create problems. When the housing market is booming, consumer debt rising rapidly and the personal sector savings rate is very low - while at the same time other sectors of the economy face falling demand and spare capacity - it is not helpful to a central bank to have so much mortgage debt at variable rates. The Bank of England has faced a difficult situation for much of the past three years when the manufacturing sector has been weak and investment expenditure much weaker than consumption while house prices have risen sharply and mortgage borrowing has been exceptionally high. If a temporary cut in interest rates in the UK had its major effect on the economy because of a reduction in the cost of borrowing for companies and its impact on the exchange rate, and had limited effect on the housing market because longer rates would not change much, then it is at least plausible that interest rates in recent years in the UK would have been lower. More important imbalances in the economy would have been reduced.

3.8 Monetary policy will be easier to manage if households make well-informed decisions about mortgage products that are priced in a transparent and sustainable way and where the risks of different types of mortgage are well understood. If that is how the mortgage market worked it would work better. Section 2 presented some evidence that if the market worked better there would be more longer-term fixed rate lending. The risks of over-indebtedness, of problems of debt affordability triggered by interest rate rises, and of excess volatility in the housing market would be reduced. Those risks can make monetary policy *more* difficult to operate.

# 4 Improving borrowers' understanding

4.1 Section 2 assessed which types of mortgage contract might be attractive to different types of borrower in a world with transparent pricing, where households are well informed and are able to judge which risks are acceptable, based on a realistic assessment of the degree of uncertainty over their own incomes and over rates of interest. It found that a substantial proportion of borrowers, particularly among those borrowing more than three times their income, are likely to find the nominal payment certainty of a longer-term fixed-rate mortgage attractive. In the UK few people have such mortgages. The information people have on mortgages, the structure of pricing of mortgages and the nature of advice play a major role in accounting for this. Those forces help mould decisions and are a key factor behind the dominance of variable and short-term fixed-rate mortgages in the UK. This section focuses on advice, information and understanding. The next section analyses the structure of pricing. Pricing depends upon the sources and costs of funding and these are considered in Sections 6 and 7.

4.2 Section 3 of the Interim Report presented a wide range of different types of evidence that suggests that borrowers tend to focus excessively on the initial monthly cost of the mortgage and do not have a good understanding of interest rate risk. That evidence comes from academic and market consumer research, from analysis of the relative take up of fixed and variable-rate mortgages, from econometric models of house prices in the UK and from discussions with many lenders and mortgage intermediaries. A short summary of the evidence is included here.

#### **EVIDENCE OF MISUNDERSTANDING**

4.3 In the run-up to designing their mortgage regulation regime, the Financial Services Authority (FSA) undertook substantial consumer research into how people make decisions about mortgages. In summarising both a review of existing academic and market research on the subject and a bespoke survey, the FSA states:

'... studies highlight that the information that consumers say they need is predominantly focused on the immediate monthly mortgage costs in order to assess initial affordability, and that they do not have longer-term horizons' (FSA, 2001b).

4.4 The historic take-up of (largely short-term) fixed and variable-rate mortgages in the UK also suggests that borrowers tend to focus on initial cost. Over the last decade the take up of fixed-rate mortgages has been very sensitive to the initial rate differential, i.e. the relative size of the first monthly payment on a mortgage. At times when the initial cost of short-term fixed-rate mortgages relative to variable-rate mortgages has been low, the proportion of fixed rates in new lending has been high, and vice versa. Because the interest paid on a variable-rate contract will vary over the life of the contract, expectations of future variable-rates should be a factor in determining take-up. Forward-looking borrowers would respond to the likely future cost of different mortgages. But there seems to be no relationship between the take up of fixed-rate mortgages and the differential between the fixed rate and the expected variable rate over the length of the fixed period (where expectations are based on bond prices). This suggests that many borrowers do not pay much attention to the likely level of future interest rates in choosing between variable and short-term fixed rates.

4.5 Evidence from models of house prices also supports the idea that a great many borrowers pay overwhelming attention to the current variable interest rate. If households take into account the likely future path of interest rates in deciding how much to borrow and which type of mortgage to choose then house prices would depend more on longer interest rates than on short rates. Longer rates embody expectations about the future path of short rates. In fact, econometric models of UK house prices – for example those built by the Bank of England, the National Institute of Economic and Social Research, Oxford Economic Forecasting and HM Treasury – nearly always reflect the finding that in the UK the short-term variable mortgage rate is a much more powerful explanatory factor than longer rates.

4.6 The many mortgage lenders and intermediaries that the Review has consulted have, almost without exception, confirmed that their customers tend to focus on the initial interest rate. Their views are based on an enormous wealth of experience of the way the UK market operates.

4.7 There is also more limited evidence that some borrowers perceive longer-term fixed-rate mortgages as giving little or no flexibility in payment profiles and that many may not appreciate that fixed-rate mortgages tend to be portable, leading them to see longer-term fixed-rate mortgages as inherently unsuitable since they expect to move house within a few years. In practice many fixed-rate products offer degrees of flexibility (the option to overpay up to 10 per cent of the outstanding balance per year and draw-down overpayments is common in products with rates fixed for 10 to 25 years) and on moving house borrowers often need not incur redemption penalties (lenders generally make fixed-rate mortgages portable and generally offer competitive terms for top-up loans where the new property is more expensive).

4.8 Further evidence concerning borrowers' understanding of interest rate risk has come to light since publication of the Interim Report. In order to assess the effects on consumers of interest rate rises, the FSA made use of the September 2003 National Statistics Omnibus Survey to assess how mortgage holders would cope with 1 percentage, 2.5 percentage and 5 percentage point increases in interest rates (the results were reported in the FSA's Financial Risk Outlook 2004).<sup>1</sup> Those borrowers who said that they would struggle or fall behind on their debt payments, for these given increases in rates, were asked what action they would take to cope with the increased cost of debt. Chart 4.1 shows the results. The popularity of re-mortgaging as a strategy to deal with a general increase in interest rates, and the fact that the popularity of this strategy increases with larger rate rises, may reflect some misunderstanding of interest rate rates. Many respondents may not have realised that other mortgage lenders will also have raised their interest rates by similar amounts when the cost of their own variable-rate mortgage goes up and that re-mortgaging is unlikely to result in a saving.

<sup>&</sup>lt;sup>1</sup> The Office of National Statistics omnibus survey had an overall sample size of 1,832 respondents. Interviews were conducted face to face – between 15th September and 3rd October. The data reported here summarise responses from all families who owned their own home with a mortgage who said they would struggle or fall behind with mortgage payments for each of the three scenarios.



4.9 Other recent survey data have found that once prompted to think about the level of current interest rates, and their own view as to the likelihood of future changes in rates, many respondents express an interest in fixing their mortgage payments for more than a few years. The Council of Mortgage Lenders' (CML) latest survey of mortgage borrowers, conducted in November/ December 2003, asked households which type of interest rate they would prefer if re-mortgaging tomorrow: variable; fixed for less than 5 years; or fixed for more than 5 years. 26 per cent of respondents preferred to fix their mortgage interest rate for more than 5 years.<sup>2</sup> A survey commissioned by the Cheshire Building Society, carried out in November 2003, found that 49 per cent of respondents would consider taking out a mortgage fixed for 5 years or more.<sup>3</sup> The contrast with the numbers of borrowers actually taking out such products is striking. This apparent desire from a high proportion of households for a substantial degree of nominal payment certainty is not reflected in the take up of longer-term fixed-rate mortgages – only around 4 per cent of new advances in December 2003 were fixed for more than 5 years.

4.10 There are three broad routes through which to improve borrowers' understanding and help them to make better-informed decisions: (i) improving the standard of verbal advice given to borrowers during the sales process; (ii) improving the standard of documentation that lenders are required to provide during the sales process; and (iii) improving the decision-making capability of the borrowers themselves. Each is considered in turn.

<sup>&</sup>lt;sup>2</sup> The CML survey, carried out by MORI, had a sample size of 2525. Interviews were conducted face to face in November/December 2003. Results are weighted to be representative of all UK mortgage borrowers.

<sup>&</sup>lt;sup>3</sup> The UK wide survey was conducted by YouGov on 12-14 November 2003. The sample size was 1939.

#### **IMPROVING THE STANDARD OF ADVICE**

4.11 The Interim Report presented evidence, from research by the FSA, Financial Services Consumer Panel and others, showing that professional advice is very influential on borrowers' decision-making. In some cases consumers effectively delegate the choice of product to the advisor (FSA, 2001b; FSCP 1999). Mortgage choice is a complex issue. Professional advice has a key role to play in encouraging and helping borrowers to consider the characteristics of different mortgage products.

4.12 The way in which most advice is given is currently subject to voluntary regulation under the Mortgage Code, to which 98 per cent of lenders and most intermediaries have signed up. The Code sets out three levels of service and requires firms to be clear to the customer about which level(s) they offer. The three levels are:

- (a) advice and a recommendation;
- (b) information on different mortgage products; and
- (c) information on a single mortgage product.

4.13 A recent survey by the Mortgage Code Compliance Board (MCCB) suggests that 35 per cent of the market currently receives advice and a recommendation.<sup>4</sup> Table 4.1 shows levels of service broken down by type of buyer and by distribution channel.

Table 4.1: Advice	by type of buy	er and distribution	channel (per cent)
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	<b>T</b> 1	T	vpe of buye	Channel		
	Total	First-time buyer	Mover	Remortgager	Lender	Internediaries
Advice and a recommendation as to which mortgage was most suitable for me	35	49	33	29	23	48
Information on different types of mortgage product but I made the choice	52	41	58	53	59	45
Information on a single product only	11	6	9	17	17	5
Don't know/not sure	2	4	_	1	1	1
Source: Mortgage Code Compliance Board Consumer 1	Pasaarch Rapa	+ 2003				

Source: Mortgage Code Compliance Board, Consumer Research Report 200

Figures may not sum due to rounding.

#### FSA Regulation of Advice

4.14 The Government has extended the FSA's remit to include regulation of mortgage sales from 31st October 2004. Following a number of consultations the FSA rules governing the sales process were published on 15th October 2003. Under the new regime firms can offer consumers two routes through the sales process: advised or non-advised. For the purpose of their cost benefit analysis of mortgage regulation, the FSA assume that 56 per cent of new advances will receive advice under the new regime (NERA, 2003, Appendix A).<sup>5</sup>

<sup>&</sup>lt;sup>4</sup> The survey asked borrowers, who had taken out a mortgage in the last 6 months, to identify which level of service they had received. Despite a fairly small sample size of 629 respondents, the MCCB considers the results to be an accurate reflection of the market.

<sup>&</sup>lt;sup>5</sup> The FSA may be taking a cautious approach here and using a figure slightly higher than a central estimate so as not to underestimate the costs of compliance.
4.15 The key section covering required conduct for advised sales in the FSA's rules is the "suitability assessment". Before recommending a particular mortgage to a customer, firms will be required to take reasonable steps to ensure that the mortgage is suitable. This section of the rules is of critical importance not only because it will govern advice that evidence suggests is very influential in borrowers' decision-making, but it will also be a benchmark in subsequent consideration of complaints about mis-selling by the Ombudsman.<sup>6</sup>

4.16 There are three key suitability criteria for a mortgage: (i) that the customer can afford the mortgage; (ii) that the mortgage is appropriate to the needs and circumstances of the customer; and (iii) that the mortgage is the most suitable of those that the firm has available.

4.17 To assess the first of these, affordability, a firm should give due regard to;

'(a) information that the customer provides about his income and expenditure, and any other resources that he has available;

(b) any likely change to the customer's income, expenditure or resources; and

(c) the costs that the customer will be required to meet once any discount period in relation to the regulated mortgage contract comes to an end (on the assumption that interest rates remain unchanged).<sup>77</sup>

4.18 And a firm;

'must explain to the customer that the assessment of whether he can afford to enter into a regulated mortgage contract is based on:

- (1) current interest rates, which might rise in the future; and
- (2) the customers current circumstances, which might change in the future.'8

4.19 While there is a requirement to consider likely (i.e. predictable) changes in a borrower's income in assessing affordability (see (b)), there is no specific requirement to take account of interest rate risk in assessing affordability. This seems strange given that interest rate risk is a key feature of a mortgage. The rules explicitly state that the assessment of affordability is made at current interest rates (see (c) and (1)).<sup>9</sup> There is only the requirement to tell the customer that rates might rise. Explicitly stating that the use of current interest rates achieves compliance does not seem consistent with the desirable outcome that advisor and borrower make a measured assessment of ongoing affordability.

<sup>&</sup>lt;sup>6</sup> FSA Handbook, DISP 3.8.1 sets out what the Financial Ombudsman Service will take into account in considering complaints.

<sup>&</sup>lt;sup>7</sup> FSA Handbook, MCOB 4.7.7 E (1).

<sup>&</sup>lt;sup>8</sup> FSA Handbook, MCOB 4.7.5 R.

<sup>&</sup>lt;sup>9</sup> The FSA's responsible lending rules cover all sales and require that, before lending, a firm must take account of a customer's ability to repay. Guidance on complying with this rule is again explicit that firms should use current interest rates in assessing ability to repay. FSA Handbook, MCOB 11.3.5 G (2) (a).

4.20 However, some assessment of risk is a required part of the advice on a suitable mortgage. In assessing whether the mortgage is appropriate to the needs and circumstances of the customer a firm should, among other things, give due regard to;

'whether the customer has a preference or need for stability in the amount of required payments, especially having regard to the impact on the customer of significant interest rate changes in the future;<sup>'10</sup>

4.21 The interpretation of this rule is central to the effectiveness of the suitability assessment. A key question is what would count as taking reasonable steps to assess a customer's preferences or needs in this regard? Customers need to have some idea of the chances that interest rates might move by small or relatively large amounts; many need guidance on what "small" and "large" mean when thinking about possible movements in interest rates. It is hard to see how an advisor can assess 'whether the customer has a preference or need for stability in the amount of required payments, especially having regard to the impact on the customer of significant interest rate changes in the future', without giving the customer at least some idea about the risks of interest rates moving by certain amounts over the next few years. Without this customers are not in a good position to express an informed preference for, or place a value on, the payment stability offered by a fixed-rate contract. If the advisor simply tells the customer that interest rates can change significantly, both going up and down, most customers would be left little better informed and the advisor hardly able to judge whether they have a meaningful preference for stability in the profile of mortgage payments.

4.22 Ideally advisors should explain what would happen to the monthly payments of the mortgage product for a range of possible interest rate movements, as this would give some idea about the scale of risks. Explaining about market expectations of future rate movements and the degree of uncertainty around such expectations is not easy. There is no single or definitive way of doing this. But to make no effort to do so is not desirable. Annex A sets out questions and the sort of illustrative future interest rate scenarios that could be used in assessing borrowers attitudes to the risk of different mortgage products. The projections of the cost of mortgages shown use various paths for interest rates: no change; movements in short-term interest rates that are in line with current market expectations and alternative paths based on rate increases and decreases relative to the central path. The nature of those illustrative paths where rates rise by more or less than expected are guided by the actual volatility in changes in interest rates over the past fifty years." Much of the information contained in Annex A would require professional explanation as many consumers could find some of this information difficult to interpret without help from an advisor. It is important that the discussion of uncertainty over interest rates should cover a period considerably longer than one or two years, the typical length of short-term fixed and discounted variable-rate deals. Significant interest rate risk will persist until a substantial proportion of the mortgage balance has been repaid and that will be well beyond two or three years after most mortgages are taken out.

<sup>&</sup>lt;sup>10</sup> FSA Handbook, MCOB 4.7.11 E (1) (d).

<sup>&</sup>lt;sup>11</sup> Annex B presents some data on that volatility which is helpful in assessing the sort of alternative paths that might be used to illustrate to consumers the scale of interest rate variability.

4.23 While the FSA's regulations governing the sale of investment products are generally less prescriptive than the new mortgage regime, they make understanding of risk absolutely central. Under the investment regime a firm may not recommend a particular transaction;

'unless it has taken reasonable steps to ensure that the private customer understands the nature of the risks involved.'12

4.24 The final stage of the suitability assessment requires that of all the mortgages identified as being appropriate the firm should;

'recommend the one that is the least expensive for that customer taking into account those pricing elements identified by the customer as being most important to him.'<sup>13</sup>

4.25 While this price criterion should only be applied following the steps discussed above, there is a danger of a simpler interpretation. In the FSA's final consultation paper on the rules the price criterion is described as 'the default option' that will 'allow the advisor to demonstrate compliance' (FSA 2003a, p. 20). Firms will be required to make the case for recommending anything other than the cheapest mortgage. In an environment in which some firms may be concerned that recommending anything other than a discounted short-term deal with no redemption penalties lays them open to charges of mis-selling, it is critical that this price criterion is understood as the likely overall cost, and not simply the lowest cost at current interest rates. A simple price criterion could only make sense within categories of products – e.g. between different five-year fixed-rate mortgages or between different capped-rate mortgages or between different discounted variablerate deals that revert to standard variable rate at a given point. But borrowers will naturally want to trade-off different degrees of nominal payment certainty against initial price.

4.26 Greater clarity in what is required to comply with aspects of the suitability assessment is needed. Amending the rules so as to make what counts as complying with the suitability assessment clearer – or issuing guidance upon how the current rules should be interpreted – would be beneficial for both borrowers and the mortgage industry. Borrowers would benefit from better advice on critical aspects of suitability and the industry would gain from the greater certainty over compliance and less risk of subsequent allegations of mis-selling. A number of lenders and intermediaries recently consulted by the Review have expressed support for guidance on the suitability assessment.

4.27 There is potentially a danger in overly prescriptive regulation of advice but the issuance of guidance rather than detailed rules could avoid this. Nonetheless there would be some costs to this. There would be ongoing compliance costs to the industry if the guidance required them to devote more advisors' time to the suitability assessment than they otherwise would. The FSA's cost/benefit analysis of all the rules governing advice suggests that they will cost the industry around £3.4 million annually (NERA, 2003). This assumed that the requirements would add an additional five minutes per advised sale by small and medium sized lenders and intermediaries and an additional three minutes per advised sale by large lenders and intermediaries. Requiring firms to discuss information of the sort set out in Annex A could be expected to add an additional few minutes per advised sale. There could be significant one-off systems costs depending on the precise design of

<sup>&</sup>lt;sup>12</sup> FSA Handbook, COB 5.4.3.

<sup>&</sup>lt;sup>13</sup> FSA Handbook, MCOB 4.7.13 E (1).

FSA guidance for advising on the impact of possible future changes in interest rates on monthly repayments, e.g. whether they should be product specific, frequency for updating forward rates etc. Any changes to the Handbook would be subject to the FSA's own cost/benefit analysis.<sup>14</sup>

4.28 Recommendation: that the FSA requires that, to discover consumer attitudes to risk and hence assess a customer's preferences, it is essential for mortgage advisors to cover personalised "what if" scenarios, of the sort illustrated in Annex A of this Report.

#### Qualifications for advisors

4.29 It is important that advisors are required to give good advice but also that they have the competence to do so. It is critical that advisors themselves understand the risk characteristics of the different products they are recommending. The Mortgage Code Compliance Board (MCCB) currently requires all individuals giving advice to have an accredited professional qualification. Advisors must either hold the Certificate in Mortgage Advice and Practice (CeMAP) or, alternatively, the Financial Planning Certificate (FPC) or Certificate for Financial Advisors (CeFA) and have passed the CeMAP bridge paper or the Mortgage Advice Qualification (MAQ). There are approximately 60,000 qualified mortgage advisors in the UK (MCCB, Annual Report 2003). It is a major achievement of the voluntary code that has been in place that so many advisors now have accredited professional qualifications.

4.30 The FSA currently maintains a list of "approved qualifications" in its Training and Competence Sourcebook. The FSA is in the process of changing its rules so that it no longer tells firms which examinations advisors must pass; instead a firm must decide for itself which examination is appropriate based on the business it undertakes and the needs of its customers. The most common way that firms will do this is by reference to a list of "appropriate examinations" to be maintained by the Financial Services Skills Council. The Skills Council sets the National Occupational Standard (NOS) for mortgages and lending, which identifies the key areas of competence that advisors need to have; examination providers set the detailed syllabus and structure of the examinations.<sup>15</sup> The Skills Council is currently reviewing both the NOS and the existing qualifications for mortgage advice. The Skills Council will decide whether the current qualifications meet the new National Occupational Standard and will produce a list of "appropriate qualifications", which advisors can take to demonstrate competence. The review is scheduled for completion in April 2004.<sup>16</sup>

4.31 Under the 'provision of the personal mortgage advice' section of the current NOS one of the competence criteria requires that practicioners must:

'Explain the implications of fixed and variable mortgage repayments so that you can establish which your customer might prefer'17

<sup>&</sup>lt;sup>14</sup> The Financial Services and Markets Act 2000 requires that any guidance on the FSA's rules must be consulted upon and be subject to cost benefit analysis in a similar way to the rules, FSMA 2000, Section 157.

<sup>&</sup>lt;sup>15</sup> The examination providers for these qualifications are: the Institute of Financial Services, the Chartered Insurance Institute and the Chartered Institute of Bankers in Scotland.

<sup>&</sup>lt;sup>16</sup> The Qualifications and Curriculum Authority formerly sign off the qualification as being sufficient to demonstrate that the NOS is met.

<sup>&</sup>lt;sup>17</sup> Skills Council For Financial Services National Standards: Mortgages and Lending.

4.32 However the syllabuses for CeMAP and MAQ pay little attention either to the term structure of interest rates or to interest rate risk issues. Mortgage advisors need to have an understanding of the role of expectations in determining the term structure of interest rates if they are to advise on the relative value of fixed and variable-rate contracts. They also need to have some knowledge of the potential variability in interest rates and how such variability can affect the future affordability of different types of debt.

4.33 As shown in Chart 4.1, one reason why many consumers may underestimate the risk of variable-rate mortgages is that they believe that they can switch to a cheaper mortgage, perhaps a fixed-rate mortgage, if and when short-term rates start to rise. In order for this strategy to work movements in long-term rates must lag behind movements in short-term rates or else individual borrowers must have an understanding of the yield curve that allows them to beat the market. Neither condition is likely to be met. Some mortgage advice can be read as advocating the strategy of sticking with variable-rate mortgages and only switching to a fixed rate once variable rates have moved up. On 8th February, following a rise in the base rate to 4 per cent, a large firm of intermediaries offered the following comment on the relative value of fixed and variable rates:

"Fixed rates below 5% offer decent value, but are about one point higher than the best discounts. The base rate would have to go to 5% before you'd be better off with a fix."

4.34 The implication is ambiguous but could be read as saying that the best strategy is to wait until the base rate is 5 per cent and then switch to a fixed rate. On the same day another prominent firm advised:

"Even after the rise, the best value mortgages are still trackers and discounted deals. Despite the likelihood of rates rising further in coming months, most fixed rates look expensive as they are already priced to reflect the City's expectations of base rate rising to 4.75 to 5 per cent over the next year."

4.35 Fixed rates on mortgages are always going to reflect yields on bonds and swap rates and so will invariably reflect the City's expectations. The quote reflects a particular view about what is "best value", one which implicitly attaches relatively little weight to the certainty of a payment profile. This Review is not suggesting that advisors should try to predict future interest rate movements. But they should be able to interpret the information that the market provides and explain to borrowers what is implied by the yield curve (and by forward rates and by futures contracts) and, as well as giving some notion of market expectations, also give them some idea about the scale of the unpredictability of future interest rates.

4.36 Advisors should also understand that a borrower's ability to service mortgage debt over the life of the contract is a crucial factor in determining suitability. An important aim of the advice process should be to help consumers assess affordability in an uncertain world; that might usefully be done by showing how debt servicing burdens could evolve under different interest rate scenarios. Mortgage advice qualifications should require an understanding of how debt servicing burdens could evolve for a typical borrower taking out different types of mortgage contract in different interest rate environments, using typical profiles for income growth and loan to income ratios. The scenarios described in Section 2 of the Interim Report could provide a useful guide for examining bodies.

4.37 Given that the Skills Council is currently conducting a review of mortgage advice examinations and is expected to require a number of more general changes, the additional cost of including these specific topics in the syllabus is likely to be low.

4.38 Recommendation: that the Financial Services Skills Council should require appropriate examinations for mortgage advisors to cover the role of expectations in the term structure of interest rates, the potential degree of volatility in interest rates and the evolution of mortgage repayments under different scenarios.

#### The Role of Intermediaries

4.39 Intermediaries, largely specialist mortgage brokers and independent financial advisors, play a very important role in the mortgage industry. Chart 4.2 shows that the volume of all lending originated through intermediaries has grown considerably over the last ten years and now stands at over 50 per cent of all new mortgages.<sup>18</sup> The proportion of first-time-buyers using intermediaries is consistently higher than for other categories of borrowers and is currently close to 60 per cent. There were around 12,000 intermediaries registered with the MCCB in 2003, covering an estimated 98 per cent of the intermediary market.



4.40 As Table 4.1 suggests, intermediaries tend to give advice on a greater proportion of their sales than lenders. For the purpose of their cost benefit analysis of mortgage regulation the FSA assumed that intermediaries will give advice to 80 per cent of their customers and lenders to 40 per cent (NERA, 2003, Appendix A). In 2003 83 per cent of intermediaries met the MCCB's requirements for giving advice; MCCB records show that there are roughly twice as many qualified advisors in the intermediary sector than those employed by lenders (MCCB, Annual Report 2003).

<sup>&</sup>lt;sup>18</sup> Further advances – additional lending on top of the original mortgage – are not included in this measure of new mortgage lending.

The great majority of mortgage intermediaries' remuneration is paid in the form of 4.41 commission from the lenders to which they refer business. Some intermediaries charge their customers a fee in addition or as an alternative. There is little public data on commissions but those disclosed in trade publications suggest that commissions tend to take the form of one-off payments at the point of sale, typically a proportion of the mortgage advanced, though there is some use of flat fees. There are fairly small differences between commissions for prime market mainstream products. Higher commissions tend to be paid for speciality and sub-prime products. As discussed in the Interim Report, intermediaries have some financial incentive to sell short-term discounted products with the prospect of a resale in the near future. Many intermediaries sell other financial products to customers at the time when the mortgage is taken out and the sale of the mortgage is seen by some intermediaries as pivotal in the earning of commissions on other products. Many of the lenders consulted by the Review believe this incentive to be a key factor in explaining the lack of longer-term fixed-rate lending in the UK. Rejecting this view, some intermediaries consulted by the Review say that the practice of advisors regularly prompting customers to consider remortgaging is not widespread and that high levels of "churn" are customer driven.

4.42 It has been suggested that the use of alternative commission structures could, to some degree, mitigate problems. Commission that is paid to the intermediary per period that the borrower remains with the lender – so called "trail fees" – could help align intermediaries' incentives with the longer-term interests of both borrowers and lenders. Lenders' experience is that intermediaries are often reluctant to accept trail fees, though in present value terms they may be equal in value to up-front fees. Such commission structures have a serious draw back as there is scope for abuse in a market where borrowers are not well informed. Unscrupulous lenders and intermediaries could contract to keep customers on uncompetitive products.

4.43 It has also been suggested that lenders could pay higher levels of commission on longer-term fixed-rate mortgages to overcome this short-term financial incentive faced by intermediaries. However, in a properly functioning market, commission should reflect the cost of services provided by the intermediary – i.e. the cost of advising and selling – and differences in the profitability or expected profitability to the lender of certain products (taking into account the expected period for which the borrower will keep the mortgage) should be reflected in the price of the product to the borrower. Given that the costs of selling a longer-term fixed-rate mortgage are unlikely to be higher than those for other mainstream prime market products, differences in levels of commission seem unwarranted. Indeed large and unjustified differences in commissions across products could fall foul of the FSA's prohibition of inducements rules.<sup>19</sup>

4.44 Under the FSA's new regime firms will be required to disclose the level of commission payable in the pre-sale disclosure document which sets out the details of the particular product that the customer is taking.<sup>20</sup> This is helpful though it may not allow the customer to compare the incentive to sell that particular product relative to other products.

<sup>&</sup>lt;sup>19</sup> FSA Handbook, MCOB 2.3.

<sup>&</sup>lt;sup>20</sup> FSA Handbook, MCOB 5.6.113-9.

4.45 The most effective way to overcome the potential financial incentive on intermediaries to sell short-term deals where these would not be most appropriate (discounted variable or short-term fixed) is to issue clear regulations in respect of advising on the likely overall cost and the relative risks of different mortgage products. Guidance on complying with this aspect of the FSA's suitability assessment would help achieve that (see recommendation in paragraph 4.38).

# **IMPROVING PRE-SALE DISCLOSURE**

4.46 The FSA's pre-sale disclosure requirements cover all sales, both advised and non-advised. There is a difficult balance to strike in disclosure requirements. There is a need to enhance transparency, provide written personalised product information, and explain key elements of the mortgage product. The difficulty is that consumers, understandably, tend to have a limited appetite for such information. The FSA has extensively researched the presentation of disclosure forms to ensure that information is given in a digestible and concise manner. The pre-sale disclosure form is the key disclosure document that firms must send to customers once a particular product(s) has been selected. It sets out the principal terms of that mortgage(s).

4.47 Figure 4.1 reproduces sections from an FSA illustration of the pre-sale disclosure form for a variable-rate, interest-only mortgage. The form highlights the annual percentage rate (APR) as a summary measure of the overall cost of a mortgage of £90,000. Related pieces of information on cost, the total amount you must pay back over the life of a mortgage and the amount repaid per pound borrowed, are shown. For variable-rate mortgages all these calculations are made using *the current interest rate*.<sup>21</sup> Borrowers are encouraged to use the APR as the relevant number for comparison of the cost of mortgages. Warnings that these numbers will change following interest rate changes and that comparison should only be made with other repayment or interest-only mortgages are given (see box 5). The number of payments and the amount to be paid each month is also presented (see box 6).

# Figure 4.1 Extract from FSA pre-sale disclosure form

5.	Overall	cost of	f this	mortgage
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The overall cost takes into account the payments in Sections 6 and 8 below. However, it excludes any payments that you may need to make into a separate savings plan, to build up a lump sum to repay the amount borrowed, but assumes that you pay off the amount borrowed as a lump sum at the end of the mortgage.

The total amount you must pay back, including the amount borrowed is	£207,534
This means you pay back	$\pounds 2.30$ for every $\pounds 1$ borrowed
The overall cost for comparison is	5.4% APR

The figures in this section will vary following interest rate changes and if you do not keep the mortgage for 25 years. Only use the figures in this section to compare the cost with another interest-only mortgage.

<sup>&</sup>lt;sup>21</sup> If it is a discounted product where the level of mortgage payments is calculated from a standard variable-rate after the initial discount, the APR and other calculations are based on the *current* SVR.

6.	What you will need to pay each month	Monthly payments
This your	illustration is based on a loan amount of £90,300, and includes the fees that a mortgage, and assumes that the mortgage will start on 31st January 2004.	are shown in Section 8 as being added to
	60 payments at a variable rate currently 3.99%	£300.25
Follo	wed by:	
	240 payments at a variable rate currently 5.49%	£413.12

#### Cost of repaying the capital

You will still owe £90,300 at the end of the mortgage term. You will need to make separate arrangements to repay this. When comparing the payments on this mortgage with a repayment mortgage, remember to add any money that you may need to pay into a separate savings plan to build up a lump sum to repay this amount.

Savings plan that you do not have to take out through [this particular lender/broker]	Monthly payments
(see separate key features document)	£120.00
What you will need to pay each month including the cost of a savings plan to repay the capital	
60 payments at a variable rate currently 3.99%	£420.25
Followed by:	
240 payments at a variable rate currently 5.49%.	£533.12

Reproduced from FSA illustration.

4.48 It would be natural for borrowers to focus on APR and the related calculations in comparing fixed and variable-rate mortgages. The APR figure is described as a measure of 'the overall cost for comparison' of different mortgages. The APR figures are helpful in showing the impact of fees and other costs on the overall cost of debt. But they are not helpful in assessing the relative merits of mortgages with very different risk characteristics. It is understandable that the FSA places emphasis on such calculations, though they may encourage people to think of the cost of variable-rate mortgages based on unchanged short-term interest rates as a reasonable measure of the overall likely cost of a mortgage. This is a further reason why the suitability assessment should ensure that borrowers understand the sort of uncertainty over re-payment profiles they may be facing.

4.49 The FSA has adopted a standardised measure of APR, adapted from that defined in the Consumer Credit Regulations 1980, to be used in mortgage promotions, comparative tables etc. as well as in the pre-sale disclosure form.<sup>22</sup> While APR calculations for products within the scope of the Consumer Credit Directive have been standardised by an APR directive,<sup>23</sup> the FSA is free to adopt a measure suitable for mortgage products and it consulted on the calculation of APR for mortgages in 2001 (FSA, 2001a).

4.50 A potentially more informative measure of APR could be calculated based on expected interest rates over the life of the debt. This would provide a better figure for comparing the likely cost of variable-rate mortgages with fixed-rate mortgages; it could be used instead of, or in addition to, the standard APR. Such a figure could be based on the forward rates implied by the yield curve. The Bank of England publishes implied forward rates on a daily basis and these could be used as

<sup>&</sup>lt;sup>22</sup> FSA Handbook, MCOB 10.

<sup>&</sup>lt;sup>23</sup> Council Directive 90/88/EEC.

a standardised source for calculating expected APR.<sup>24</sup> Of course focusing on a single number for the comparison of mortgages with different risk characteristics is always unsatisfactory and there is no substitute for looking at different possible scenarios.

4.51 The systems costs to firms in having to make a calculation based on forward rates on a daily basis to include in all mortgage material would be significant. Borrowers may find the number difficult to understand. There is considerable evidence of borrowers misunderstanding APR currently (FSA 2001a, Annex A). Complicating the calculation further could lead to greater confusion.

4.52 It may be preferable to balance the information contained in the APR with separate information about interest rate changes. The FSA goes some way towards this in the pre-sale disclosure form by stating in cash terms the effect of a 1 percentage point rise in interest rates on the monthly payment, see Figure 4.2. This is helpful. But there is no indication of how likely it is that rates could move by one percentage point or by two percentage points or more. The FSA's consumer research which tested how borrowers would interpret this 1 percentage point warning found that some respondents, 'could not imagine that an increase of 2 % or more could ever occur' (FSA, 2002b). Given the strong evidence from many sources of a lack of understanding of interest rate risk, and the emphasis on APR calculations based on current interest rates in the pre-sale disclosure document, it would be helpful to strengthen the interest rate risk warning by giving some indication of the possible magnitude of change.

#### Figure 4.2 Extract from FSA pre-sale disclosure form

#### 7. Are you comfortable with the risks?

#### What if interest rates go up?

The monthly payments shown in this illustration could be considerably different if interest rates change.

• For example, for one percentage point increase in *[Lender's]* standard variable rate, your monthly payment will increase by around £75.

# RATES MAY INCREASE BY MUCH MORE THAN THIS SO MAKE SURE YOU CAN AFFORD THE MONTHLY PAYMENT

Reproduced from FSA illustration.

4.53 Over the last 50 years the standard deviation of the change in base rates over a two-year horizon is around 3 percentage points; over the last 10 years that standard deviation is 1.7 percentage points (see Annex B). Given that a large proportion of mortgage debt will still be outstanding after two years it may be sensible to show the typical variability in base rates over a longer period. The precise wording and design of the warning is a matter for the FSA and should be informed by their consumer research work. There is evidence that showing the impact of a change on the specific product's monthly payment is an effective way to deliver the message (FSA, 2000a).

<sup>&</sup>lt;sup>24</sup> The Bank of England's government liability nominal yield curves are derived from UK gilt prices and General Collateral (GC) repo rates. Forward rates are the interest rates for future periods that are implicitly incorporated within today's spot interest rates for instruments of different maturities. For products where the rate of interest is at the lender's discretion the calculation would need to assume a spread over the forward rate, the current spread over the base rate would seem to be the most sensible assumption.

4.54 The FSA has produced a generic consumer information sheet on mortgage risks, which is available on the FSA website. Among other things this short leaflet gives a clear explanation of the impact of a range of changes in interest rates on mortgage payments and draws attention to historic volatility in rates. It is to be expected that this leaflet will have a low circulation among borrowers. If this type of valuable information was included in the pre-sale disclosure form, and hence was personalized, it would be more likely to be read.

4.55 The compliance costs of making this change to the pre-sale disclosure form would likely be low but not insignificant. While firms' systems are likely to be able to cope with such minor changes to text, undertaking an additional simple calculation will create additional cost.

4.56 Recommendation: that the FSA requires that, in addition to the current warning, a clear indication of variability in rates over the past, and the impact of such variability on mortgage monthly repayment, is shown in the pre-sale disclosure form.

4.57 Recommendation: that the FSA revises its mortgage information leaflet to include, in a consumer friendly style, the type of information contained in Annex A and that it engages with the Council of Mortgage Lenders, the Association of Mortgage Intermediaries and other stakeholders to identify the most effective distribution method. It may be that the most effective time and method of distribution is along side the Initial Disclosure Document which firms will be required to send to customers before they apply for a mortgage. If customers receive the leaflet early in the sales process there is a greater chance of it informing their decision-making.

# **IMPROVING FINANCIAL CAPABILITY**

4.58 The most effective way to improve households' understanding of mortgages, and financial products in general, is to improve their own ability to make informed financial decisions. Research by the Financial Services Consumer Panel reveals a low level of financial literacy in the UK: two thirds of consumers think that financial matters are 'too complicated for them' and that they do not know enough to choose suitable financial products (FSA, 2002). Addressing low levels of financial literacy is made more difficult by low levels of numeracy in the UK. Research carried out by the Office of National Statistics found that half the adult population in the UK had an understanding of numerical concepts that did not go beyond simple addition and subtraction, meaning that they were unable to understand percentages and other concepts vital for financial literacy (ONS, 1997). Lack of financial literacy is a problem across all of the retail financial services industry. It is very relevant in the mortgage market due to the scale and longevity of the commitment borrowers are typically taking on. There is much evidence of short-termism and a lack of consumer understanding of the risk characteristics of different mortgage products.

4.59 There are a large number of organisations, including some from the mortgage industry, involved in initiatives to improve financial literacy in the UK. The FSA has recently taken the lead in developing a national strategy for financial capability and has set up a steering group comprising senior representatives from the financial services industry, consumer bodies and the Government. The Financial Capability Steering Group is expected to publish its strategic priorities in Spring 2004. The scope of this FSA led strategy covers the delivery of financial education to consumers to help them identify and address their financial needs; the provision of targeted, digestible, printed information delivered at the appropriate time and place; and whether, and if so how, a generic advice service could be provided (FSA, 2003b).

4.60 Much of the research on, and discussion of, the level of financial literacy in the UK has focused on the implications for savings, pensions and unsecured debt markets. Implications for the mortgage market have received relatively little attention. The lack of longer-term financial planning and provisioning has been considered in some detail in the context of savings and pensions markets. The tendency for consumers to focus on the initial cost of debt has been considered with respect to unsecured borrowing. But the lack of consumer understanding of the risk characteristics of different mortgage products has received little attention. If consumers understood the concept of risk and return better, benefits would accrue across a wide range of retail financial markets, and that would most certainly include the mortgage market.

4.61 The Citizens Advice Bureau puts the ability to, 'choose between types of mortgage' and 'the ability to look ahead and take account of whether future interest rate changes make a fixed rate savings or borrowing product a better option than a variable rate alternative' among its key requirements for financial literacy (NACAB, 2001). In setting out its 2004-05 priorities for financial capability the FSA draws attention to a lack of consumer understanding of the risks of mortgage borrowing (FSA, 2004-05 Business Plan).

4.62 Recommendation: that the Financial Capability Steering Group includes improving consumers' understanding of the risks of mortgage borrowing among its strategic priorities.

**4.63** The Financial Capability Steering Group is also considering how its strategy can best be funded. Funding will need to come from a number of sources, and is likely to include an increased contribution from the FSA's budget.

4.64 In contemplating the scale of funding required, a comparison can be made between resources for enhancing financial capability and recent trends in advertising by financial services firms – some of which the FSA believes could be adding to the challenge of promoting consumer understanding (FSA, 2004). In the 2004 Financial Risk Outlook the FSA points out that firms advertising ways in which households can access credit tends to 'highlight how cheap and affordable the debt is in the short term', and that this is 'unlikely to help consumers understand issues such as the long-term affordability of debt' (FSA, 2004). Chart 4.3 shows the growth in advertising spend in recent years by the UK financial services industry.



4.65 Total spend on advertising was around £1.8 billion in 2002. The most significant growth over the last two years has been in advertising of mortgages, credit cards and personal loans (spending was around £1 billion in 2003). The FSA's total budget for consumer relations work in 2003-04 was less than £10 million.

4.66 Recommendation: that the Financial Capability Steering Group seeks to increase the financial resources dedicated to improving financial capability and that part of that funding comes from a levy on the financial services industry.

5.1 Competitive pressures on lenders shape both the pattern of pricing in the UK mortgage market and the nature of products offered. Lenders in the UK face intense competition for new business and are under pressure to create products that match the perceived needs of borrowers – even when those perceptions may not always fully reflect people's real interests. The structure of pricing and the range of products reflects this competition – which in itself is desirable – but it may also reflect the tendency of many borrowers to focus excessively on the level of the initial payments and insufficiently on the range of possible repayment costs some years ahead. This section reexamines the evidence presented in the Interim Report and it reflects the considerable consultation that followed it. This section describes recommendations for how some of the undesirable features of pricing in the mortgage market may be removed, or at least reduced.

# THE CURRENT STRUCTURE OF PRICING IN THE UK

5.2 Table 5.1 gives an indication of the pricing of a range of mortgage products in the UK market in February 2004 (figures for October 2003 are shown in Table 5.1 of the Interim Report). The underlying data are from the Financial Services Authority (FSA) comparative tables where products offered by most UK lenders are listed. The first row shows the average rate charged on discounted variable-rate mortgages. These are mortgages with no overhanging redemption charges – borrowers can remortgage without any redemption charge at the end of the discount period. The discounts are available for two years after which borrowers would usually move onto the Standard Variable Rate (SVR) of the lender. These are mortgage products that have become increasingly popular in recent years. The second row shows pricing of variable-rate mortgages where there is no initial discount; here borrowers would not move onto the SVR after an initial period. Just over half of these mortgages were tracker mortgages where the rate charged is at a fixed margin over a reference rate, usually the base rate.

Mor	tgage	LIBOR/Swap	Difference	Arrangement	Number of	Number below	Cheapest deal
rate	s (%)	rates (%)	(%)	fees (£)	products	LIBOR/Swap rate	per product (%)
Discounted Variable	3.96	3.92	0.04	322	39	21	3.39
Variable-rates for term	4.64	3.92	0.72	160	44	0	4.05
Standard Variable-rate	5.58	3.92	1.66	_	79	0	4.30
2 year fixed	4.97	4.77	0.20	325	43	19	4.24
5 year fixed <sup>1</sup>	5.34	5.01	0.33	327	41	8	4.80
10 year fixed <sup>2</sup>	5.65	5.11	0.54	357	13	0	5.19
25 year fixed <sup>3</sup>	5.89	5.14	0.75	397	2	0	5.78

#### Table 5.1: Pricing of mortgages - February 2004

<sup>1</sup> spread over four year swap – chosen because amortisation makes the 5 year swap somewhat too long for a benchmark maturity.

<sup>2</sup> spread over seven year swap – chosen because amortisation makes the 10 year swap substantially too long for a benchmark maturity.

 $^3$  spread over ten year swap – in the US thirty year fix rate amortising mortgages are generally priced off 10 year swap rates.

Source: FSA comparative tables - 3/2/2004, Bank of England.

5.3 The third row shows the Standard Variable Rate of a sample of over 70 lenders. The final rows show data on fixed-rate deals of various lengths: two, five, ten and 25 years. As with the variable-rate mortgages described above these products do not have overhanging redemption charges.

5.4 Table 5.1 presents a snapshot picture of pricing in the UK market; the figures reflect rates reported on the FSA comparative tables on 2nd February 2004. In February new borrowers could choose from a great many discounted variable-rate deals that offered them mortgages with sub-LIBOR initial rates of interest. Over half of the discounted deals had interest rates under the one-month LIBOR rate of 3.9 per cent. Several deals were at initial rates well under 3.75. The average of the rates charged on these discounted deals was close to LIBOR. Two-year fixed-rate deals were also priced a little over two-year swap rates. If we take money market rates of interest as an indication of the marginal cost of funds, these discounted and two-year fixed-rate deals seem to offer lenders little in the way of a profit margin. Lenders could earn almost the same rate of interest as they were receiving on discounted and two-year fixed-rate mortgages.<sup>1</sup> It is plausible that a majority of lenders whose rates are reported in the FSA tables were making a loss on their discounted and two-year fixed rates.

5.5 European Economics (1999), in a report for the FSA on the compliance cost of extending financial regulation to mortgage advice, found that 'one industry source estimated margins on new mortgage advances to be typically around 0.4 per cent too low to cover costs.' Margins below cost had been supported by 'a proliferation of upfront charges and redemption penalties' and a 'cross-subsidy from existing borrowers, who may face rates one percentage point higher than new borrowers.' Both the two-year fixed-rate mortgages and the discounted variable-rate mortgages reported in Table 5.1 have no overhanging redemption penalties; both products generally switched onto the lender's Standard Variable Rate after two-years. At this time the spread of the average Standard Variable Rate over one-month LIBOR was 166 basis points, though the majority of SVR's were closer to 200 basis points over LIBOR.

5.6 It is hard to escape the conclusion that many lenders are continuing to offer new borrowers money at rates that could only make commercial sense if they were either subsidised by existing customers already paying the Standard Variable Rate (SVR) or if there was an expectation that a substantial proportion of those taking the low initial rates would subsequently switch onto the SVR, despite there being no overhanging redemption charges.

5.7 Variable-rate mortgage products where there was no switch onto a Standard Variable Rate were, on average, priced at around 72 basis points over one-month LIBOR. No lender offered a rate below LIBOR on such deals.

5.8 Long-term fixed-rate deals, where the prospect of a borrower switching onto a Standard Variable Rate is remote, were priced at a margin over comparable swap rates of between 54 basis points (for 10 year fixes) and 75 basis points (for 25 year fixes). These spreads are higher than those reported in the Interim Report for October 2003 when spreads were 32 basis points and 46 basis points respectively. But the margin on ten-year fixed-rate products remains less than that on the variable rate for term. This margin on ten-year fixed-rate deals – of just over 50 basis points – needs to cover the costs of administering loans over a sustained period and generate a profit margin. Since

<sup>&</sup>lt;sup>1</sup> Lenders tend to charge arrangement fees to borrowers on mortgages and so might create a small margin over the marginal cost of funds in that way. Arrangement fees also need to pay towards the costs of marketing, arranging and servicing mortgages.

the longer-term fixes typically had early redemption charges the value of the option to prepay the mortgages – which is expected to be reflected in the margin over swap rates – may have been fairly small. But it was not zero and still had to be covered by a spread of between 50 and 75 basis points.

The implications of the figures in Table 5.1 is that even though some lenders were setting 5.9 thin margins on some longer-term fixed-rate deals, the margins on discounted deals and on twoyear fixes (which for many lenders are effectively a form of discounted lending with the prospect of borrowers moving on to SVR in two years) were very much lower. The two-year discounted deals are likely to be very attractive to borrowers focusing on the scale of their initial repayments on mortgages. The two-year discounted deals are probably only feasible because a substantial gap exists between such rates and the Standard Variable Rate – a gap of over 180 basis points for many lenders. The substantial number of borrowers paying Standard Variable Rates - a group that may currently constitute more than a third of all borrowers and a little over 20 per cent of all mortgage loans outstanding - allows pricing of this sort to be feasible. Not all of those paying SVR will have received a discount in the past and many of those that did will not have received a discount (relative to SVR) as large as that which current new borrowers can get. So there is an element of crosssubsidisation from some (and probably the majority) of existing payers of SVR to new borrowers. Within a particular group of new borrowers with discounted variable-rate mortgages there will also be an element of cross-subsidisation from those who remain on the SVR after the discount period is over and to those that are quick to move to another product paying less than SVR. So there are different types of cross-subsidisation going on. But what is not in any doubt is that we have a structure of pricing in the UK where it is common for two borrowers with the same lender to end up paying substantially different prices for essentially the same commodity - an amount borrowed against the collateral of a residential property. In fact the degree of difference is underestimated by a simple focus on the mortgage interest rate since those paying SVR tend to have lower loan-tovalue and lower loan-to-income ratios that those on discounted variable rates and so on a riskadjusted basis the price difference is higher than suggested by Table 5.1.

5.10 The Building Societies Association as part of their submission to the Final Report make the following observations on the structure of pricing and of the analysis of it in the Interim Report:

'It is of course possible that there is no, or little, cross-subsidisation between new and existing customers and that, rather, cross-subsidisation takes place within an individual mortgage account. It could be argued that most customers of building societies and other lenders who are currently on a standard variable rate (SVR) previously obtained a discount, the discounts merely representing a shift, within the mortgage repayment period, of interest payments. Clearly, such arrangements would reflect the income profile of some borrowers. However, the Association can offer no evidence that those currently paying the SVR enjoyed a discount broadly equivalent to the 'excess' they are currently paying and in any case there are no arrangements in place in any building society – or any other lender – to ensure that once a discount has been 'repaid' the borrower is moved on to a lower rate. Accordingly, building societies support the view that cross-subsidisation of the type described in the report is likely to be occurring (in many but not all lenders) and is undesirable.'

5.11 This apparent cross-subsidisation, which in itself is undesirable, has as a side effect that longer-term fixed-rate mortgages with flat repayment schedules – where sustainable margins over the marginal cost of funds are unlikely to be under 50 basis – appear expensive.

5.12 It is important to be absolutely clear about what is, and what is not, problematic with the pattern of pricing in the UK. Mortgages whose initial monthly payments are lower than they later become are not undesirable. Far from it. In an environment where many people are credit constrained and where many hope – but cannot be sure – that their incomes will be higher in the future then there are advantages in having the profile of payments gently rise. But how the profile of payments can rise needs to be transparent. How such mortgages are made commercially viable should not rely on price discrimination and cross-subsidisation. If those low initial payments can rise *both* as a result of a planned rise in the margin over money market rates *and* because of a rise in the general level of market rates then the risks need to be well understood. It is very clear that these conditions do not generally exist now in the UK mortgage market.

# SUSTAINABILITY OF THE CURRENT PATTERN OF MORTGAGE PRICING

5.13 The aggregate amount of cross-subsidisation depends on the relative prices of different types of debt and on the number of borrowers on the different mortgage deals. If the number of people on SVR is insignificant, or is likely to fall rapidly, then the aggregate impact of cross-subsidisation is likely to be small or at least become so. In that case there would be more limited scope for lenders to offer large "upfront" discounts to attract new borrowers. Alternatively, if the proportion of borrowers on SVRs was large, and the stock of their debt was significant and likely to remain so, the pattern of pricing, with high margins on SVR, could continue to have a sizeable impact on the market.

5.14 An important aspect of the mortgage market in recent years has been the substantial growth in remortgaging (see Chart 5.1). The chart underestimates the extent of people switching their mortgage as the figures do not include cases where the borrower moves to a new deal with their existing lender. The number of borrowers remortgaging has increased for a number of reasons. First, the margin of SVR over LIBOR has risen over recent years from around 100 basis points in September 1996 to an average of around 170 basis points in February 2004. Over half of lenders had SVRs in excess of 180 basis points over LIBOR (the median was 182 basis points) in February 2004. This compares with a substantial number of short-term deals where the interest rate is close



to LIBOR or to the relevant swap rate and where there are no redemption charges at the end of the deal. Borrowers paying SVR therefore have significant financial incentives to remortgage – though some may face considerable costs in doing so. Second, remortgaging has been encouraged by the fall in base rates since 2001 that has enabled a number of borrowers to increase their debt while reducing or maintaining the level of their current monthly payments. Third, the rise in house prices has substantially increased existing borrowers' equity in their houses. A significant number of borrowers have sought to extract some of their housing equity gains.<sup>2</sup> Finally, the sharp growth in the use of intermediaries has facilitated the growth in remortgaging.

5.15 Despite the growth in remortgaging the proportion of loans on SVR remains significant. Data from CACI presented in Tables 5.2 and 5.3 show that just under 35% by number and 21% by value of the mortgage book were on SVR in December 2003. (These numbers are lower than those reported in the Interim Report since when CACI have reclassified some mortgages after consultation with lenders. There remains considerable uncertainty about the proportion of mortgages paying Standard Variable Rates or close to it).

Table 5.2: Pro	portion of m	ortgage stock l	by category o	f mortgage pro	oduct – number
		67 67		67 67 1	

	1998	1999	2000	2001	2002	2003
	per cent					
Variable <sup>1</sup>	64	61	52	44	39	35
Discounted	12	14	15	18	21	18
Capped	4	5	6	6	3	2
Fixed	19	20	20	21	20	25
Tracker	0	0	7	9	14	17
Other	1	0	0	1	2	3

<sup>1</sup> Includes premuim rate mortgages (which do not include sub-prime or buy-to-let mortgages) that pay higher rates than Standard Variable Rates. Source: CACI Mortgage Market Database.

Table 5.5: Proportion of mortgage stock by category of mortgage product – val	Table	le 5	5.3:	Pro	portion	of	mortgage	stock	by	category	o	f mortgage	product	$-\mathbf{va}$	lu
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	1998	1999	2000	2001	2002	2003
	per cent					
Variable <sup>1</sup>	52	48	40	32	27	21
Discounted	16	18	19	23	26	22
Capped	4	6	7	7	4	2
Fixed	26	27	26	27	25	32
Tracker	0	1	9	10	16	20
Other	1	1	0	1	2	3

<sup>1</sup> Includes premuim rate mortgages (which do not include sub-prime or buy-to-let mortgages) that have higher interest rates than Standard Variable Rates. Source: CACI Mortgage Market Database.

> 5.16 The "back book" of borrowers paying SVR has halved by number and more than halved by value over the last six years. But although a smaller proportion of borrowers are paying SVR than before, the funds generated by each SVR mortgage – over and above money market rates (LIBOR) – are greater as the margin has risen over time. Chart 5.2, using data from the Bank of England, shows how the margin on SVR mortgages over LIBOR has widened since 1995.

 $^{2}$ Mortgage equity withdrawal has risen from £0.2 billion in 1998 to a little under £50 billion in 2003.



Different lenders make different commercial decisions about their Standard Variable Rates 5.17 and rates on discounted products.3 Many lenders apparently feel compelled to price their mortgages at rates that are initially below costs to acquire new borrowers in a market where competition is intense. Lenders claw back some profits on those borrowers who remain after the initial discounts have expired and move onto the SVR and also get substantial margins from existing customer who remain on SVR. Lenders who are pure profit maximisers will balance the benefits of setting a high SVR – generating a high margin from those who continue paying it – against the cost of reducing the flow of new borrowers moving on to SVR after a discounted deal ends and against the cost from existing borrowers exiting the "back book". But many lenders may not be maximising profits. Pure profit maximisation could involve charging a high rate to existing borrowers who - to a greater or lesser extent - are locked in; but it would not involve giving much of that profit back again to smart new borrowers who will move from one discounted deal to the next. A lender who was concerned about their share of new lending - and not just their profits would find it useful to use the extra margin from a significant part of the "back book" to buy more market share in new lending.

5.18 The precise extent to which short-term discounted mortgages are cross-subsidised is difficult to gauge. There are not any agreed measures of the equilibrium or sustainable margin in the mortgage market. One way of calculating what might be a sustainable, or equilibrium, margin is to consider a product that does not have an upfront discount and does not move onto an SVR. Such loans are described as "variable-rate for term" in Table 5.1; and half of these are trackers with the margin over a reference rate specified for the term of the mortgage. Given the margin remains close to constant for such mortgages the lender will make the same margin on these mortgages over time. Thus a margin of a little over 70 basis points is a plausible estimate of a sustainable profit margin currently in the UK. On that basis discounted variable-rate mortgage products that are

<sup>&</sup>lt;sup>3</sup> Discounted products is used in a more general sense to include some short-term fixed-rate mortgages that are priced below or close to the cost of funds and where the borrower moves onto the SVR at the end of the fixed-rate period.

priced at close to the cost of funds appear to be priced initially at around 70 basis points below a sustainable margin. Those paying SVR are paying, on average, about 100 basis point above an equilibrium price, though in many cases it is 130 basis points.

5.19 Lenders have increasingly marketed tracker mortgages, where the rate of interest is set at a margin over a reference rate (usually the base rate), to compete for new borrowers. There is considerable variation in the margin of trackers over the reference rate. Tables 5.2 and 5.3 show that the number of tracker mortgages has risen rapidly from close to zero in December 1999 to around 20 per cent in December 2003. Trackers are a mixture of 'stepped-rate' products with overhanging redemption penalties, trackers that run for a period of between two to five years before the borrowers moves onto the SVR of the lender and trackers for the term of the mortgage. Ignoring "stepped trackers", which have low initial rates followed by a period of higher rates, 10 per cent of trackers were priced below the money market cost of funds and none were available below base rates. A little under half of these mortgages offer flexible features including the ability to make over and under-payments and take payment holidays.

5.20 Despite the rapid growth in remortgaging the proportion of borrowers on discounted deals has actually fallen between December 2002 and December 2003. This is partly explained by the growth of fixed-rate lending, the vast majority of which is short-term deals. There has been a slight narrowing in the margin between LIBOR and discounts offered on short-term variable and fixed-rate deals since October 2000. Table 5.4 shows the pricing of mortgages for the ten largest lenders at October 2000 and February 2004. Over this period the average margin below LIBOR for discounted variable-rate deals, shown in the first two rows, fell from 25 basis points in October 2000 to zero. The average margin on short-term fixed-rate deals over the two-year swap rate, shown in the third and fourth rows, has risen from around three basis points to around 18 basis points. The reduction in discounts may reflect both the slight increase in the take up of discounted deals between 2000 and 2003 and the significant fall in the amount of the mortgage book that remains on the SVR – both factors may have reduced the scope to offer initial discounts. But the impact of falling numbers on SVR has been partially offset by a rise in the *average* margin of SVR over LIBOR over the same period – from about 150 to about 170 basis points.

	Mortgage rates (%)	LIBOR/Swap rates (%)	Difference (%)	Number of products	Number below LIBOR/Swap rate	Cheapest deal per product (%)
Discounted Variable						
October 2000	5.85	6.10	-0.25	8	6	5.55
February 2004	3.91	3.92	-0.01	8	5	3.64
Standard Variable Rate						
October 2000	7.59	6.10	1.49	10	0	6.75
February 2004	5.58	3.92	1.66	10	0	4.89
2 year fixed						
October 2000	6.25	6.20	0.03	7	3	5.54
February 2004	4.93	4.75	0.18	10	3	4.68

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Source: FSA comparative tables – 3/2/2004, Bank of England; Moneyfacts October 2000

# COMPETITION IN MARKETS WITH SWITCHING COSTS AND IMPERFECT INFORMATION

5.21 The current structure of pricing of many lenders depends on the extent to which households face switching costs and the degree to which borrowers are informed when making decisions. Where switching costs are significant, firms have incentives to use loss-leading discounts to gain market share. Lenders make profits on those borrowers who automatically move on to higher rates after the discount period is over and stay there, either due to switching costs or imperfect information. Although most discounted deals offered by lenders no longer have redemption charges that overhang the discount period, a number of borrowers will not move their loan and consequently pay a relatively high mortgage rate that is now typically around 180 basis points over LIBOR. The existence of switching costs or imperfect information therefore enables many lenders to offer extremely fine margins on short-term deals with higher prices later on for borrowers who do not switch to another deal. Lenders who deviate from this pattern of pricing may face difficulty attracting new customers since their ability to offer discounts is reduced.

#### Switching Costs

5.22 A recent Office of Fair Trading report (OFT, 2003) defined switching costs as 'a cost incurred by changing supplier that is not incurred by remaining with the current provider'. There may also be significant switching costs in changing products with the same supplier. The effect of switching costs is to allow lenders to charge a higher interest rate to existing borrowers; whether lenders use that ability is a separate issue. The existence of switching costs does not necessarily mean that average prices are higher. Lenders anticipate the higher profits to be made on existing borrowers on SVR and therefore offer low priced deals, such as two year discounted deals, to gain new borrowers. Once the initial discount is over, lenders then make a profit on the loans that remain on the SVR.

5.23 Switching costs can be broken down into:

- contract costs such as redemption charges, or the inability of existing customers to switch to deals that are only available to new customers;
- transaction costs such as legal and valuation fees, form filling; and
- search costs time taken to find the right product in the market.

5.24 Here we assess the extent to which each of these categories of switching costs affects pricing in the mortgage market.

5.25 Redemption charges are not likely to be a significant barrier to switching for most of those borrowers paying SVR. Most of the existing short-term deals on the market do not have overhanging redemption charges.<sup>4</sup> Most borrowers who remain on the SVR are therefore unlikely to be required to pay a redemption charge should they move their mortgage to a new deal or lender. The distinction made by some lenders between mortgage products available to new and existing customers allows some lenders to price discriminate between borrowers based on their differing

<sup>&</sup>lt;sup>4</sup> 13 per cent of the variable-rate mortgages (they are all "stepped-rate" mortgages with a low initial rate followed by higher interest rates) on the FSA comparative tables had overhanging redemption penalties.

switching cost rather than the risk associated with the mortgage.<sup>5</sup> The extent of price discrimination available to a lender will be linked to the degree of other switching costs. The fact that some lenders do not make all deals available to all borrowers adds an extra level of complexity, as borrowers have to find which products are available to them. More importantly they will typically incur significant costs in switching lenders if that is the only way to get the most competitively priced products.

5.26 There are a number of costs that a borrower has to pay to remortgage with a new lender. Table 5.1 showed that the average arrangement fee was around £320 and the valuation fee averaged £150. In addition the borrower needs a solicitor to act on their behalf in transferring the mortgage deed to a new lender, which may typically add an extra £350 to the cost of switching. There may be a number of fees from the existing lender such as exit fees, administration fees, deed fees etc which typically amount to around £80<sup>6</sup> (although exit fees can go as high as £200). These combined costs typically adds up to around £900 which is equivalent to about 50 basis points on the interest rate on a £100,000 mortgage over two years. Fixed-rate mortgages of ten years and over have slightly higher arrangement and valuation fees with the overall fees closer to £1,000. However, because borrowers are expected to stay on a longer-term fixed-rate mortgage for longer the transaction fees are usually spread over more years. Transaction fees on a £100,000 mortgage are therefore likely to add between ten and twenty basis points to the interest payment over the life of the loan.<sup>7</sup>

5.27 These costs largely reflect the real economic costs of transferring a mortgage to another lender. Unless the process is made more efficient, such costs are likely to persist. However a number of mortgage lenders offer to waive the arrangement fee and pay the cost of the valuation and legal fees for borrowers switching from another lender. But of the 180<sup>8</sup> deals shown in Table 5.1, only four explicitly offered to waive an arrangement fee and to pay for the valuation.<sup>9</sup>

5.28 The other main transaction cost involved in remortgaging is form filling. It is essential for the mortgage lender to ensure that the borrower is the legal owner of the property and to establish the degree of risk associated with the mortgage. The lender needs to assess the risk of default and the extent to which they would be exposed to a loss should a default occur. The mortgage application form typically requires the borrower to provide information on their:

- personal details to verify the identity of the borrower;
- previous accommodation;
- occupation and income;
- credit history;

<sup>5</sup> Of the twenty largest lenders one half provide information on the range of mortgage deals available for new borrowers on their websites but do not supply any information for existing customers who are instead provided with a contact number. The approach of many lenders therefore lacks transparency. Of the websites that show deals available for existing and new borrowers (ten of the largest twenty lenders), there is an even split between those who allow all customers to take advantage of all their deals and those who make distinctions between existing and new customers.

<sup>6</sup> Estimate by the Consumers Association.

<sup>7</sup> Loans are assumed to last 7 years for a 10-year fixed-rate mortgage and 10 years for a 25-year fixed-rate mortgage.

<sup>8</sup> Not including SVR mortgages.

<sup>9</sup> Less than 10 per cent of the variable-rate mortgages on the FSA comparative tables do not charge either an arrangement fee or a valuation fee. Lenders may also be willing to waive fees on some mortgages arranged through intermediaries or for individuals who negotiate.

- personal finances including other loan commitments;
- property details;
- mortgage loan details;
- solicitor details;
- bank account details;
- other information such as criminal record, insurance claims and property use.

5.29 A typical application form amounts to approximately nine pages. In addition, the borrower also has to provide proof of their residence and income.<sup>10</sup> This generates substantial additional switching costs. To some people these costs are very significant. Once again remortgaging with the same lender does not require the borrower to provide such information.

5.30 Transaction costs are therefore likely to be a significant deterrent to borrowers switching lender. Such transaction fees have the potential to provide lenders with some power over pricing of mortgages to existing borrowers. The scale of the difference between SVR and rates available to new borrowers suggests that this power has been widely used, albeit in an environment where the number of those who have been willing to remortgage has been growing and the number paying SVR falling. The borrower may avoid paying most of the transaction fees if they can stay with the existing lender and switch to a new loan.

5.31 Although contract and transaction costs can be a significant barrier to switching, what has been termed "search costs" are potentially as great a deterrent to remortgaging. Although there can be costs associated with remortgaging with a new lender, existing borrowers paying SVR usually have the potential to switch to a lower rate deal with their existing lender – albeit at a higher mortgage rate or arrangement fee than may be available to new customers. This suggests that the inertia of many borrowers who remain on SVR is likely to be related to the lack of awareness of their ability to reduce their outgoings by remortgaging. This raises a series of issues about information.

#### Imperfect information

5.32 The Office of Fair Trading research paper 11 (OFT, 1997) defines three categories of information that consumers require to make informed decisions:

- the price of the product and of other products (complements and substitutes);
- the quality of the product (relative to substitutes);
- the terms of trade (location of supplier, date of delivery etc).

5.33 Shortfalls of information in any of the categories make consumers decisions increasingly difficult and may lead to consumer detriment in that the consumer may not buy:

- the cheapest product available (allowing firms to maintain dispersions in price);
- the most appropriate product (particularly in the case of complex problems).

<sup>&</sup>lt;sup>10</sup> Unless the application is a self-certification mortgage

- 5.34 There are two main reasons why consumers may have imperfect information:
  - Learning costs are high. Where information is difficult for households to process, and they purchase a good infrequently, a consumer may invent simple rules on which to base decisions.
  - Search costs are high. In such instances households require a large expected gain to continue searching.

5.35 Firms are likely to use the way consumers process information when deciding what information to disclose on a product. Information is likely to be supplied where it is expected to boost sales by more than the cost of producing and disseminating the material. The OFT report suggests that firms may not disclose all the relevant information in order to:

- '... withhold information about price dispersions' (possibly in an attempt to price discriminate).
- "... price discriminate between consumers, charging customers for whom search is expensive a higher price than consumers who are willing to search more".

5.36 This suggests that borrowers who remain on high SVR may have high search costs. The OFT report notes '... although better educated consumers face a higher opportunity cost of time, they require less time to arrive at a fairly accurate picture of all the facts relevant to a particular purchase decision. If this is the case, then lower income consumers tend to pay higher prices than high income households.' FSA (2001b) finds 'Those with higher incomes are more likely to make a change [remortgage].' This suggests that on average low-income households may pay a higher mortgage rate than other households.

5.37 Furthermore the OFT report states 'Once this behaviour begins [discriminatory pricing], it can easily result in a Nash equilibrium in the sense that the outcome is stable because no firm has the incentive to return to the fully transparent pricing model'.

#### The rationale for intervention in the mortgage market

5.38 The current structure of pricing in the UK mortgage market has several unfortunate implications:

- Many existing borrowers are unfairly treated, paying a higher price than others for essentially the same product. The cost of supplying funds to an existing borrower is no different from the cost of supplying funds to a new borrower. Indeed, if pricing differentials were based solely on the risk to the lender, existing borrowers would on average have lower mortgage rates than new borrowers. The current pricing structure works against a substantial proportion of existing borrowers perhaps over one third of borrowers are paying SVR. This depends upon a combination of their lack of information and non-trivial switching costs. The fact that many such borrowers will put up with paying higher rates than others does not mean it is fair that they do.
- Discounts on mortgages by some lenders differ from special deals (loss leaders) offered on products such as baked beans. Special offers on baked beans are available to all; discounts on mortgages offered by some lenders are available to one group of consumers, new borrowers, while another group of consumers, existing borrowers, are excluded.

- Borrowers' choice between mortgage products is affected by a distorted structure of pricing. Longer-term fixed-rate mortgages appear expensive relative to short-term deals that are priced below or close to the marginal cost of funds and where the headline rate up front is the focus of marketing.
- The initial cross-subsidy to short-term mortgage deals plays to the tendency for borrowers' to focus on upfront deals rather than focusing on the cost over the term of the mortgage and associated risks.
- Resources are wasted as borrowers are encouraged by the pricing structure to move from one short-term deal to the next. Remortgaging to a new lender, which for many borrowers is the only means to get the most discounted deals, creates real economic costs (including borrowers' time, administrative, valuation and legal costs).
- 5.39 In summarising the structure of pricing the FSA (2000b) concluded:

'Research showed that products from some new entrants to the markets and some products offered by the main lenders to new borrowers and remortgagers were cheaper than those offered to long-standing borrowers. This suggests that mortgage rates offered on some products do not reflect the efficient cost of providing mortgages and that some consumers may therefore be paying more than they would in an effectively competitive market. The range and complexity of mortgage products available and the problems of poor information also made it hard for consumers to compare value'.

5.40 The size of the mortgage market implies that the total amount of consumer detriment may be significant. There were around 11.5 million mortgages at the end of 2003 with a total stock of debt of over £740 billion. Given that just over a third of borrowers and over 20 per cent of the debt remains on SVRs, the costs involved are substantial.

5.41 A number of commentators have suggested that intervention is not required to tackle cross-subsidisation. They predict that the proportion of borrowers paying SVR will become insignificant in a few years. Nevertheless, action may be justified as:

- There is no certainty that the proportion of mortgages that will remain on SVR will now fall sharply and quickly;
- Any fall in the proportion of mortgages on SVR will take time. In the meantime a large number of borrowers will pay higher mortgage rates and the distortions to pricing in the mortgage market will continue;
- Borrowers who remain on SVR are likely to be those with higher switching costs or who lack information that would allow them to shop around;
- Action to hasten the fall in the proportion of borrowers who are on SVR is not opposed by anyone who has a good argument that the current structure of pricing generates real advantages. The strongest argument they have is that the current pricing structure will not last long. If so there are no arguments against hastening its demise.

# Regulation of the mortgage market

5.42 The review consulted with the Office for Fair Trading (OFT) and the Financial Services Authority (FSA) to find out which organisation had the powers to implement the recommendations of the review. The FSA's powers that enable them to implement the Review's recommendations are described below.

5.43 Following consultation by HM Treasury, the FSA was given responsibility for regulating the mortgage market under the Financial Services and Markets Act (FSMA) (2000). The Act set out the following statutory objectives:

- maintain financial market confidence;
- increase public awareness of financial matters;
- protect consumers;
- reduce financial crime.

5.44 In regulating mortgages the FSA chiefly aims to meet their statutory objectives of securing appropriate consumer protection and promoting public awareness. In this context public awareness relates to the disclosure of material that will among other things enable consumers to take informed decisions when shopping around. In order to meet these statutory objectives the FSA have drafted a set of rules, the Mortgage Conduct of Business Sourcebook, which lenders and other intermediaries in the mortgage market are required to abide by from October 31st 2004. The regulatory framework focuses on product features, contract terms and providing information to consumers.

5.45 As background to setting out the rules on disclosure the FSA ranked categories of information in terms of its importance to meeting their statutory objectives. Information that assists consumers shopping around and switching products was given the joint highest ranking – 'very important' (FSA, 2001a).

5.46 In addition to FSMA, the FSA also has power under the Unfair Terms in Consumer Contracts Regulation.<sup>11</sup> When launching an investigation under the unfair contract terms the FSA has to notify the Director General of the OFT. The general test of whether a term is unfair is based on whether, contrary to good faith, it could give a significant advantage to the firm that could cause detriment to the consumer.

#### POSSIBLE RECOMMENDATIONS TO PROMOTE FAIR PRICING

#### Ban pricing structure of discounts then SVR?

5.47 Table 5.1 showed that long-term fixed-rate mortgages appear expensive relative to mortgages with upfront discounts. Lenders are unlikely to earn a sustainable margin on these products during the discount phase and will instead rely on making a profit on a number of borrowers remaining inert and moving onto the more profitable SVR.

<sup>&</sup>lt;sup>11</sup> In general the OFT deals with unfair terms, but the FSA is termed a "qualifying body" with powers to intervene where it deems practices undertaken by companies involved in financial services are unfair on consumers.

5.48 One option would be to make it illegal to have an interest rate structured in a way that has an initial discount followed by a higher interest rate such as the SVR. Imposing such a ban has the potential to dramatically reduce consumer choice. For variable-rate products the only products that would be available would be those that are called "variable rate for term" or SVR mortgages. If such a rule was also applied to fixed-rate products the only product that would comply would be a fixed rate for the term of the mortgage – in most cases a 25 year fixed-rate mortgage. Reducing the market to a few simple products would substantially reduce the ability of lenders to match the terms of the mortgage to the characteristics of borrowers.<sup>12</sup> Yet if fixed rates were excluded from the regulation lenders could continue to focus on offering cross-subsidised short-term deals with the prospect of making profits on such mortgages when the short-term deal ended. Difficulties in tackling the pricing problem with a simple ban highlight the need for any intervention to be carefully targeted to avoid increasing consumer detriment.

5.49 Discounts do not necessarily have to be at the expense of existing borrowers. Mortgages which offer borrowers a lower payment at the beginning followed by a higher payment later can be useful as long as the borrower fully understands the implications of the profile of future payments. So for many reasons the strategy of trying to ban discounts is undesirable. Banning discounts on mortgage deals would only address the symptoms of the pricing problem and not the root cause. Discounts are not the problem; differential pricing between new and existing borrowers reflects switching costs of moving a mortgage and a shortfall in information on different prices across the mortgage market. Recommendations should address these issues directly. The Review does not recommend that the pricing structure of initial discounts followed by higher interest rates is banned.

# **REDUCING SWITCHING COSTS**

#### Deals for all

5.50 Many lenders discriminate between customers on the basis of whether they are a first-time buyer, someone who is remortgaging from another lender or an existing customer.<sup>13</sup> Differences in mortgage rates offered to these different groups do not reflect differences in risk for the lender.<sup>14</sup> Rather, differential pricing appears to reflect the fact that for many existing borrowers switching costs are high enough to deter them from moving their mortgage to another lender despite the significant difference between discounted deals and SVR. Fees can often add around a thousand pounds to the other costs of switching a mortgage to another lender. Households are also likely to face higher search costs and a greater administrative burden if they move their mortgage to an alternative provider. The easiest and cheapest way for a borrower to move from a relatively expensive SVR mortgage to a cheaper deal would be to move to a new deal with the existing lender.

<sup>&</sup>lt;sup>12</sup> A further effect could be to make it difficult for lenders to offer what are termed "stepped-rate" products where the profile of the payments is tilted so that the borrower pays less at the start and more towards the end of the mortgage. Such products are useful for consumers who face substantial upfront costs and whose income is expected to rise rapidly over time.

<sup>&</sup>lt;sup>13</sup> In February 2004 a quarter of the twenty largest lenders explicitly adopted differential pricing between existing and new borrowers. Half of the lenders did not have a transparent policy with existing borrowers recommended to consult the lender to clarify the products available to them. The remaining quarter did not differentiate between new and existing customers.

<sup>&</sup>lt;sup>14</sup> Risk-based pricing suggests that differences in mortgage rates should reflect the probability of default (linked to loan-to-income ratio) and the expected loss in the case of default (linked to the loan-to-value ratio). Existing customers on average have lower loan-to-income and loan-to-value ratios than new customers and under risk-based pricing should pay a lower mortgage rate.

Existing lenders already hold information on the borrower and their property which makes the task of switching mortgage much more straightforward. Excluding existing customers from deals available to new customers prevents them from taking advantage of the best deals on offer, raises their incentive to move lenders, results in some borrowers incurring greater costs when they change mortgage, and increases the difficulty to the existing borrower of finding a deal that is available to them.

5.51 In a submission to the Review the Council of Mortgage Lenders discussed the option of making all deals available to all borrowers:

'Require all lenders to offer all products both to new and existing customers. A number of lenders already do this, and the practice could be extended to all lenders. This might accelerate the existing trend for cross subsidies to be removed from the market due to substantial remortgaging levels. But it also cuts across competitive and regulatory pressures on lenders, under Basel 2, to introduce more risked-based pricing in the future.'

5.52 It is indeed likely, as the CML suggests, that making products available to all customers will accelerate the trend for cross-subsidisation to be removed from the market. But making all deals available to all customers is not inconsistent with risk-based pricing. There are many different risk characteristics which a lender would legitimately wish to charge a different price for. For instance differences in the amount put down as a deposit on the property, variations in the mortgage relative to a borrower's income and differences in their credit history are all legitimate reasons for differences in mortgage rates. While these are legitimate reasons for mortgages to have different prices, differences in price based simply on whether a borrower is a new or existing customer has no link to risk at all.

# 5.53 Recommendation: that the FSA requires that lenders make their full range of mortgage products available to all borrowers.<sup>15</sup>

5.54 If the FSA implements this recommendation they may need to pre-announce a date from which deals would be available to all. Some lenders currently base their pricing of the mortgage book on the profits they expect to make on existing customers. By removing a barrier to existing customers switching, the validity of these pricing assumptions could be undermined. The FSA would need to assess a timescale for implementing this recommendation so that it did not lead to significant market disruption. A typical discount lasts for around two years. Two years would therefore be a plausible upper bound on the timescale for the market to adjust to a new regime where all deals need to be available to all customers without undermining lenders' profitability.

5.55 The removal of any barriers to existing borrowers taking advantage of the best-priced deals is likely to have significant effects on the pricing of mortgages. Removing a significant barrier to some existing customers switching to the best priced deals is likely to lead to a fall in the number of borrowers paying SVR over time. As the funds generated by existing borrowers paying SVR falls so there would be less scope to offer large initial discounts on variable and short-term fixed-rate mortgages. The price of discounted mortgages could therefore rise while the average interest rate paid on existing mortgages falls. There is little evidence of monopoly profits being earned by lenders in the UK. This suggests that the extra margin currently earned from existing borrowers paying SVR is largely channelled to other borrowers. The scale of that cross-subsidisation would be lower if deals were available to all customers.

<sup>&</sup>lt;sup>15</sup> Lenders must of course be free to vary the price of a mortgage to reflect differences in risk between borrowers.

5.56 Some commentators have suggested that the current pricing structure is helpful in that it provides support to new buyers at the point when the cost of servicing their debt is likely to be high relative to their income. Removing the amount of cross-subsidisation in the market, and thereby potentially raising the cost of the cheapest upfront mortgages for new buyers, might have a negative effect on the demand for housing. However the advantage to borrowers of having lower payments at the beginning of the mortgage need not depend on cross-subsidisation. Section 2 highlighted a number of alternative ways that borrowers could have a low upfront payment without generating sharply rising monthly payments over the lifetime of the mortgage, without negative amortisation, and without any cross-subsidisation. Mortgages that are "stepped-rate"<sup>16</sup> allow borrowers to have a lower payment in the early years that is compensated by higher payments later. Such profiles of repayment do not require explicit early repayment fees - they simply mean that the mortgage balance outstanding after the initial low start payments end is higher than it otherwise would be. Measures that may lead to the removal of the cross-subsidy from existing to new borrowers do not have to imply that demand for housing will be adversely affected. Lenders have the ability to create "upfront discounts" for new borrowers by restructuring their mortgage payments. This is fairer and more transparent than the pricing structure many lenders adopt.

5.57 There is a risk that some lenders could re-establish price discrimination and comply with the recommendation that all deals be available to all customers. They could create a new subsidiary that focused on acquiring new mortgages. The current established lender would then concentrate on maximising profits from existing borrowers, some of which could be used to cross-subsidise initial losses from the new subsidiary. The pricing in the new subsidiary could gradually become less competitive over time and profits used to finance the next generation of subsidiaries. However, following such an approach would have a number of potential drawbacks to any lender:

- setting up a subsidiary solely to acquire new mortgages would involve significant setup costs;
- lenders may be cautious about risking their established brand name by concentrating on maximising profits from existing customers. Research (CML, 2003) suggests that lender reputation is a key influence on borrowers' mortgage decisions;
- a subsidiary would take time to establish a reputation and could therefore be less successful at attracting new customers than the existing lender.

5.58 The recommendation that lenders have to make all their deals available to existing customers could be insufficient on its own to tackle distortions and discriminatory pricing. Other measures that target information disclosure to reduce switching costs are also required. The effectiveness of establishing a subsidiary to acquire customers would be less successful the more existing borrowers are aware of the pricing of mortgages across the market. The recommendations below are aimed at improving borrowers' information on the mortgages they have and the ones they could have.

# Ban redemption penalties on variable-rate mortgages?

5.59 Laws prevent lenders from combining redemption charges with variable-rate mortgages in both Belgium and the Republic of Ireland. Irish legislation restricts the use of redemption charges to cases where the lender has to cover potential funding gaps which can arise when the borrower

<sup>&</sup>lt;sup>16</sup> Stepped-rate mortgages can be on fixed or variable-rate terms.

redeems the loan. In the case of a fixed-rate mortgage redeeming the mortgage early when interest rate have changed can result in a funding gap. In the case of a variable-rate loan no such funding gap occurs. While discounts on variable-rate mortgages for new borrowers exist in Ireland they tend to be lower than in the UK, ranging from 35 basis points to 100 basis points, and for shorter periods of between six months to one year.<sup>17</sup> These differences in the pricing of variable-rate mortgages in the UK and Ireland are likely to reflect a range of factors including the ability of lenders to use redemption charges.

5.60 Evidence from the Irish mortgage market does not point to significant gains from banning redemption charges on variable-rate mortgages. Indeed such a restriction on the use of redemption charges could prevent lenders from offering certain sorts of variable-rate products that attempt to match payments to expected income growth. Mortgages which offer low initial payments based on a low initial interest rate require redemption charges to ensure that the mortgage is self-financing. After the initial discount, the rate of interest has to be higher to recoup the funds used to offer the initial discount. Tilting the profile of payments in this way combined with a redemption charge is fair as long as these features are clear to the borrower in advance. Without a redemption charge borrowers would have an incentive to move to another deal once the initial discount is over. Lenders would be reluctant to offer this form of discounted variable-rate product if borrowers could switch the mortgage without the lender recouping the funds used to offer the discount either through higher interest rate payments or a redemption charge.<sup>18</sup> The review does not recommend that redemption charges on variable-rate mortgages be banned.

# Simplifying the process of switching

5.61 The process of switching a mortgage to a new lender involves an application to the new lender, a valuation of the property and requires a solicitor to ensure that due legal process is followed. Although the process results in switching costs, the information gathered is essential to the new lender. There is little available evidence on the extent to which the process of switching a mortgage acts as a deterrent to moving to a better deal, but the costs are not trivial.

5.62 There are a number of ways in which the burden of form filling may be reduced in the future. Lenders and intermediaries are increasingly offering mortgage applications online which is likely to speed up a remortgage. Proposals to introduce e-conveyancing are also expected to increase the ease of remortgaging, as the timescale involved in transferring details between solicitors should be reduced.

5.63 While there is little evidence on the extent to which the process acts as barrier to switching lender, a survey shows that some borrowers perceive the process to be a barrier.<sup>19</sup> Recommendation: that the FSA creates a short user-friendly guide on the process of remortgaging to aid borrowers. This guide should be available through the FSA's consumer helpline and its website.

<sup>&</sup>lt;sup>17</sup> Source www.finfacts.com on 27th January 2004.

<sup>&</sup>lt;sup>18</sup> There are two alternative strategies lenders could follow to offer borrowers low initial payments. They could either a) let the interest rate on the debt vary in a predictable way over time or b) tilt the proportion of interest and capital payments away from that with a level repayment mortgage. The second strategy does not require redemption charges but the first strategy does even though it is really equivalent.

<sup>&</sup>lt;sup>19</sup> Nationwide (2004) state 'Many people mistakenly believe that switching their mortgage to another provider is a complex process.'

# Improved information disclosure

5.64 Borrowers who remain on SVR may do so because they do not have the information to enable them to shop around. To make informed decisions consumers need information on the relative prices of mortgages and the terms (such as redemption charges) attached to them. The following recommendations focus on providing existing borrowers with better information.

# **COMPARATIVE TABLES**

5.65 FSA (2001b) found that for the bulk of consumers shopping around was relatively restricted. Very many consumers were confused by financial products, lacked the required skills for financial planning and wrongly believed that there was little dispersion in the price of mortgages. The research focused on consumers actively seeking a mortgage. The information shortfall of existing borrowers paying SVR may be greater, with many borrowers unaware of the potential gains they could make from switching their mortgage.

5.66 One possible solution is to let the market fill the information gap. Newspapers regularly provide "best buy" tables that show some information on a few of the lowest priced products, often those with the cheapest upfront deal, on the market. "Best buy" tables may be useful in highlighting to new and existing borrowers some of the prices on the market. However they can only show a very limited selection of the thousands of mortgages available. While other private sector firms provide helpful comparative information, the lack of knowledge of the mortgage market across borrowers justifies the continued dissemination of comparative information by the FSA.

5.67 The FSA aims to reduce information asymmetries between mortgage buyers and suppliers by showing comparative tables on their website. The aim of the tables, among other things, is to enable consumers to make informed decisions when they shop around. The tables help existing borrowers to compare their current mortgage rate with what is available in the market.

5.68 The tables have information on:

- the provider;
- rate type (e.g. variable, fixed);
- initial rate (%);
- monthly cost (£s per month);
- the date that the deal ends;
- tie-in period (date redemption charges end);
- Standard Variable Rate (SVR) (%);
- monthly cost (£s per month); and
- 25-year APR (%).

5.69 Information is provided on the initial price, the length of any initial deal, the SVR which deals move onto after the end of a discount or fixed-rate period and the APR. The rational for using the APR appears to be that it is used widely to compare the cost of other borrowing such as consumer credit. The APR has a number of difficulties when comparing different mortgage products that were discussed in Section 4. A secondary table provides the costs of setting up a mortgage including valuation fees and arrangement fees.

5.70 The website also offers the potential to filter the range of products to the top 25 per cent or 50 per cent of mortgages based on a number of categories including the lowest initial price and the APR. These tools are powerful and enable consumers to quickly sift through the huge number of products to produce a more manageable group. However filtering in this way may have the side effect of reinforcing consumers' focus on one particular aspect of a mortgage, for example the initial cost. Information on the risks associated with short-term discounted deals may be better handled through other material.

5.71 Overall, the tables provide an extremely valuable resource for consumers. The main difficulty would appear to be in raising their profile with consumers, particularly amongst existing borrowers who may be unaware of the potential gains they could make by remortgaging. At the time of their launch there were around 7,000 visitors to the mortgage tables a month but this has fallen to around 1,000. Given that the number of mortgages taken out each month has recently been running at between 200,000 and 300,000,<sup>20</sup> and that there are a stock of about 11.5 million mortgages, the comparative tables would appear to be little used.

5.72 Recommendation: that the FSA requires firms to include the exact website address for the comparative tables (www.fsa.gov.uk/tables) and a short description of their purpose in all mandatory disclosure documentation.

# Pre and post-sale disclosure

5.73 The FSA propose to increase and standardise the information at the pre-sale stage by requiring lenders to provide information in the form of a pre-sale disclosure form. This form will provide the consumer with information on which to base their decision. The main drawback for existing borrowers is that the information is provided far in advance of when the borrower is likely to remortgage. The post-sale disclosure documents (annual statements and statements driven by changes in interest rates) would appear to be a better place to give information allowing households to assess the benefits of remortgaging.

5.74 The FSA regulations will improve information disclosure post-sale in two ways: through annual statements and through what is termed "event driven disclosure" – a statement that is sent to the borrower when the interest rate changes. Both forms of disclosure have the potential to increase existing borrowers scope to find the best mortgage.

# Annual statement

5.75 The FSA (FSA, 2001a) aims to achieve two things through the provision of annual statements:

- 'to allow borrowers to check their mortgage is correct';
- 'to allow borrowers to check that they are still getting the best deal'.

<sup>&</sup>lt;sup>20</sup> These numbers ignore borrowers who switch mortgage products with the same lender.

5.76 To achieve these aims the FSA requires the following information to be included in the annual statement:

- the type of mortgage;
- details of transactions during the year including interest payments (and interest rates) and fees;
- amount of outstanding debt;
- repayment and other charges should the borrower wish to repay at the time of the statement;
- when the early repayment charge ceases to apply;
- details of any tied products (such as a requirement to buy insurance through the lender) including when the requirement to buy a tied product ends.

5.77 Annual statements have the potential to improve the information available to consumers and thereby enable them to make better-informed decisions. While many lenders currently provide annual statements they generally do not provide the total cost of repaying the mortgage. Such information should make borrowers on SVR aware of their ability to move their mortgage without incurring significant costs from the existing lenders. Annual statements can act as a prompt to borrowers to shop around to improve their deal. Borrowers currently on SVR or those about to move onto SVR may be unaware of the alternative options available to them. It would help greatly if borrowers were better able to assess the relative price of their mortgage.

5.78 There are two ways disclosure could be improved at limited cost to lenders. First, the statements could include a reference to the FSA comparative tables. Second, the lender could include a leaflet of the current mortgage rates across all their product range with the annual statement. The Banking Code (BBA, 2003) sets a precedent with respect to informing consumers about the range of interest rates available on savings account. The Code states 'To help you compare interest rates on all our savings accounts more easily, at least once a year we will send you a summary of these products and their current interest rates'. Recommendation: that the FSA requires that lenders include, with Annual Statements, a leaflet setting out the current mortgage rates on all their products.

#### Force lenders to help borrowers to switch?

5.79 The success of increased disclosure depends on the extent to which the information is understood and acted on. An alternative approach could be to change the decision to move onto the SVR from a passive one to an active one. The FSA could amend their conduct of business rules to require that lenders have to actively offer all their mortgage products to a borrower once they do not face a significant redemption charge. Under the Banking Code, when the rate of interest on a savings account falls significantly, defined as a change of 50 basis points relative to the Bank of England base rate, the bank has to tell savers about other savings accounts and offer to help them switch to one of these accounts if they wish to.

5.80 Making lenders actively offer their mortgage products to existing customers who no longer face significant redemption charges would have to be justified on the basis that consumers were unable to understand the choices they face. Only if there were grounds for believing that borrowers were unable to understand the extra information on mortgages available from a lender that other

recommendations will generate would there be grounds for forcing lenders to actively help consumers to move between products. The Review does not recommend that lenders be forced to offer to help customers switch mortgage deals where they no longer face significant redemption charges.

# **COMPLIANCE COSTS AND BENEFITS**

5.81 The recommendations focusing on increased disclosure will add to the cost of lenders. Measures that are likely to result in increased cost include:

- Making deals available to all would require changing descriptions of product details. Changes are likely to involve the rewriting and reformatting of material. Costs would be lower the longer the lead-time as lenders have to change their promotional material over time anyway. A number of lenders would not bear any cost as they already offer all deals to all customers. There would not be any ongoing costs to implementing this measure after the initial one-off costs.
- The addition of a reference to the FSA comparative tables on pre- and post-sale disclosure forms is likely to require limited reprogramming of lenders' software. Costs will be one-off and will tend to be lower where lenders are already updating their software.
- The inclusion of a leaflet containing the current range of mortgage rates available from the existing lender along with annual statements will add a minor ongoing cost.

5.82 The precise costs of these measures are difficult to gauge. NERA (2003) produced a final report for the FSA on the economic costs of mortgage regulation. The overall one-off systems costs for FSA regulation were expected to be of the order of £36.4 million for lenders. However NERA noted that costs were 'difficult to allocate to individual proposals'. The system changes required by the Review's recommendations are small relative to those assessed by NERA and would therefore add a fraction of the cost.

5.83 NERA calculated the cost of extra disclosure at between three and six pence per item. On the basis of that calculation, and assuming a leaflet can be costed in this way, the recommendation of sending a leaflet once a year to each borrower (of which there are currently 11.5 million) could cost around £0.5 million.

5.84 The increased costs due to the recommendations have to be weighed against the benefits of fairer pricing. The recommendations will provide customers with information that should enable them to choose better value products. Although the overall benefits are difficult to gauge the FSA (1999) estimated that if 20 per cent of consumers took a better value mortgage then overall savings could be of the order of £30 million a year for every 10 basis point reduction in rates paid.<sup>21</sup>

<sup>&</sup>lt;sup>21</sup> Calculation based on a £60,000 mortgage.
# Alternative protection from nominal payment uncertainty

6.1 Fixed-rate mortgages provide certainty over the profile of nominal payments over some horizon and give insurance against the risk of rising interest rates. If there is some flexibility in the profile of repayments they can also allow borrowers to take advantage of falling rates, though redemption charges can limit the scope to do this. There is evidence that some borrowers value a high degree of flexibility in repayment profiles and that this discourages them from borrowing at longer-term fixed rates. But there are alternative ways in which borrowers can choose to protect themselves against interest rate fluctuations while maintaining significant flexibility. In this section we consider them and assess potential obstacles to their emergence.

#### **CAPPED MORTGAGES**

6.2 Capped mortgages, which put an upper limit on the interest rate paid, are an alternative means by which borrowers can remove some risks about the level of future repayments. Capped mortgages shield borrowers from rate rises above the level of the cap while allowing them to benefit from rate falls automatically.<sup>1</sup> Lending at variable rate in the US takes the form of adjustable-rate mortgages, also known as ARMS. They are typically capped mortgages, often with both lifetime and annual caps.

6.3 Capped mortgages are not very popular in the UK. Table 5.2 (page 49), using CACI data, shows that they made up only about two per cent of the mortgage stock, both by value and by number, at the end of 2003. In 2000 capped mortgages made up a significantly higher proportion of the market representing about seven per cent of the stock.

6.4 One plausible reason for the low take-up of capped mortgages is that they typically have significantly higher initial monthly payment rates than discounted variable-rate mortgages. The lender needs to hedge the risk that interest rates will rise above the cap, often through taking positions in financial derivatives, or else bear the loss when the cap is breached. This extra cost, or the extra risk to the lender, is reflected in the higher spread over the level of short-term rates (e.g. over base rates) that is found in most capped mortgages. Table 6.1 shows the results of a search for capped mortgage was 4.49%. Less than half of the mortgages on offer had initial rates under five per cent. On that date, the same tables yielded dozens of discounted variable-rate mortgages with no extended tie-in periods with initial rates under four per cent.

<sup>&</sup>lt;sup>1</sup> Collared mortgages have both a cap and a floor. Like capped mortgages, they protect borrowers from rate rises above the cap. But collared mortgages do not allow borrowers to automatically benefit from rate falls beneath the level of the floor. They are equivalent to the borrowers buying a cap and selling a floor. By adjusting the floor and cap levels, it is always possible to make the price of both options the same. When the mortgage is devised in such a way, the interest rate can be the same as that of an ordinary variable-rate mortgage. The borrower pays for the cap protection by forfeiting his right to benefit from rate reductions below the floor level.

	Initial		Tie-in	Redemption		Duration	Then	25-year	Flexible	
Provider	rate (%)	Until	period	penalties (%)	Cap level (%	of cap	moves on to	APR (%)	features	
Abbey	5.49	5/2/09	5/2/09	5	5.49	5/2/09	SVR	6.20	no	
Beverley	4.49	2/28/06	2/29/08	4	5.99	2/29/08	tracker	5.70	no	
Bristol & West	4.89	term	3/31/06	5	5.99	3/31/06	tracker	5.20	yes	
Bristol & West	4.99	term	3/31/06	5	6.15	3/31/06	tracker	5.30	yes	
Cheltenham & Gloucester	5.24	3/31/08	3/31/08	4-3-2-1	5.24	3/31/08	SVR	5.80	no	
Cheltenham & Gloucester	5.49	3/31/08	3/31/08	4-3-2-1	5.49	3/31/08	SVR	5.90	no	
Co-operative Bank	4.84	1/31/09	1/31/09	1	5.99	1/31/09	tracker	5.10	no	
Coventry	4.80	3/31/09	none	none	5.99	3/31/09	SVR	5.30	yes	
Lloyds TSB Scotland	5.24	3/31/08	3/31/08	4-3-2-1	5.24	3/31/08	SVR	5.80	yes	
Lloyds TSB Scotland	5.49	3/31/08	3/31/08	4-3-2-1	5.49	3/31/08	SVR	5.90	yes	
Norwich & Peterborough	5.14	1/5/07	1/5/07	3	5.14	1/5/07	SVR	5.70	no	
Norwich & Peterborough	5.29	1/5/07	1/5/07	3	5.29	1/5/07	SVR	5.70	no	
Source: FSA comparative tables, 20/02/04.										

#### Table 6.1 Capped mortgages

- 6.5 How great the cost of a cap on a variable-rate mortgage is depends on:
  - the level at which the cap is set. In Table 6.1 cap levels vary from 5.14% to 6.15%. Mortgages with higher cap levels tend to have lower initial rates;
  - the duration of the cap;
  - the likely path of future interest rates; and
  - the uncertainty in future interest rates around the central path.

6.6 In an environment where the nature of interest risk may not be well understood by many borrowers, where for many the initial cost is an overriding concern when choosing a mortgage and where many initial variable mortgage rates have been heavily discounted, it is understandable that capped mortgages are not very popular. Flow data available from the Council of Mortgage Lenders (CML) show that since the start of 2002 capped mortgages have never made up more than five per cent of new mortgages advanced (Chart 6.1). The data show a downward trend from the maximum of just under five per cent in the first quarter of 2002 to the current level of two per cent.



6.7 A second possible reason why the take-up of capped mortgages is low is that the range of capped mortgages on offer is somewhat limited. Table 6.1 contains just 12 products from eight different lenders. Some of the major lenders do not offer capped mortgages. If some intermediaries tend to work with a subsample of all lenders, this may limit the range of products that they offer to their clients. Table 6.1 shows that the longest capped period among the mortgages reported on the FSA website was just over five years. Out of the 12 mortgages available, 11 had substantial redemption penalties during the duration of the cap. Compared to the wide range of characteristics to choose from amongst discounted variable-rate and short-term fixed-rate mortgages, the choice of capped mortgage types is more limited. This is reflected in the opinion expressed in the personal finance pages of a newspaper in March 2002:

'The cap sets an upper limit on the rate you will pay but if rates drop your repayments will fall. However, capped-rate mortgages are thin on the ground...'2

6.8 The range of capped rate mortgages reflects limited demand. The next section examines the possibility of a stand-alone retail financial products emerging that could overcome a potential lack of flexibility. Stand-alone interest protection insurance has the potential to be tailored to match a borrower's preferences.

<sup>&</sup>lt;sup>2</sup> The Guardian, 21/03/2002.

### STAND-ALONE PROTECTION AGAINST INTEREST RATE MOVEMENTS

6.9 One way for borrowers to protect themselves against interest rate rises beyond a certain level is to buy interest-rate insurance. This protection could be sold separately from a mortgage, although it might be linked to it. In exchange for an insurance premium, the insurer would have the obligation (for some specified interval) to pay the borrower the difference between the level of a reference rate and a cap (for as long as that difference is positive) multiplied by the sum assured. For some period t the payoff is given by:

 $Max[(sum assured * (r_r-cap level)), 0]$ (1)

where  $r_t$  is the prevailing variable reference rate at time t specified in the contract. If the interest rate goes above the cap level, the payoff is calculated as the difference between the interest rate and the cap multiplied by the sum assured. If the interest rate is at the cap level or lower, there is no payoff. The maximum sum assured could be linked to the outstanding balance on the variable-rate mortgage – though it need not be. Whether it is or not should affect the appropriate tax and regulatory treatment of the product. In the case of a repayment mortgage, the amount assured might need to be adjusted after each mortgage payment to reflect capital amortisation.

6.10 As an example, take a protection contract that sets the cap at 6 per cent. Suppose that the assured amount is half of the outstanding balance on a mortgage. We assume that the repayments on the mortgage follow the contractual schedule. If the reference rate is the mortgage rate<sup>3</sup> and that rate rises above 6 per cent lifting mortgage repayments by say £100 a month above what they would be at six 6 cent rates, the insurer pays £50 a month to the borrower. This is equivalent to the borrower buying a separate cap on interest rates.

6.11 A separate insurance product held alongside the mortgage has the potential to be more flexible than a capped mortgage. The buyer can choose the term of the insurance, the proportion of the mortgage insured, the level of the cap and can even combine it with a succession of different variable-rate mortgages. This product could be provided by either the mortgage lender or by another insurance provider.

6.12 Borrowers in the UK already choose to protect themselves against different types of risks that affect their ability to make mortgage payments, such as unemployment or ill health. During the second half of 2003, 38 per cent of new mortgages and 24 per cent of all mortgages had Mortgage Payment Protection Insurance (MPPI).<sup>4</sup> This kind of general insurance pays the borrower's monthly mortgage payments for a specified period if the borrower suffers accident, sickness, or unemployment.

6.13 There are some potential difficulties with the development of a market in stand-alone interest rate insurance products: these relate to the uncertainty about their tax treatment and regulation of sales.

<sup>&</sup>lt;sup>3</sup> If the borrower's mortgage were a tracker mortgage referenced to the Bank of England's policy rate (base rate), the contract rate would naturally be the base rate and the match with the rate on the mortgage would be perfect. If the mortgage interest rate was the lender's SVR, the reference might be an index constructed with a group of lenders' SVRS. In this case, the match between the increase in mortgage payments and the mortgage protection payout could not be perfect.

<sup>&</sup>lt;sup>4</sup> CML data. 88 per cent of new policies were for accident, sickness and unemployment, 4 per cent for accident and sickness only and 8 per cent for unemployment only.

#### Possible obstacles to the sale of stand-alone interest rate insurance.

#### Tax treatment

6.14 If interest rate protection were classified as insurance for tax purposes, the money received if a payout was made would not be subject to tax, just as with any other insurance payouts. The premium paid would in principle be subject to Insurance Premium Tax (IPT). The general rate is five per cent, going down to zero per cent for products classified as long-term insurance. For IPT purposes, HM Customs and Excise follow the FSA's lead in terms of whether they would classify a product as general or long-term insurance.

6.15 Were the interest rate insurance product described above (the stand-alone cap) to be classified as an investment by the Inland Revenue, the compensation received when the cap is breached could be subject to Capital Gains Tax (CGT). Gains and losses from it could be treated in the same way as gains and losses from a derivatives position. The current annual CGT allowance for the year 2003-2004 is £7,900. Capital losses can be offset against gains, and capital losses can be carried forward indefinitely for offsetting purposes, so the premium could be offset against this  $\pounds$ 7,900. Assuming a taxpayer had no other capital gains in a fiscal year, only interest protection payments of over  $\pounds$ 7,900 in any one year would be taxable – and only payable on the part that exceeded  $\pounds$ 7,900. The CGT allowance could mean that relatively few people would in practice have to pay tax. But the tax treatment of derivatives seems unsuited to individuals, and it would be difficult to work out the yearly changes in the position. Borrowers would need to keep records necessary to work out the capital gain, such as the premium paid up front (considered a loss) and the yearly payments received.

6.16 If interest rate protection were considered as an investment but the government wanted to achieve tax neutrality with respect to capped mortgages, legislation in the annual Finance Bill would probably be necessary to alter its tax treatment. The concession could be limited to a sum assured not in excess of the size of the outstanding mortgage. While a tax concession could be granted to exempt payouts from CGT, buyers of this interest rate protection would still have to keep records of premiums paid for a long time. The reason is that a concession could not remove the right for taxpayers to be able to offset the initial premium against potential future capital gains from any of the taxpayer's other investments.

6.17 A key consideration for the Inland Revenue when deciding on the treatment of the income generated from interest rate protection would be whether the product allows the borrower to speculate and benefit from movements in the market or whether it only offers compensation for an adverse event. If the insurance could be sold on to the market when it was no longer wanted and could therefore generate a profit in favourable market conditions, it would be more likely to be treated as an investment.

#### **Regulation of sales**

6.18 A product classified as insurance by the FSA is subject to lighter regulation of sales than one classified as an investment. While the definition of an insurance contract is a matter of law, the FSA can issue guidance interpreting the law. The sale of investment products is regulated by the FSA's conduct of business rules as set out in the FSA handbook. The new FSA regulation of the conduct of business in insurance will come into force on 14 January 2005. The new regime will implement the European Insurance Mediation Directive (IMD) requirements. The main difference between the investment and the insurance regimes is that an insurance product has to be deemed as "suitable" rather than "most suitable" as is the case for an investment product. The requirements for registration are also stricter in the case of investment sales.

6.19 Recommendation: that the Government treat interest payment protection as insurance for tax purposes, provided that the sum assured is no greater than that part of a mortgage with a variable interest rate. The income received as compensation should not be subject to tax. For neutrality with the treatment of capped rate mortgages, the premium on stand alone interest rate payment protection should pay a zero rate of insurance premium tax.

6.20 Recommendation: that the FSA treat such a product as insurance for regulation of sale purposes.

6.21 Although the treatment for tax and regulation are independent decisions it would be desirable to treat consistently the product as an insurance contract. For that to be the case the seller will need to show that the buyer has a variable-rate mortgage with a balance no smaller than the sum assured.

6.22 The classification of interest payment protection as insurance is natural; the product protects borrowers from an adverse event that results in a quantifiable financial loss and over which they have no control. Interest payment protection of the sort described above – limited to the mortgage balance, not allowing the borrower to speculate, and that triggers compensation in the case of an adverse event – is insurance. Interest payment protection is not dissimilar to other types of insurance associated with a mortgage that people buy, such as MPPI. The event that triggers compensation (a rise in interest rates) is an adverse event from the point of view of the borrower and an event defined in a clearer way than loss of income due to unemployment.<sup>5</sup> An additional reason to justify the tax treatment of interest payment protection as insurance is that the payment protection afforded by a capped mortgage when rates are above the level of the cap is tax-free to the borrower. A capped mortgage is equivalent to a variable-rate mortgage plus an interest payment protection policy. It would be desirable to treat the two products sold separately in the same way.

6.23 Capped mortgages and stand-alone interest payment protection are an alternative to standard fixed-rate mortgages which also afford borrowers some certainty about future nominal interest payments. They allow consumers to enjoy some of the features of mortgages that have tended only to be available with variable-rate deals – initial discounts and flexibility in payments profiles – while gaining the insurance element of a fixed-rate mortgage. But fixed-rate mortgages that give borrowers flexibility in payments profiles and low initial payments are also feasible and some have been offered. Fixed-rate mortgages with stepped-up payment profiles and part-fixed/part-variable mortgages have characteristics that can make them attractive to borrowers who value flexibility or are particularly concerned about initial monthly payments. In the next section the design of such products is considered.

<sup>&</sup>lt;sup>5</sup> The CML has published a "MPPI Baseline Cover Specification" – the minimum cover that should be offered to borrowers– that features exclusions to cover if, for instance, work is temporary, unemployment is seasonal, or the illness is caused by alcohol abuse.

## FIXED-RATE MORTGAGES WITH STEPPED-UP REPAYMENT SCHEDULES

6.24 A fixed-rate mortgage with a stepped-up repayment profile is an alternative product that allows borrowers to get the low start payments usually associated with discounted variable rates but without having to take on any uncertainty about the profile of repayments. This was illustrated in Section 2 of this Report. In its simplest form, a stepped fixed-rate mortgage has increasing monthly payments over some part of the fixed period. The borrower's payments are initially lower than those on a comparable level-repayment mortgage. Such a product could generate negative amortization if the initial payment is set at a very low level. The loan balance could actually increase during the first few years if the payment is less than the fixed rate times the mortgage balance.

6.25 In principle there is nothing intrinsically bad about negative amortisation – though many lenders may be wary of allowing mortgage balances to increase. But the scope to offer low initial payments without generating negative amortisation is substantial. One way to avoid negative amortisation is to have a mortgage that during the initial years is an interest-only mortgage. As an example, a borrower with a 25-year repayment mortgage could only pay interest on his or her balance for the first 2 years, and then would move on to payments that repay the balance over the remaining 23 years. The drawback is that with only one "step" in the profile of payments the size of the increase would be large (as illustrated in Table 2.1). But as the example illustrated in Table 2.1 showed there is enormous potential to design fixed-rate mortgages that have low initial payments, repay over 25 years, do not have negative amortisation and never have payments that rise more than a relatively small amount from one year to the next and then only rise for a few years. Table 6.2 reproduces some of the information in Table 2.1 to illustrate the scope for low start payments with fixed rate mortgages. Here we take three mortgages – two fixed-rate and one with a discounted variable rate – and just focus on repayments over the first six years.

	M1-Interest o on a fixed	M1-Interest only for two years on a fixed-rate mortgage			nted variabl	e	M3-Gradually rising payment of fixed-rate debt		
	Outstanding	Monthly	Weekly	Outstanding	Monthly	Weekly	Outstanding	Monthly	Weekly
year	capital	Payments	rise	capital	Payments	rise	capital	Payments	rise
1	100,000	500	-	100,000	519	-	100,000	500	-
2	100,000	500	0	97,517	519	0	100,000	535	8
3	100,000	677	41	94,941	637	28	99,580	572	9
4	97,872	677	0	92,895	637	0	98,685	613	9
5	95,617	677	-	90,728	637	-	97,256	655	10
6	93,226	677	-	88,433	637	-	95,227	692	9
Total Payments Over: M1					M2			M3	
	1 year		6,000			6,233			6,000
	2 years		12,000			14,466			12,420
	3 years		20,127			20,114			19,289
	5 years		36,383			35,408			34,504
	6 years		44,512			43,058			42,801

#### Table 6.2 Stepped-up payment profiles on fixed and variable-rate mortgages (£)

M1 is a mortgage with a fixed rate at 6 per cent where for the first two years payments are interest-only. M2 is a discounted variable-rate mortgage where the initial rate is set at a discount of over 2 per cent from the standard variable rate (SVR) but then switches on to the SVR after two years (5.9 per cent). The initial rate is 3.75 per cent for two years. We assume that there is no change in the SVR over the whole 25 years. M3 is a fixed-rate mortgage where payments are initially interest-only but they then move up over a five-year horizon to a level that then remains constant. The focus of this table is purely on the profile of payments so we abstract from risk.

Source: Miles Review calculations

#### PART-VARIABLE/PART-FIXED MORTGAGES

6.26 Borrowers could divide their mortgages so that different portions are on different rates, for instance, a mortgage that includes a tracker element and a fixed rate. It would also be possible to mix two different fixed rates, such as a two-year fixed rate and a ten-year fixed rate, in any proportion.

6.27 There are several advantages of a mortgage combining fixed and variable rates. Borrowers can decide the level of nominal payment risk they are willing to take on, and choose the proportion of their mortgage on a variable rate accordingly. The variable-rate part of their mortgage can provide an element of flexibility; borrowers could have the option to overpay or – possibly – underpay at no charge.

6.28 A single mortgage allowing borrowers to mix variable and longer-term fixed rates for different proportions of their mortgage debt is a potentially useful product. Such mortgages have recently been offered in the UK.

#### **CONCLUSION**

6.29 The UK is a very innovative market, with a long record of creating new types of mortgage. It is plausible to think that deals like the ones discussed here would become more attractive if borrowers' awareness and understanding of risk and return improves.

### Enabling cost-effective long-term lending

#### **INTRODUCTION**

7.1 Section 5 of the Interim Report examined how fixed-rate mortgages are funded and priced. How mortgages are funded is a key factor behind the relative prices of different sorts of mortgage; and price is central to the attractiveness of different types of mortgage to households.

7.2 Section 5 of the Interim Report analysed different means by which lenders can handle two risks associated with fixed-rate mortgages: interest rate risk and pre-payment risk. It outlined ways in which lenders with fixed-rate lending can avoid interest rate mismatch. Three different strategies (though not exhaustive of those that can be used) are: (A) using the swaps market; (B) using fixed-rate funding raised in the form of fixed-interest bonds (which might have call features); or (C) selling their mortgages on to the capital markets as mortgage-backed securities (MBS). The three different strategies are illustrated in Figure 7.1.



7.3 Pre-payment risk, in turn, can be held by borrowers, by lenders or by investors in either MBS or in bonds with some form of call provision to issuers. Investors will require compensation for holding callable assets. Lenders can also take on pre-payment risk themselves and hedge it with swaptions or other derivatives (either held explicitly or created synthetically). Borrowers who have some form of option to pre-pay a fixed rate mortgage ultimately have to pay for the ability to pre-pay their mortgage early. They can pay either at the point of "breaking" the contract (through "mark-to-market" or pre-determined charges) or pay in the form of a higher interest rate charged over the life of the mortgage. The Interim Report did not attempt to single out a preferred funding or hedging route, and it noted that many of these routes were already being used in the UK. Instead, the Interim Report examined whether obstacles existed to using some of these funding strategies that could hinder the development of more widespread long-term fixed-rate lending.

7.4 The Interim Report identified several potential obstacles that lenders may encounter when funding fixed-rate mortgages in a way that avoids interest rate mismatch and which efficiently allocates pre-payment risks. In this section we consider those obstacles and make recommendations on how they can be overcome or lessened.

7.5 Two of the potential obstacles identified in the Interim Report are:

- the absence of specific covered bond legislation in the UK; and
- the possible lack of liquidity at the long end of the swaps market.
- 7.6 Potential problems stemming from difficulties in managing pre-payment risk were:
  - the enforceability of mark-to-market redemption charges;
  - possible lack of liquidity in the market for fixed income derivatives;
  - the accounting treatment of gains and losses on derivatives and the implications of International Accounting Standard 39 (IAS 39); and
  - limited data on prepayment behaviour.

7.7 Section 5 of the Interim Report went on to examine regulatory issues that could affect the funding of long-term fixed-rate mortgages. These were:

- changes to prudential regulations about capital adequacy due to the implementation of the new Basle Accord; and
- legislative limits imposed upon building societies' funding.

7.8 Finally, the Interim Report made a distinction between factors that may ultimately prove transitory, such as the absence of pre-payment data and the lack of liquidity in long-dated swaps and swaptions, and those that might present permanent obstacles to certain funding strategies being used. Here we will consider the obstacles, exploring possible courses of action to remove them and make policy recommendations where appropriate.

#### DEALING WITH OBSTACLES TO FUNDING

#### Covered bonds

7.9 Longer-term fixed-rate mortgages in the UK could be financed through the issuance of fixed-rate debt by UK lenders. This would be one way in which interest rate risk for lenders could be avoided. Issuance of fixed-rate debt would allow the lender to match fixed-rate cash flows on the assets side of the balance sheet (fixed-rate mortgage interest payments made by the borrower) with fixed-rate liabilities (cash-flows to holders of fixed-rate debt issued by the lender).

7.10 Covered bonds are one form of fixed-rate debt where the securities that are issued are collateralised by a specific pool of mortgages. Unlike MBSs, covered bonds remain on the lender's balance sheet. In many European countries covered bonds are already an important source of finance for fixed-rate mortgages. In the UK there is no specific covered bond legislation. However, most European countries have legislation that defines what can be classed as a covered bond. Laws set out how security is enhanced for investors in covered bonds in the case of bankruptcy. In the case of default of the issuer, the assets backing covered bonds are ring-fenced. This enhances the credit of covered bonds. The Interim Report highlighted potential obstacles to the development of

a liquid and efficient covered bond market in the UK and outlined the rules and procedures that currently govern the issuance of these bonds across Europe.

7.11 The key issue is the impact of the lack of specific covered bond legislation in the UK on the development of a UK covered bond market. This lack of legislation could affect the development of a longer-term fixed-rate mortgage market by restricting one potential route through which lenders could fund longer-term fixed-rate mortgage lending.

7.12 The Interim Report raised two particular concerns about the lack of specific covered bond legislation in the UK:

- costs could be increased. Due to uncertainties surrounding some aspects of UK covered bonds, the lack of legislation could lead to a cost premium if investors believe these bonds are higher risk. The cost to issuers of convincing potential investors that a particular issue was a covered bond could be higher in the absence of specific covered bond legislation; and
- the lack of specific legislation could be an obstacle to recognition of covered bonds by the UK authorities, under the Co-ordination Directive on Undertakings for Collective Investments in Transferable Securities (UCITS). A lack of recognition for covered bonds under UCITS would affect the extent to which European funds could invest in them. A lack of specific covered bond legislation could also prevent UK issued covered bonds benefiting from any lower risk-weighting for covered bonds resulting from EU proposals for a new Capital Adequacy Directive (CAD3).

7.13 Although there is no specific covered bond legislation in the UK, HBOS issued the UK's first covered bonds during 2003.<sup>1</sup> The structure of this issue relied on the legal underpinnings of English contract law. The success of the HBOS covered bond issuance (in terms of how it has been received by investors) suggests the lack of specific covered bond legislation in the UK may not have a significant impact on the cost of longer-term fixed-rate mortgages.

7.14 Currently, covered bonds in the UK do not qualify for favourable treatment under the UCITS Directive. Article 22(4) of UCITS allows European investment funds to invest up to 25 per cent of their funds in covered bonds that meet the UCITS criteria. Without UCITS recognition, the maximum is 5 per cent. A list of the bonds that meet the criteria set out in Article 22(4) of UCITS can be found on the European Commission website.<sup>2</sup> Article 22(4) requires that such bonds need to be recognised in law before a Member State can grant UCITS recognition. In particular, Article 22(4) of UCITS provides that:

"Member States may [increase the extent to which UCITS can invest in covered bonds] when these [bonds] are issued by a credit institution which...is subject by law to special public supervision designed to protect bond-holders. In particular, sums deriving from the issue of these bonds must be invested in conformity with the law in assets which, during the whole period of validity of the bonds, are capable of covering claims attaching to the bonds and which, in the event of failure of the issuer, would be used on a priority basis for the reimbursement of the principal and payment of the accrued interest."

<sup>&</sup>lt;sup>1</sup>HBOS issued two covered bonds during 2003, selling  $\in 3$  billion in July of a bond maturing in 2010 and  $\in 2$  billion in October of a bond maturing in 2013. These issues are part of a  $\in 14$  billion programme. <sup>2</sup>The European Commission website sets out information on which Member States have implemented regulations allowing for the issue of bonds meeting the requirements of Article 22 (4) and, as far as possible, information on the eligible individual instruments. This information can be found at: http://europa.eu.int/comm/internal\_market/en/finances/mobil/ucits/instruments\_en.htm

7.15 European Mortgage Federation (EMF, 2003), presents a detailed analysis of Article 22(4) of UCITS. It states that the criterion requiring covered bonds to be recognised in law is met if the rules on the issuing of the bonds are enshrined in a formal law. However, it also states that "If the provisions governing the issuing of mortgage bonds have, on the basis of an authorisation, as provided for in the Constitution of the Member State, been issued in a form other than an express law, this will be considered to be sufficient. Likewise the regulations or statutes of a bank, where these have been adopted by the competent legislators, is to be considered sufficient."

7.16 This suggests that the requirement in Article 22(4) that covered bonds need to be recognised in law before a Member State can grant UCITS recognition could be met with an amendment to the FSA's rules, without the passage of primary legislation. Discussions of these issues with the FSA have proceeded since publication of the Interim Report. The FSA's opinion has been sought on whether or not primary legislation would be needed both to allow recognition of UK covered bonds under the UCITS Directive and to facilitate the development of a UK covered bond market more generally.

7.17 It is the responsibility of the FSA to decide whether to grant recognition, for the purposes of the UCITS Directive, to covered bonds issued under UK law. The FSA has given us a preliminary assessment that current UK insolvency law may be sufficient to allow recognition of covered bonds for the purposes of the UCITS Directive and to facilitate development of a UK covered bond market. The FSA has not yet given a definitive view on these legal questions. However, if its final view is in line with its preliminary assessment, this would mean that the concerns set out above could be met without the need for primary legislation in the UK.

7.18 Recommendation: that the FSA should provide a definitive view on whether or not current UK insolvency law is sufficient to allow for the recognition of covered bonds under the UCITS Directive.

### Capital risk weighting for covered bonds under the new Capital Adequacy Directive (CAD3)

7.19 Covered bonds issued in a number of countries, including Germany, carry a capital risk weighting of 10 per cent, whereas in the UK the risk weighting is 20 per cent or more depending on the structure of the issue. The 10 per cent preferential risk weight is not currently available in the UK because the transitional provision set out in Directive 2000/12/EC that allowed this was not taken up by the UK and has now expired.

7.20 The new Capital Adequacy Directive (commonly referred to as CAD3) will revisit the definition of covered bonds as part of its more general review of the capital treatment of these bonds. If a requirement for specific covered bond legislation were to be included in any new definition of covered bonds under CAD3, this would mean covered bond legislation in the UK would be needed if UK lenders were to get the more favourable capital weight.

7.21 Covered bonds have certain characteristics on which there is already general agreement. It appears possible to ensure that a bond issued by a UK lender has these characteristics without the need for new legislation.

7.22 Recommendation: that the UK Government should aim to ensure that CAD3 does not require specific UK covered bond legislation.

#### **DEALING WITH OBSTACLES TO MANAGING PRE-PAYMENT RISK**

#### Mark-to-market pre-payment charges

7.23 Section 5 of the Interim Report identified the uncertainties surrounding the use of markto-market redemption charges as one hurdle facing lenders that choose this option to manage prepayment risk.

7.24 The option to pre-pay a fixed-rate mortgage is valuable to the borrower but it is not free. Lenders need to be compensated for the risk that they will not be able to reinvest the pre-paid funds at the contractual rate. Borrowers can pay for the option to pay off their mortgage early in three basic ways: (i) payments at the point of pre-payment; (ii) a higher interest rate over the life of the mortgage; or (iii) a charge up front. In the first approach, only those borrowers who actually redeem their mortgage early pay for the pre-payment option. Most fixed rate mortgages offered in the UK now have some form of early redemption charge. This is often set at a declining rate and is generally unrelated (or only weakly related) to the level of future interest rates (i.e. mark-to-market charges are very rare). Charges are usually in the form of pre-determined fees unrelated to interest rate at the time of pre-payment (either as a fixed amount, as a number of months of interest rate payments, or as a percentage of the outstanding loan). Pre-determined fees only hedge the lender partially, since the actual cost of breaking the contract depends on the difference between the contractual rate and the level of interest rates for the remaining duration of the mortgage at the point of pre-payment.

7.25 Mark-to-market redemption charges are equal to the market cost of breaking the mortgage contract. This is the difference between the present value of the mortgage discounted at market interest rates (for the remaining maturity) at the time of pre-payment and the present value of the mortgage discounted at the original contractual fixed rate. If charges are symmetric then they could result in a refund: a mortgage pre-paid at a time when interest rates are higher than when the mortgage was taken out could come with a refund. The value of the refund would exactly offset the higher repayments that would need to be made if a new mortgage was taken out for the same value and with the same residual maturity. If a fixed-rate mortgage is pre-paid when interest rates have fallen, the mark-to-market redemption charge is equal to the saving that would be made by taking out a new mortgage at a lower fixed rate.

7.26 There is nothing intrinsically unfair about mark-to-market pre-payment charges. They are designed so that the gain to a borrower from repaying a fixed-rate mortgage early and replacing it with debt paying a lower interest rate is exactly matched by the charge for repayment. The amounts to be paid are potentially high (though if charges are symmetric so are the potential repayments), so borrowers need to understand how mark-to-market charges work. Borrowers need to have it explained clearly.

7.27 Mark-to-market charges have advantages for some borrowers. First, the amount to be paid is determined by the level of market interest rates and cannot be changed arbitrarily. Second, while pre-payment with pre-determined charges always results in an amount having to be paid (either as several months' interest or a percentage of the original loan or of the outstanding amount), if borrowers pre-pay their loan when there are mark-to-market charges at times when rates have not fallen, they will either pay nothing or may receive compensation (if these were to be symmetric charges). 7.28 Mark-to-market charges provide lenders with the most complete hedge against prepayment risk. Pre-determined redemption charges do not cover lenders against a possible mismatch between the penalty paid and the market price of breaking the contract. The potential mismatch between the true cost of pre-paying the mortgage and a pre-determined penalty increases with the length of the fixed-rate period. This mismatch may be negligible when, as currently, most lenders offering short-term fixed-rate mortgages have to hedge pre-payment risk that usually extends only for two or three years. That risk can be substantial in the case of ten or 15-year fixed-rate mortgages. It is greatest with 25-year fixed-rate mortgages.

7.29 Two obstacles – which are linked - may prevent the use of mark-to-market charges: (i) they are not well understood and are popularly considered to be intrinsically unfair; and (ii) there is uncertainty about their enforceability.

The first obstacle to the use of mark-to-market redemption charges is that they do not 7.30 seem to be well understood. The cases brought to the Banking Ombudsman in the late 1990s indicate that borrowers did not grasp how the charges worked. Understanding is not helped by the fact that they are often portrayed as a penalty that the lender levies on the borrower at a time when they are already overcharging them because the contractual interest rate remains high while the general level of rates have come down. This reveals a misunderstanding of how mortgages are funded. When a lender lends long term, the relevant rate for pricing the mortgage is not the shortterm rate, but the prevailing rate for the expected maturity of the loan. With a ten-year fixed-rate mortgage the borrower has effectively issued a ten-year bond to the lender at the then current tenyear rate. If the issuer has an option to redeem a bond before maturity, this is valuable, and the issuer should expect to pay for it. A non-prepayable fixed-rate mortgage is similar to a non-callable fixed-rate bond. Assume that five years down the line, interest rates are lower and the issuer (borrower) wants to call the bond. An issuer of non-callable debt would have to buy back that bond at the market price of that bond at the time he wanted to buy it back.<sup>3</sup> If interest rates for the remaining five years are lower than at the time of issuance, and assuming the bond was issued at par, the market price of that bond will be above par. The issuer (borrower) would not pay the par price to buy back their debt. The difference between the market price of the bond and its face (or par) value is equivalent to the mark-to-market pre-payment charge. The relevant rates for the calculation of the bond prices are the rates for the remaining maturity. These rates reflect expectations of future short-term interest rates.

7.31 There is clearly nothing intrinsically unfair about mark-to-market pre-payment charges. They are designed so that the gain to a borrower from repaying a fixed-rate mortgage early and replacing it with a lower rate loan is matched by the charge for repayment.

7.32 An obstacle to the use of mark-to-market redemption charges is the uncertainty about their enforceability. This is unfortunate. Some borrowers may prefer to have the option to pre-pay at a cost unrelated to the subsequent level of rates, or pay for the option as a higher spread over the life of the mortgage. But some may prefer mark-to-market penalties – they are a contract that would allow a borrower to ensure that the overall value of their payments over a given horizon for borrowing a certain amount are of a known value independently of whether they pay off an initial contract for that debt and then re-borrow the funds again in a new contract with a different lender.

7.33 Ideally a range of options would be available for fixed-rate mortgages with different types of redemption charges, but it could usefully include mortgages with mark-to-market charges. The Office of Fair Trading (OFT) judgement in the NatWest case and the subsequent Consumers'

<sup>&</sup>lt;sup>3</sup>Alternatively, the issuer can issue a callable bond where the price at the time of issuance reflects this option. The principle is the same.

Association guidance has led many lenders to believe that only pre-set charges would be upheld if a claim against the lender was made by the borrower in the future. The FSA regulation of the mortgage sales process will require maximum redemption charges to be quoted in cash amounts in the pre-sale disclosure form; while this has some benefits it does not seem likely to help make markto-market charges become better understood.<sup>4</sup> The CML submission to the Review of 23 January 2004 (para 38) states that:

'In the consumerist environment in the UK, no lender foresees offering products with such charges, even if they may be "fair" from an economic perspective. They would be difficult to explain in a way that consumers could understand, and may appear to show a very high potential early repayment charge. This would appear unattractive to consumers, compared to variable or shorter-term fixed rates'.

7.34 In the 1998-99 Annual Report of the Banking Ombudsman (1999) (whose work was subsumed by the Financial Ombudsman Service from 1 December 2001), the Ombudsman set out suggestions for good practice concerning early repayment charges:

'Advertising and marketing material should be clear, fair and reasonable (as required by the Banking Code and Mortgage Code). The early repayment charge should not be hidden in the small print.

- Where the bank assists the borrower in choosing the type of loan, it should remember that the borrower may be forced into early repayment by an unexpected change in circumstances, such as redundancy or divorce.
- The mortgage offer should explain the mechanism by which the charge is calculated in a way which is understandable to an ordinary borrower who has no idea how money markets work. This may require quite a lengthy explanation.
- There should be a clear warning of how large the early repayment charge might turn out to be. Examples help, but only if they are representative explaining clearly the relationship between the example and the actual loan.
- There should be a cap on the amount which the early repayment charge will reach. A statement that the charge might be as much as, but will not exceed, X% of the loan will bring home to the borrower the extent of the risk.
- The bank should not seek to recover the whole of its mark-up for the entire fixed rate term, however quickly the mortgage is redeemed, without regard to any mark-up it is likely to recover if it re-lends the money to someone else.
- There should be a justifiable link between the likely amounts of the charge and the bank's loss. Where the charge is to compensate the bank for loss it will incur in the future, there should be an appropriate discount for early payment.
- The bank should act sympathetically where the borrower is not seeking to redeem in order to strike a better deal elsewhere, but is genuinely forced into early repayment by an unexpected change in personal circumstances.

I appreciate that some of these suggestions, particularly the cap, may affect the cost of providing funds for fixed rate mortgages - with consequent effect on the interest rates

<sup>&</sup>lt;sup>4</sup>The rules allow firms to put in the KFI a basic explanation of the basis of the charge (see MCOB 5.6.84R(1)(e)) and they can refer to a separate document for fuller details.

payable by borrowers. Better that than a superficially cheap mortgage with unquantifiable pitfalls.

The future trend of interest rates is uncertain, and may be affected substantially by whether or not the UK joins the European single currency. The future personal circumstances of individual borrowers are made uncertain by reduced job security and increased divorce.

Accordingly, banks may wish to reflect on how far it is prudent for a lender to offer a fixed interest rate period of more than 5 years if it is coupled with an early repayment charge which is potentially crippling to a borrower's finances. Others will no doubt be reflecting on the same issue.' (Banking Ombudsman, 1999)

7.35 No-one can argue against the need for mark-to-market penalties to be properly explained, and with representative examples that are prominent in the accompanying literature. But the suggestion that lenders need to act sympathetically 'where the borrower is not seeking to redeem in order to strike a better deal elsewhere, but is genuinely forced into early repayment by an unexpected change in personal circumstances' may itself rule out mark-to-market redemption charges in practice. Almost anyone could claim that a decision to repay a mortgage is triggered by an unexpected change in personal circumstances. There is no obvious reason why this is a requirement of a fair contract. The dividing line between being forced into early repayment by an unexpected change in personal circumstances and a calculated decision is not straightforward. Examples of grey areas can be moving to a different town to take up a different job, or coming into some money that enables a borrower to pre-pay the mortgage. Lenders are not encouraged to waive pre-determined charges when borrowers pre-pay due to a change in their personal circumstances.

7.36 Lenders' fear of litigation costs that could be incurred when deciding whether in such cases borrowers were genuinely "forced into early repayment" or not is understandable. Nor is it clear why the lenders should bear the financial loss of the change in the borrower's personal circumstances, such as divorce, when no other commercial organisations make allowances for such changes. Waiving a mark-to-market penalty means taking a financial loss. Finally, the warning against mark-to-market penalties for mortgages with terms longer than five years seems to rule out a contract that has nothing intrinsically unfair about it.

#### Symmetric mark-to-market pre-payment charges

7.37 If mark-to-market charges were symmetric, when borrowers pre-paid their mortgage at a time of higher market rates (of the relevant maturity) than those in their contract, they would be compensated with a lump sum equal to the market gain to the lender of breaking the contract. There are advantages in such a deal and, more importantly, the advantages benefit both lenders and borrowers. From the borrower's point of view, it makes the issue of portability irrelevant. If borrowers want to carry the amount borrowed forward and be certain about nominal payments in the future, a fixed-rate mortgage with symmetric mark-to-market redemption charges has the right characteristics. Borrowers would not be stuck in a house that was no longer desired at a time of high interest rates because they wanted to keep their lower fixed rate deal. With symmetric mark-to-market charges, the refund obtained in that situation would offset exactly the increased cost of future payments on a new mortgage of equal value.

7.38 From October 2004, the FSA regulations of the mortgage sales process will require the disclosure of maximum redemption charges in the pre-sale disclosure form (the "key facts" illustration). The maximum possible mark-to-market charge would need to be calculated either

assuming that interest rates go down to zero or with a cap on the maximum charge. A complete illustration of symmetric mark-to-market charges would, arguably, need to show the maximum possible lump sum that the borrower would receive in the case of interest rates being higher than the contractual rate at the time of redemption. Since there is no upper limit for interest rates, this illustration is not feasible.

7.39 Recommendation: that the FSA allow in the pre-sale disclosure form illustration of the potential gain of early repayment of a mortgage with symmetric mark-to-market charges, as well as requiring disclosure of the maximum charge.

7.40 Recommendation: that the Government exempts compensation from symmetric markto-market charges from tax.

#### Hedging pre-payment risk with call options

7.41 Pre-payment risk arises in the case of fixed-rate mortgages because they can be, and often are, paid off before the scheduled date. When pre-payment occurs, lenders cannot expect to reinvest the pre-paid funds at the contractual rate because interest rates are likely to have moved by the time the pre-payment option is exercised. Borrowers' ability to pre-pay at a time when prevailing interest rates are lower than the contractual rate of the mortgage represents a valuable call option on the underlying debt.

7.42 One means by which lenders can hedge pre-payment risk is by purchasing call options whose value moves in line with that of the borrower's option to pre-pay the loan. However, there may not be enough natural writers of longer-term call options in the private sector to create a liquid and efficient market in which options could be bought at a cost which makes this strategy feasible. The question arises as to who might be natural writers of longer-term call options.

7.43 One natural writer of call options is someone that has funding costs that might be hedged by writing calls. This might include regular issuers of long-term fixed-rate bonds, where there is uncertainty about what coupons will need to be offered on such bonds (due to uncertainty about the future path of interest rates).

7.44 Writing call options could potentially provide a partial hedge against this uncertainty about interest rates. But writing calls is risky and whether it does reduce the risk in funding costs will depend on the particular sources of uncertainty and the correlations between them. If the future issuer of bonds writes a call option it generates revenues now. Subsequently, the writer of the option needs to issue a new bond. If interest rates at the relevant maturity have risen (unexpectedly) since the call option was written, the cost of issuing the new bond is higher than had been anticipated. However, due to the interest rate rise, the call options previously sold to the market are now more likely to be "out of the money" and so the option would be more likely to expire unexercised. The gain on the option position to the writer offsets the loss from having to issue new bonds with higher yields. Conversely, when interest rates fall unexpectedly the call would be worth more but the loss on the option position to the writer is offset by the gain from issuing new debt at lower yields. This (overly) simplified example illustrates how call options could potentially benefit the writer by providing a hedge against interest rate risk.

7.45 The UK Government has some of the characteristics of the issuer described above. The Government conducts its debt management operations in an environment where there is uncertainty about the general level of interest rates, and the Government cannot control fluctuations in the sterling yield curve. Some of the volatility in nominal and real interest rates comes from economic and other shocks originating outside the UK, which increases the variability in the cost to Government of debt servicing. There may be some advantages to the UK Government in writing call options.

7.46 Whether or not writing calls actually helps smooth debt costs depends on why interest rates are lower or higher than anticipated. There are times when interest rates are low because the economy is operating below trend. In these cases, Government writing call options could increase debt servicing costs, because call options would be exercised at times of rising debt. How great the correlation between low interest rates and poor economic performance then becomes relevant.

7.47 So it is not clear whether the UK government writing call options would provide any benefits in smoothing debt service costs or in reducing uncertainty about the overall cost of the national debt. And there remains the broader question of whether smoothing debt service costs should itself be a significant concern of the government. Two key considerations are; (i) the remit of the UK Debt Management Office (DMO); and (ii) the extent to which debt interest costs are positively correlated with longer-term interest rates. These issues are discussed below.

7.48 *Debt Management Office Remit.* The Government's overall debt management policy objective as published in the Debt and Reserves Management Report 2003-04 (DRMR)<sup>5</sup> is:

'to minimise over the long-term, the costs of meeting the Government's financing needs, taking into account risk, while ensuring that debt management policy is consistent with the aims of monetary policy.'

7.49 The DMO Remit for 2003-04 is also published in the DRMR and includes the requirements that put the overall debt management policy objective into effect. In particular the Remit includes requirements:

- 'to meet the annual remit set by HM Treasury Ministers for the sale of gilts, with high regard to long-term cost minimisation taking account of risk; [and]
- to develop policy on and promote advances in new instruments, issuance techniques and structural changes to the debt markets that will help to lower the cost of debt financing...'.

7.50 The DMO has undertaken research involving quantitative modelling of the characteristics of the debt portfolio under different issuance strategies over the long-term. Part of this work has sought to quantify the dynamic relationships between the evolution of the debt portfolio, debt interest charges and the associated risks to the Government.

7.51 Results from the DMO's modelling work presented in the DRMR include consideration of the extent to which different possible future debt portfolios might affect both the volatility and the average level of coupon costs as proportions of Gross Domestic Product (GDP).

<sup>&</sup>lt;sup>5</sup> The Debt and Reserves Management Report is published by HM Treasury and can be found at: http://www.hm-treasury.gov.uk/documents/uk\_economy/debt\_management\_report/ukecon\_dmr\_03to04.cfm

7.52 In terms of the criteria for success in debt management used by the DMO, there is at least a case for considering the merits of the Government writing call options because call options could potentially have a beneficial impact both on the average cost, and particularly on the variability of the cost, of servicing the Government's debt. The Government is concerned about the average cost of debt and about the risks of debt servicing costs. The relative weights to be attached to minimising likely cost and to minimising risk are not explicit and are also hard to quantify. If the correlation between the net value of writing calls and the cost of issuing new debt is positive then in principle there may be scope to use calls to reduce risk. If there were to be a shortage of natural writers of calls then the terms on which calls could be written might be favourable so that as well as the potential to hedge risk they might also reduce costs. The scope for either potential benefit to exist is very uncertain but is at least worth considering. But writing calls very definitely carries with it risks and the case for doing so would need to be carefully evaluated.

7.53 Correlation between debt interest costs and longer-term interest rates. A key consideration is whether the cost of servicing the national debt is positively or negatively correlated with longer-term interest rates. More relevant (though certainly related) is the correlation between debt servicing costs and the net value of a written call position (i.e. the value of the premium charged for the call option less the expiry value of the option written on a longer-term bond). If the correlations were positive, writing call options would have potential merit because the premium received from selling call options might partially offset the increased costs of issuing new debt at a time of higher interest rates. But if debt servicing costs and longer-term rates are negatively correlated, then Government writing calls would more likely exacerbate volatility and increase risk.

7.54 Chart 7.1 shows central government gross debt interest costs as a proportion of GDP, together with 10-year nominal gilt yields (on the last day of each quarter) for the period 1979Q1 to 2003Q4. The correlation coefficient is 0.69; there is a positive relationship between movements in the two series.

7.55 Chart 7.2 plots the quarter-on-quarter rate of change in the two series. The correlation coefficient for these series is -0.15 which suggests there is little relationship between the rates of change in these series. The correlation coefficient is not statistically significant at the 5 per cent level.

7.56 The relationship between the fiscal deficit and the net value of a written call position may be relevant to assessing the desirability of the Government writing call options. Chart 7.3 below plots public sector net borrowing (PSNB) as a proportion of GDP, together with the ten-year nominal gilt yield. The correlation coefficient for these series is 0.25, which suggests a weaker positive relationship than between yields and debt servicing costs. But in both cases the correlations are positive which is at least consistent with there being a potential hedging role in writing call options. These correlations do not show that writing calls should be part of funding strategy; but they do suggest the question is worth more serious analysis.



Chart 7.2: Rate of change in debt interest costs and rate of change in 10-year nominal gilt yields 1979Q2 to 2003Q4



7.57 It might be argued that the Government writing call options could have a distortionary impact via the effect on expectations about yields. In a situation where the Government has effectively pre-committed to a particular coupon (through writing an option allowing the holder to buy a gilt at par), there could be an impact on market expectations.



7.58 If the Government were to write call options as part of its fiscal/ debt management policy, then adherence to the principle of Transparency as set out in the *Code for Fiscal Stability*<sup>6</sup> would require publication of information sufficient to allow public scrutiny of the impact of call options on policy.

7.59 Whilst there could be benefits to the longer-term fixed-rate mortgage market from Government writing options, the potential positive and negative impacts on Government's wider management of the economy and the public finances would need to be carefully considered. The potential difficulties of the Government entering an illiquid market are not trivial. The case for the Government writing options is that it could be hedging against a rise in long yields and there might be a significant demand for such instruments. If the Government is able to influence long yields directly (through decisions on policy issues such as the inflation target, the fiscal framework, adoption of the Euro and pension fund regulation) this could create a conflict between policy decisions in these areas and the effect on the Government's finances of writing calls. However, in a world of global capital markets, the extent to which Government policy can impact on long-end yields is not clear. If the UK were to join the euro the impact of UK government policy decisions on the euro yield curve would be small.

7.60 Recommendation: that Government should give further consideration to the potential costs and benefits of Government issuing interest rate derivatives.

<sup>&</sup>lt;sup>6</sup> The Code for Fiscal Stability sets out the key principles that the Government adheres to in its fiscal and debt management policies. These principles are transparency, stability, responsibility, fairness and efficiency. The Code and further explanation of its contents can be found at: http://www.hm-treasury.gov.uk/documents/uk\_economy/fiscal\_policy/ukecon\_fisc\_code98.cfm

#### **International Accounting Standard 39**

7.61 The Interim Report discussed proposed changes to accounting requirements, which are to be effected through the adoption of International Accounting Standard 39 (IAS 39). Proposed changes to IAS 39 could affect the attractiveness of using derivatives to manage pre-payment risk. IAS 39 mandates that all financial instruments held for trading, including derivatives, are reported on balance sheet at "fair value".<sup>7</sup> In an active market, market price is the best evidence of fair value. Common UK practice (as required by the Statement of Recommended Practice on Derivatives published by the British Bankers Association) is to measure financial instruments that are held for trading at fair value, with derivatives held for hedging purposes measured at cost. Under IAS 39, there is a requirement that derivatives held for hedging purposes are to be reported at fair value.

7.62 The European Commission has proposed that all listed companies in the EU should be subject to International Accounting Standards in their group accounts by January 2005. The International Accounting Standards Board (IASB) has embarked on a project to revise IAS 39, in order to make it easier to implement. The majority of revisions are due to be published in early-2004, in line with this EU deadline.

7.63 A key issue regarding the implementation of IAS 39 is whether it will allow a lender to report fair values for both the derivatives used in hedging positions and the underlying mortgages. Specific issues (discussed below) were set out in the Interim Report:

- the potential practical difficulties in identifying individual hedging relationships between a swaption that the lender takes out and the specific mortgage loan that the swaption is hedging; and
- the extent to which lenders can accurately value the option to pre-pay a mortgage (particularly where the option is "closely related" to the mortgage contract).

7.64 The Interim Report discussed proposed simplifications in the IASB's exposure draft of July 2003 (to allow for portfolio hedging) that appeared not to be applicable to hedging with swaptions. This suggested that lenders would have had to identify individual hedging relationships between each swaption they take out and the specific mortgage loan the swaption is hedging. Where large volumes of transactions are involved this could be practically difficult. However, it may not always be necessary for lenders to account "line-by-line" for each hedging relationship under IAS 39. For example, if a group of loans are similar in that they were all of the same type and were taken out at approximately the same time, they could be accounted for together.

<sup>&</sup>lt;sup>7</sup> 'Fair value' is defined in IAS32 'Financial Instruments: Disclosure and Presentation' as 'the amount for which an asset could be exchanged, or a liability settled, between knowledgeable, willing parties in an arm's length transaction'. In an active market, the market price is the best evidence of the fair value of a financial instrument. But this may not be the case when, for example, there is infrequent activity in a market or an instrument is not traded in an organised financial market. In such circumstances, it may be necessary to use a different basis to estimate fair value e.g. by using a valuation technique.

7.65 One of the criteria in accounting, under IAS 39, for the pre-payment option in a mortgage is whether or not the economic characteristics of the option are deemed to be "closely related" to the mortgage contract. Where the pre-payment option is not "closely related" to the contract, the pre-payment option is required to be separated from the mortgage and the derivative used to hedge it is measured at fair value. To the extent that the hedge is effective (that is, changes in the value of the pre-payment option are equal and opposite to changes in the value of the derivatives) there will be a zero effect on reported profit and loss. Therefore, it is possible for lenders to obtain a match between the fair value of the pre-payment option and the fair value of the derivative used to hedge it without the need for hedge accounting. Where the pre-payment option is "closely related", it is not separated from the loan which is accounted for at cost, although the pre-payment option can be reported at fair value if the change in fair value is hedged and the effectiveness of the hedge can be measured.

7.66 The IASB has indicated in its January 2004 "Update" (which sets out IASB decisions on international financial reporting standards), that assessment of the effectiveness of a hedge may be based on measuring the change in the value of the entire mortgage (including the pre-payment option embedded in it). This form of assessment would allow a financial entity to qualify for macro-hedge accounting.<sup>8</sup> The IASB's decision clarifies that macro-hedges using derivatives can qualify for hedge accounting and that effectiveness can be assessed based on the change in the value of the mortgage including the embedded option, thus removing any accounting obstacle to this kind of hedging strategy. Furthermore, the loans included in a macro-hedge do not need to be "similar", rather they need only to share the risk for which they are being hedged.

7.67 This Review has considered the potential impact of IAS 39 on accounting for fixed-rate pre-payable debt and associated derivatives in the context of its remit to look at factors limiting the development of the longer-term fixed-rate mortgage market in the UK. Clarifications made by the IASB since publication of the Interim Report are likely to ease any difficulties lenders might face in valuing the option to pre-pay a mortgage (including where the option is "closely related" to the mortgage contract). Moreover, the potential practical difficulties in matching individual hedging relationships with specific mortgage loans will be eased to the extent that groups of loans share the risk for which they are hedged and qualify for macro-hedge accounting. These clarifications address the issues raised in the Interim Report regarding whether IAS 39 will allow a lender to report fair values for both the derivatives used in hedging positions and the underlying mortgages.

#### Data necessary to estimate pre-payment

7.68 The Interim Report identified the limited amount of data available to estimate prepayment rates as one obstacle that could hinder the efficient funding and hedging of fixed-rate mortgages. Lack of pre-payment data makes hedging pre-payment risk more difficult. Pass-through mortgage-backed securities or callable bonds are likely to be more expensive as a funding option. The only hedging alternative where the lender can be fully protected from pre-payment risk that does not need pre-payment data is mark-to-market redemption charges.

7.69 As the Interim Report stated, there is no easy way to solve this start-up problem of limited data. Enough data may in time be accumulated to make pricing more efficient, and a trade body such as the CML could play an important role in pooling data across lenders.

<sup>&</sup>lt;sup>8</sup> Macro-hedging is the hedging of a portfolio of assets and liabilities for the same type of risk. A macro-hedge is designed to reduce or eliminate risk resulting from the entire portfolio rather than the risk arising from a particular asset or liability within the portfolio. Macro-hedging would enable fair value hedge accounting to be used more readily for a portfolio hedge of interest rate risk.

#### **REGULATORY ISSUES**

#### The new capital adequacy regime

7.70 Current capital adequacy requirements stem largely from the first Basle Accord, agreed in 1988, and its transposition into EU legislation. The Accord sets a minimum capital adequacy ratio of capital to risk weighted credit exposures at 8 per cent (of which core capital must account for at least half). The current risk weight for residential mortgage lending held on balance sheet is 50 per cent.

7.71 Development of the new Basle Accord has the aim of setting out a more comprehensive and accurate approach to risk. Following closure of the third Basle consultation exercise on 31 July 2003, the Basle Committee intends to ratify a final version of the new Accord by mid-2004. The Accord is due to take effect in all G10 countries from 31 December 2006. The European Commission is expected to publish proposals for a new Capital Adequacy Directive (commonly referred to as CAD3) in Summer 2004. This directive will be the means by which the new Basle Accord will be transposed into EU legislation. Once the CAD3 proposals have been formally made, both the European Council and European Parliamentary processes will begin, with Council working groups expected to begin during 2004.

7.72 The minimum requirement of capital to risk weighted exposures remains at 8 per cent in the proposed new Accord. Three options are proposed for firms in calculating the credit risk element of their capital requirements; (i) the Standardised Approach (SA); (ii) the Foundation Internal Ratings Based Approach (FIRB); and (iii) the Advanced Internal Ratings Based Approach (AIRB). A stringent set of systems and data requirements will have to be met in order for lenders to qualify for the IRB approaches. For retail lending, including residential mortgage lending, lenders will only be able to choose between the SA and AIRB approaches. It is uncertain how many lenders will qualify for the AIRB approach and much depends on systems work undertaken by lenders before implementation.

7.73 The CAD3 proposals could have an impact on the capital treatment of fixed-rate compared with variable-rate mortgages. The FSA's initial proposals for implementation of CAD3 in the UK suggest that where firms can provide sufficient evidence to demonstrate that there is a different risk profile for particular mortgage products then different capital treatments will be accepted. Most (and perhaps all) UK mortgage lenders have little historic data that reflects the different credit risks of longer-term fixed and variable-rate mortgages. Where firms use estimates of credit risk which are not the same as historic experience, the FSA has said firms must explicitly justify why the estimates are not the same as historic experience. Evidence has to be sufficient to demonstrate why lower risk weights for certain mortgage products are justified.

There are several sources of evidence on differences in risk characteristics of fixed- and 7.74 variable-rate mortgages. Much of the academic literature in this area focuses on the US mortgage market, analysing mortgage contracts which have embedded options for the borrower either to default or to pre-pay the loan.9 Empirical studies based on US data do suggest there are differences between the default behaviour of fixed and variable-rate mortgages. US variable-rate mortgages (known as adjustable-rate mortgages or ARMs) are more likely to default than fixed-rate mortgages (FRMs), although this is partly explained by the fact that ARMs tend to be taken out by sub-prime borrowers (rather than because of inherent differences between ARM and FRM contracts). For example, Vanderhoff (1996) compared default probabilities of ARMs and FRMs using US data at metropolitan area level for loans originated in the 1980s and 1990s. Results suggested ARMs have a higher default rate than FRMs. Calhoun and Deng (2002) analysed US data for around 1.3 million loans originated between 1979 and 1993. They found that average rates of default by mortgage age were initially higher for ARMs than for FRMs, although there was a more rapid improvement in the ARM risk profile than the FRM risk profile as mortgage age rose. Studies also show that changes to factors such as payment to income ratios affect the probabilities of default on ARMs to a greater extent that default probabilities on FRMs. For example, Cunningham and Capone (1990) present simulations which show ARM default probabilities are more sensitive than FRM default probabilities to changes in payment to income ratios.

7.75 In the UK, default generally occurs because the borrower is no longer making the payments due to the lender. The result can be repossession of the property, but without cancellation of the outstanding amount owed by the borrower, unlike in the US. This suggests that the cost of defaulting on a mortgage will be much greater for the UK borrower than for the US borrower. However, it does not imply that US mortgage default is costless. For example, costs of exercising the option to default on a US mortgage may include loss of access to credit (at least for a period after default), higher costs of credit in future and reduction in employment opportunities.

7.76 Although most UK mortgage lenders have little historic data that reflects the different credit risks of longer-term fixed and variable-rate mortgages, there remains the potential for data to be compiled by UK lenders in future which could better help to distinguish the risk characteristics of fixed and variable-rate mortgages in the UK.

7.77 Recommendation: that the FSA should allow a broad range of different types of evidence (in addition to UK historic data) to be part of an assessment of the default risk of different mortgage contracts. Relevant evidence might include simulation results (for example, based on Monte Carlo simulations<sup>10</sup>) as well as simulations of the kind set out Section 2 of the Interim Report. These simulations looked at the relative risk characteristics of fixed and variable-rate mortgages. A set of common assumptions were used, including assumptions about the rate of real income growth and the ratio of loan to gross income. Simulations showed the evolution of the repayment burden under different assumptions about what happens to inflation and interest rates.

<sup>&</sup>lt;sup>9</sup> Options theory views mortgages as bonds issued by borrowers who retain embedded call (pre-payment) and put (default) options. The borrower will exercise the call (put) option and pre-pay (default on) the mortgage if this is financially advantageous. For example, the borrower might exercise the option to default if the present discounted value of future mortgage payments were higher than the market value of the house.

<sup>&</sup>lt;sup>10</sup> Monte Carlo simulations are an analytical technique where a large number of simulations are run using random quantities for uncertain variables. A distribution of results is then created from which inferences are drawn.

#### Updating the calculation of building society funding limits

7.78 Legislative limits imposed upon building societies' funding structure could act as an obstacle to their involvement in the development of long-term fixed-rate lending (paragraphs 5.88 to 5.91 of the Interim Report set out the details). The Building Societies Act 1986 sets funding and lending limits, or "nature limits", on building societies. Following the amendment to the Act that took place in 1997,<sup>11</sup> at least 50 per cent of the funds raised by a building society must be in the form of members' funds. If there were a significant increase in long-term, fixed-rate lending, this requirement could place building societies at a disadvantage to other mortgage lenders if tapping wholesale markets turned out to be the most effective way of funding fixed-rate lending. Another potential hurdle stems from the new rules on international accounting standards. At present, securitised assets do not count towards the funding limits of building societies. Once the international accounting standards come into force, securitised assets will have to be reported in societies' accounts and, under the current arrangements, will count towards the funding limit. This section considers both issues.

#### Funding limits constraints

7.79 About 24 per cent of outstanding funds invested with building societies were from nonmembers at the end of 2002. Among the ten biggest building societies, the lowest ratio of nonmember funds was just over 9 per cent, and the highest was 39 per cent. Overall, five building societies reported non-member funding ratios above 30 per cent. By 2003, 30 per cent of all outstanding funds were from non-members<sup>12,13</sup>. This rapid change in the stock figure reflected a sharp decrease in the flow of new funds into building societies accounted for by members.

7.80 If this decline continues, some building societies may be close to the 50 per cent limit of funding by non-members in the near future. A potential shift in the UK mortgage market towards substantial longer-term fixed-rate lending could intensify this trend. The current funding limits do not generate significant constraints on building societies. It is possible that even in the event of very much more long-term fixed-rate lending in the UK, building societies would find that continuing to be funded largely by variable-rate deposits and using swaps and swaptions markets to get rid of interest and pre-payment risk would turn out to be the most efficient route. But, in the case that the use of wholesale funding turned out to be the most effective funding source, building societies could struggle to compete.

7.81 The possible relaxation of the funding limits of building societies raises two important issues: the nature of building societies, and the protection of their members' deposits in case of insolvency.

<sup>&</sup>lt;sup>11</sup> The 1997 amendment was in itself a liberalisation that relaxed the funding limits.

<sup>&</sup>lt;sup>12</sup> Not all non-member funding is wholesale. Much is invested through societies' offshore subsidiaries and has retail characteristics.

<sup>&</sup>lt;sup>13</sup> KPMG, "Building Societies Database", 2003 and Building Societies Association's submission to the Review, 23/01/2004.

7.82 The aim of the funding – and lending – limits placed on building societies is to ensure that they retain their specific purpose. If how the building societies' assets are funded is what defines a building society, then any change to the funding limits is potentially problematic. But the essential characteristic of building societies is that they are mutuals that take funds from members and that make mortgage lending on residential properties their primary business. Building societies are set up and owned by members with the aim of providing lending to finance house purchases. To fulfil their aims they need to raise funds in the most efficient way. If the key characteristic of building societies is that they are run in the interest of members and a 50 per cent funding limit prevents them from offering their members competitive mortgages, then there is a prima facie case for reviewing the funding limit. In principle, building societies can continue to fulfil one of their roles of accepting funds from members even if a majority of funds do not come from members.

7.83 A second important implication of any change to the nature limits is the protection awarded to depositors in the event of a building society's insolvency. Members' funds rank behind wholesale funds in the event of liquidation.<sup>14</sup> Holders of the debt of a building society have priority over members with regard to its assets. In some ways members would find themselves in a similar position to that of shareholders if a society is liquidated. If the limit on retail funds from members came down from the current 50 per cent to a lower level such as 30 per cent or 20 per cent, then in some sense the gearing of members' funds would increase. If a society being liquidated had 70 per cent of its funding from non-members, its assets would need to cover a higher volume of claims by creditors than if only 50 per cent of its funding were from non-members. A smaller number of members' funds would have to make up for the shortage of assets, increasing the risk to members' deposits.

7.84 Protecting members' deposit is important. Funding limits may in fact weaken building societies' positions by not allowing them to compete for efficient funding if long-term fixed-rate lending becomes more prevalent in the UK. Members' interests are not protected if the societies cannot lend efficiently.

7.85 The risk to members' funds is monitored by the regulator and affected by the capital adequacy regime to which building societies are subject. An additional – and substantial – line of protection for members who have provided funds is afforded by the Financial Services Compensation Scheme. The scheme is triggered when an authorised firm goes out of business. The Scheme may also be triggered when the FSA considers that an authorised firm is unable to repay its depositors, or is likely to be unable to do so. The maximum level of compensation that a depositor can receive from the Scheme for a deposit claim is £31,700 (100 per cent of £2,000 and 90 per cent of the next £33,000). The compensation limit applies to each depositor and covers the total of all their deposits held with that firm.<sup>15</sup> The five biggest building societies have the following distribution of member funds: 62 per cent of members have less than £2,000, 33 per cent of members have between £2,000 and £35,000 and five per cent have more than £35,000.<sup>16</sup>

<sup>&</sup>lt;sup>14</sup> Building societies raise two types of funds on a subordinated basis - term subordinated debt and permanent interest bearing shares (PIBS -essentially a perpetual instrument). These funds are intended to (and usually do) qualify as capital resources for regulatory purposes, and so are specifically excluded from the member/wholesale deposit ratio calculation. However, in 2002 the amount of subordinated funds was just 1 per cent of unsubordinated shares and deposits. Other capital - retained profits (reserves) was then 5.8 per cent of unsubordinated shares and deposits (BSA data).

<sup>&</sup>lt;sup>15</sup> Each individual in a joint account is eligible to receive compensation up to the maximum limit in respect of their share of the deposits (it will assumed that the split is 50/50 unless evidence shows otherwise).

<sup>&</sup>lt;sup>16</sup> These figures do not adjust for people being members of more than one building society.

7.86 With regard to the funding limits there are three options; (i) to do nothing; (ii) to use primary legislation to change the limits affecting building societies; or (iii) to change the funding limits with secondary legislation.

7.87 *Option (i):* Building societies could continue to operate within the current limits. If a large proportion of UK mortgage lending were fixed for a longer period, they could use the swaps and swaptions markets. New legislation could be passed in the future if the limits proved to be a constraint.

7.88 *Option (ii):* The second alternative is to change the Building Societies Act 1986 through primary legislation. Section 5 (1) of the Act states that the "purpose or principal purpose is that of making loans which are secured on residential property and are funded substantially by its members". The requirement of "substantially funded by members" can be modified with primary legislation. Primary legislation is a very costly option since there is a premium on parliamentary time.

7.89 *Option (iii):* The final option is to use secondary legislation to modify the funding limit. The Building Societies Act 1986 provides a secondary legislation route for altering the lending limit<sup>17</sup> which is at Section 6 of the Act, not for altering the funding limit at Section 7 of the Act. However, there is the option of using a Regulatory Reform Order to amend the funding limit. This is a type of secondary legislation which enables the government to amend legislation by Order made under the Regulatory Reform Act 2001. This route can be used where an amendment is to reform legislation which has the effect of imposing burdens affecting persons in the carrying out of any activity. The funding limit may be a burden of the type meant by the Regulatory Reform Act. The funding limit imposed by Section 7 of the Building Societies Act could be amended by Regulatory Reform Order (RRO). An RRO takes longer than other types of secondary legislation – between nine months and a year.<sup>18</sup> This route would not modify the requirement that building societies be substantially funded by members.

7.90 Recommendation: that Government consider lowering the minimum funding limit by members from the current 50 per cent. 25 or 30 per cent of building societies' funds coming from members would still represent a substantial source of funding.

#### International Accounting Standard 39 and securitised assets

7.91 This section considers the second potential hurdle for effective funding of long-term fixedrate mortgages by building societies: the possible inclusion of securitised assets in the calculation of wholesale funding used in assessing the funding limits.

<sup>&</sup>lt;sup>17</sup> Section 6 of the Building Societies Act 1986 states that no more than 25 per cent of business assets (total assets minus liquidity, fixed assets and long-term insurance funds) can comprise assets other than loans fully secured on residential property.

<sup>&</sup>lt;sup>18</sup> The reason it takes so much longer is that the order has to be cleared by Cabinet Office Legal Advisers, the Regulatory Impact Unit and Parliamentary Counsel. The order has to be made available for consultation for at least 12 weeks. Then there is first stage scrutiny by a Commons Committee and a report on the draft RRO from a committee of each house. 60 days after that stage the RRO can be laid for second stage scrutiny and if both Houses of Parliament approve the Order then the Minister can make the RRO.

7.92 The introduction of international accounting standards and, in particular, IAS39, will mean that securitised assets will have to be reported in societies' accounts. Under the current arrangements, the funding limit would be calculated on the basis of the accounts, including the non-recourse funding raised through securitisation. Some building societies currently securitise a substantial proportion of their mortgages, and this change could hinder the ability to continue using this route. If long-term fixed-rate mortgage lending became more popular in the future, and securitisation were a more efficient funding route, this would place a constraint on building societies. The inclusion of securitised assets in the calculation of the funding limits is an unintended consequence of the introduction of the international accounting standards that in fact changes the rules within which building societies operate.

7.93 Recommendation: that the Government change the way in which wholesale funds are measured for assessing nature limits to enable building societies to continue to exclude securitised assets if IAS39 is adopted.

## RECOMMENDATIONS AND CONCLUSIONS

#### **SUMMARY**

8.1 There are great strengths in the UK housing finance system. Lenders compete in a market where innovation in products has been impressive; loans are available to a high proportion of the population; homeownership has risen steadily for decades and has risen greatly amongst households at the lower end of the income distribution. But there are problems and some of these explain why so few mortgages in the UK are at longer-term rates of interest.

8.2 Evidence presented in Section 2 of this Report suggests that a substantial proportion of households – particularly those borrowing more than average relative to their income and those whose incomes are uncertain – can get benefits from fixing the level of nominal repayments for several years. Yet few of such borrowers take out longer-term fixed-rate mortgages. These households are taking on substantial risk by borrowing a large amount relative to their incomes at interest rates that are variable or only fixed for a year or so.

- 8.3 Several factors play a role in accounting for this, in particular:
  - When choosing between mortgages, many borrowers attach great weight to the level of initial monthly repayments and too little to the likely overall cost of borrowing over the life of the loan.
  - Many borrowers' understanding of interest rate risk is poor. The type of advice and information many people receive does not help them as much as it could in understanding these risks.
  - The structure of mortgage pricing generates cross-subsidisation from many existing borrowers, a significant proportion of whom are paying standard variable rates (SVR), to new borrowers taking out discounted variable and short-term fixed-rate mortgages. This creates unfairness and makes the market less transparent than it could be. It plays to a tendency of many borrowers to focus on the initial monthly payments on a mortgage and it makes medium-term and longer-term fixed-rates appear expensive.
  - There are also a number of potential legislative and regulatory barriers to the cost effective funding of longer-term fixed-rate lending and the way in which early redemption charges are structured.

8.4 Monetary policy will be easier to manage if households make well-informed decisions about mortgage products that are priced in a transparent and sustainable way and where the risks of different types of mortgage are well-understood. Risks of over-indebtedness, debt affordability and excess volatility in the housing market – problems that can make monetary policy more difficult to operate – would be reduced. This is desirable whether or not the UK adopts the euro.

8.5 This Final Report makes recommendations on how the mortgage market in the UK can be helped to work better. The recommendations are based on the analysis of problem areas on which evidence is presented both in the Interim Report and in this Report. If acted upon these recommendations will:

- improve the information and advice households receive;
- make the pricing of mortgages in the UK more transparent, fairer and sustainable;
- remove some potential obstacles to the emergence of new types of contract which allow borrowers to hedge interest rate risk; and
- improve the ways in which fixed-rate mortgages can be funded and the ways in which the risks they generate can be hedged.

8.6 The recommendations fall broadly into two groups: first, those that are aimed at improving the advice and information that borrowers receive and at creating a fairer and more transparent pricing structure (recommendations 1 to 10); second, those that are aimed at helping lenders fund mortgages and handle risk in the most cost-effective way (recommendations 11 to 20). Many of the recommendations in the first group reflect the current best practice of lenders and financial advisors. The second group of recommendations have the potential to reduce the cost to lenders of offering several different types of mortgage. The issues which prompted recommendations, and the recommendations themselves, are summarised below.

#### RECOMMENDATIONS

#### Improving borrowers' understanding

8.7 The information people have on mortgages and the nature of advice they receive play a major role in their choices over mortgage products. Issues discussed in Section 4 of the Final Report focus on advice, information and borrowers' understanding.

Improving the Issue: There is strong evidence that suggests that many borrowers tend to focus excessively on the standard of advice initial monthly cost of a mortgage and do not have a good understanding of the interest rate risk associated with different mortgage products. The advice that borrowers receive often does not help as much as it could in explaining these risks.

Recommendation 1: that the FSA requires that, to discover consumer attitudes to risk and hence assess a customer's preferences, it is essential for mortgage advisors to cover personalised "what if" scenarios, of the sort illustrated in Annex A of this Report.

**Issue:** If mortgage advisors are to give good advice they need to understand the risk characteristics of the different products they are recommending and the way in which their cost to borrowers might evolve.

Recommendation 2: that the Financial Services Skills Council should require appropriate examinations for mortgage advisors to cover the role of expectations in the term structure of interest rates, the potential degree of volatility in interest rates and the evolution of mortgage repayments under different scenarios.

Improving pre-sale Issue: There is evidence that many consumers have a poor understanding of the interest rate risk disclosure of different types of mortgage. It is important that borrowers have an indication of the potential variability in interest rates.

Recommendation 3: that the FSA requires that, in addition to the current warning, a clear indication of variability in rates over the past, and the impact of such variability on mortgage monthly repayment, is shown in the pre-sale disclosure form.

Recommendation 4: that the FSA revises its mortgage information leaflet to include, in a consumer friendly style, the type of information contained in Annex A and that it engages with the Council of Mortgage Lenders, the Association of Mortgage Intermediaries and other stakeholders to identify the most effective distribution method.

Increasing Issue: There is a low level of financial literacy in the UK. Lack of financial literacy has serious implications in the mortgage market due to the scale and longevity of the commitment borrowers are typically taking on.

Recommendation 5: that the Financial Capability Steering Group includes improving consumers' understanding of the risks of mortgage borrowing among its strategic priorities.

Recommendation 6: that the Financial Capability Steering Group seeks to increase the financial resources dedicated to improving financial capability and that part of that funding comes from a levy on the financial services industry.

#### Fairer pricing in the UK

8.8 Competitive pressures on lenders shape both the pattern of pricing in the UK mortgage market and the nature of products offered. The structure of pricing and the range of products reflects competition in the mortgage market – which in itself is desirable – but it may also reflect the tendency of many borrowers to focus excessively on the level of the initial payments and insufficiently on the range of possible repayment costs some years ahead.

Reducing Issue: Some mortgage lenders distinguish between customers on the basis of whether they are a switching costs first-time buyer, someone who is re-mortgaging from another lender or an existing customer. Where there are differences in mortgage rates offered to these different groups they do not reflect differences in risk for the lender. They also create a barrier to some borrowers getting better mortgages and can mean that switching to another lender – which is costly – is the only way to get the best deals.

Recommendation 7: that the FSA requires that lenders make their full range of mortgage products available to all borrowers.

Improving postsale disclosure evidence shows that some borrowers perceive the process to be costly.

Recommendation 8: that the FSA creates a short user-friendly guide on the process of remortgaging to aid borrowers. This guide should be available through the FSA's consumer helpline and its website.

Issue: Borrowers should be aware of sources of comparative information. The FSA maintains extensive mortgage comparative tables on its website. The aim of the tables is to enable consumers to make informed decisions when they shop around and compare mortgages, and to help consumers focus on the longer-term costs of a mortgage.

Recommendation 9: that the FSA requires firms to include the exact website address for the comparative tables (www.fsa.gov.uk/tables) and a short description of their purpose in all mandatory disclosure documentation.

Issue: Borrowers should be aware of all of the mortgage products that their lender offers.

Recommendation 10: that the FSA requires that lenders include, with Annual Statements, a leaflet setting out the current mortgage rates on all their products.

#### Alternative protection from nominal payment uncertainty

8.9 Fixed-rate mortgages provide certainty over the profile of nominal payments over a given horizon and give insurance against the risk of rising interest rates. There are alternative ways in which borrowers can protect themselves against interest rate fluctuations. These include capped mortgages, stepped fixed rates and part variable/part fixed-rate mortgages. If interest rate caps could be sold separately from the mortgage this would protect against interest rate movements while offering greater flexibility.

**Issue:** There is uncertainty about the tax and regulatory treatment of stand-alone interest rate insurance and this could be an obstacle to the development of such products.

Recommendation 11: that the Government treat interest payment protection as insurance for tax purposes, provided that the sum assured is no greater than that part of a mortgage with a variable interest rate. The income received as compensation should not be subject to tax. For neutrality with the treatment of capped rate mortgages, the premium on stand alone interest rate payment protection should pay a zero rate of insurance premium tax.

Recommendation 12: that the FSA treat such a product as insurance for regulation of sale purposes.

#### Enabling cost effective long-term lending

8.10 There are supply side factors affecting how mortgage lending is funded that might inhibit the emergence of a more substantial market in longer-term fixed-rate mortgages. How mortgages are funded is a crucial factor behind the cost of making different types of loans. That in turn plays a role in determining the relative prices of different sorts of mortgage.

**Covered bonds** Issue: One route by which lenders could fund longer-term fixed-rate mortgages would be by issuing bonds (in particular, covered bonds). However, the lack of specific covered bond legislation in the UK could be an obstacle to the development of a UK covered bond market.

A lack of specific legislation could prevent recognition of these bonds for the purposes of the Coordination Directive on Undertakings for Collective Investments in Transferable Securities (UCITS). This would reduce the extent to which European investment funds can invest in UK issued covered bonds. However, current UK insolvency law may be sufficient to allow recognition for the purposes of UCITS. Recommendation 13: that the FSA should provide a definitive view on whether or not current UK insolvency law is sufficient to allow for the recognition of covered bonds under the UCITS Directive.

**Issue**: If a requirement for specific covered bond legislation were to be included in any new definition of covered bonds under the new Capital Adequacy Directive (CAD3), this would mean legislation in the UK would be needed in order to allow UK lenders to get more favourable capital weightings for these bonds than is currently possible.

Recommendation 14: that the Government should aim to ensure that CAD3 does not require specific UK covered bond legislation.

Mark-to-market Issue: Mark-to-market redemption charges for pre-paying fixed-rate mortgages appear to be charges unenforceable in the UK. This may mean that the range of fixed-rate products offered to households is restricted and types of mortgage with desirable features are not offered. Symmetric mark-to-market charges – where a payment can be made *to* the borrower on redemption – could be particularly attractive to some borrowers.

Recommendation 15: that the FSA allow in the pre-sale disclosure form illustration of the potential gain of early repayment of a mortgage with symmetric mark-to-market charges, as well as requiring disclosure of the maximum charge.

Recommendation 16: that the Government exempts compensation from symmetric mark-tomarket charges from tax.

Call options Issue: Interest rate derivatives – including call options – can provide a hedge against uncertainty about pre-payment rates on fixed rate mortgages. Call options could help mortgage lenders manage pre-payment risk. Writing call options could have the potential to help reduce volatility for regular issuers of long-term fixed-rate bonds, when there is uncertainty about future interest rates. The Government is one such issuer.

Recommendation 17: that Government should give further consideration to the potential costs and benefits of Government issuing interest rate derivatives.

Capital adequacy Issue: The CAD3 proposals are likely to have an impact on the capital treatment of fixed-rate compared with variable-rate mortgages. The FSA's initial proposals for implementation of CAD3 in the UK suggest that, where firms can provide sufficient evidence to demonstrate that there is a different default risk profile for particular mortgage products then different capital treatments will be accepted.

Recommendation 18: that the FSA should allow a broad range of different types of evidence (in addition to UK historic data) to be part of an assessment of the default risk of different mortgage contracts.

Nature limits Issue: Building societies may run up against legislative limits on the proportion of funding that must come from members if wholesale funding or securitisation of mortgages emerged as the most effective means to fund fixed-rate mortgages.

Recommendation 19: that Government consider lowering the minimum funding limit by members from the current 50 per cent. 25 or 30 per cent of building societies' funds coming from members would still represent a substantial source of funding.

Recommendation 20: that Government change the way in which wholesale funds are measured for assessing nature limits to enable building societies to continue to exclude securitised assets if IAS 39 is adopted.

#### **CONCLUSIONS**

8.11 Changes to the mortgage finance system in the UK will not come overnight. But the mortgage market has the potential to change rapidly. Over 16 per cent of borrowers moved their mortgage to a new lender in 2003 (in addition, a number of borrowers will have changed their mortgage product with their existing lender). With this scale of remortgaging the nature of the stock of mortgages can change rapidly.

8.12 Between 1993 and 2003 the proportion of new lending for house purchases in the form of endowment mortgages fell from 64 per cent to 4 per cent, with falls of up to 13 percentage points in one year. More recently, the proportion of different types of mortgage has also changed relatively quickly. The numbers of tracker mortgages rose from close to zero to about 20 per cent of the mortgage stock between December 1999 and December 2003. The proportion of (largely short-term) fixed-rate products rose by seven percentage points between December 2002 and December 2003. Recent history suggests that the mortgage market can change rapidly.

8.13 If acted upon the recommendations in this Report have the potential to change the UK mortgage market and make it work better. This will be to the benefit of borrowers, lenders, other financial intermediaries and the savers whose funds are channelled through the market.
# A Guide to giving advice

This Annex is an outline of how some of the risk and cost issues could be explained to borrowers and some relevant information presented. It is intended as a guide to how some important aspects of advice could be given. It is aimed at those giving advice on mortgages.

#### **CHOOSING A MORTGAGE**

How much you borrow to buy a house or flat and what type of mortgage you take out are longterm decisions. Most mortgages have a repayment period of between 25 and 30 years – 25 years is typical. While you will probably move house and change mortgage several times over this period, your mortgage debt is likely be there for a long time. So it is particularly important that you don't take a decision on the amount and type of your mortgage just on the basis of what might happen over the next year or so.

#### Some Points to Consider

- If your income drops, how will this affect your ability to meet the interest and loan repayments on your mortgage?
- If you choose later on to get out of your present mortgage because it becomes expensive, don't expect to replace it with another at similar or better terms to those available today.
- What looks like a more expensive mortgage today because it has a higher monthly repayment may end up being a better one. For example, it might have a long term fixed rate providing insurance against interest rate rises. Or it might provide a cap or ceiling on monthly repayments even if interest rates rise unexpectedly. Or it might provide lower penalties if you choose to repay the mortgage early.
- Have you taken a serious look at what might happen to the cost of borrowing in the future?

#### What if?

Mortgages differ depending on what happens to the cost of borrowing. On a variable rate mortgage, you will be exposed to higher monthly payments if interest rates rise. On a fixed rate mortgage, you could miss out on a better deal if the cost of borrowing falls.

Predicting the future of interest rates is no science. However, a useful pointer to what the cost of borrowing might be over the next five years can be found in how the financial markets view the future. The following chart reflects how those who trade in financial markets see how interest rates might move in the future. The figures are taken from Bank of England estimates of forward rates in the money markets and can be found on the website www.bankofengland.co.uk/statistics/yieldcurve.<sup>1</sup>

<sup>&</sup>lt;sup>1</sup> The figures illustrated in these tables are only a rough estimate of forward rates.



Let us assume you take out a mortgage of  $\pounds75,000$  repayable in 25 years. How would a fixed-rate mortgage of 5.5 per cent (1.5 per cent above the Bank of England's Base Rate) compare over, say, six years with a variable interest rate which tracks Base Rate?

The following tables compare the two mortgages under these different scenarios. They are based on a 25 year repayment mortgage but focus on payments over the first six years of the mortgage.

Interest rate movements are uncertain. So it is useful to show what happens if rates move up by more than people think or turn out lower than general expectations. The degree of uncertainty illustrated in these tables reflects the kind of volatility we have seen in interest rates over the last 50 years.

If rates are unchanged over this period, then over the first six years you would be about  $\pounds 1,390$  better off with a variable rate mortgage. However, if rates move up according to City forecasts, you would be about  $\pounds 845$  worse off with a variable rate mortgage.

And if rates moved much higher than City forecasts and increased gradually to 8.5 per cent in six years time, the variable rate mortgage would cost you over £9,000 more than a fixed rate at 5.5 per cent over the next six years.

On the other hand, a sharp unexpected downward movement in interest rates taking them down to 1.5 per cent by the sixth year would mean that a variable rate mortgage would be over £6,000 cheaper than the fixed-rate deal over a six year period.

Your assessment of the risks of changes in the cost of borrowing also needs to take account of movements in house prices. If interest rates rise sharply, the price of your house may fall and this will affect your ability to pay off the mortgage by selling and moving to another property. Interest rates and house prices are more likely to move in opposite directions than go the same way.

So the questions you need to ask yourself include:

- How far do interest rates have to rise to make a variable rate mortgage more expensive than a fixed rate one?
- How would I cope if interest rates move up more than most people think likely?
- If I decide to sell and move house, is a fixed rate mortgage transferable to my new property? Will I incur a penalty if I repay part of my loan?

Mortgages differ by risk. Some will expose you to the risk that interest rates rise; others that you may miss out on a good deal later if interest rates fall. Which risk really hurts you most?

#### 25 Year Repayment Mortgage of £75,000

Base rate tracker mortgage and 10-year fixed-rate mortgage compared. Base rate mortgage has an interest rate of base rate plus one per cent; fixed rate is 5.5 per cent. Base rate tracker pays 5 per cent initially.

#### **Unchanged Rates:**

	Tracker monthly payments (£)	Change from initial monthly payments (£)	Ten-year fixed-rate mortgage monthly payments (£)	Base rate (start year)
Year 1	422		442	4%
Year 2	422	0	442	4%
Year 3	422	0	442	4%
Year 4	422	0	442	4%
Year 5	422	0	442	4%
Year 6	422	0	442	4%
Total payments over 6 years	30,408		31,798	
Tracker vs Fixed over 6 years	Tracker is £1,390 <b>cheaper</b>			

#### Market forecast for interest rates:

	Tracker monthly payments (£)	Change from initial monthly payments (£)	Ten-year fixed-rate mortgage monthly payments (£)	Base rate (start year)
Year 1	422		442	4%
Year 2	443	21	442	4.5%
Year 3	464	41	442	5%
Year 4	464	41	442	5%
Year 5	464	41	442	5%
Year 6	464	41	442	5%
Total payments over 6 years	32,643		31,798	
Tracker vs Fixed over 6 years	Tracker is £845 more expensive			

	Tracker monthly payments (£)	Change from initial monthly payments (£)	Ten-year fixed-rate mortgage monthly payments (£)	Base rate (start year)
Year 1	422		442	4%
Year 2	545	123	442	6.8%
Year 3	601	179	442	8.0%
Year 4	610	188	442	8.2%
Year 5	623	201	442	8.5%
Year 6	621	199	442	8.5%
Total payments over 6 years	41,075		31,798	
Tracker vs Fixed over 6 years £9	Tracker is ,277 <b>more expensive</b>			

#### Market forecast for interest rates with significant upward surprise:

#### Market forecast for interest rates with significant downward surprise:

	Tracker monthly payments (£)	Change from initial monthly payments (£)	Ten-year fixed-rate mortgage monthly payments (£)	Base rate (start year)
Year 1	422		442	4%
Year 2	351	-71	442	2.2%
Year 3	343	-80	442	1.9%
Year 4	336	-86	442	1.8%
Year 5	326	-96	442	1.5%
Year 6	328	-95	442	1.5%
Total payments over 6 years	25,272		31,798	
Tracker vs Fixed over 6 years	Tracker is £6,526 <b>cheaper</b>			

#### Notes:

Market forecasts are from Bank of England estimated forward rates (available at web link www.bankofengland.co.uk/statistics/yieldcurve) as at 12th February 2004. The size of the upward and downward surprises to interest rates for each year are plus or minus one standard deviation of the change in base rates over 1 to 5 year horizons based on 55 years of history from January 1950 to January 2004. Details of the variability of base rate movements over that period are summarised below:

#### UK Base Rate 1950-2004

Standard deviations of changes in base rate

Over 1 year horizons	2.3%
Over 2 year horizons	3.0%
Over 3 year horizons	3.2%
Over 4 year horizons	3.5%
Over 5 year horizons	3.5%

# Statistical analysis of base rate changes

**B.1** The risks associated with a variable-rate mortgage depend on the probability distribution of future interest rate changes. Mortgage debt is only gradually paid off over time, so the risk to household finances remains significant for a number of years – at 5 per cent interest rates around 90 per cent of the nominal capital amount borrowed on a 25 year repayment mortgage will remain after five years. A borrower therefore needs to consider potential interest rate changes for a number of years ahead. While it is difficult to predict future interest rates it is possible to consider past performance to give some indications of the scale of changes.

#### **ANALYSIS OF BASE RATES SINCE 1950**

**B.2** This Annex looks at base rates over the past 50 years – the monetary and fiscal policy environment is different now from the past; the scale of inflationary shocks from outside has been very different at different times. These numbers therefore need to be treated with caution. Changes since 1992 are considered later in the Annex.

**B.3** Chart B1 shows a histogram of the level of base rates in each month since 1950. Over the past 50 years base rates have varied greatly from a low of 2 per cent in 1950 to a peak of 17 per cent in 1979. Episodes of high inflation at various times from the early 1970s up to the early 1990s have generated a distribution with a long tail.



**B.4** Table B1 shows the standard deviation of the change, and the average absolute change, in base rates over different time horizons.

	Base	Base rate		
	Standard Deviation	Average absolute change		
1 year change	2.34	1.72		
2 year change	3.84	2.87		
3 year change	2.94	2.18		
4 year change	3.96	2.98		
5 year change	3.84	2.81		
Source: Bank of England Miles Review of	alculations			

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Table B1: Anal	vsis of base	rate changes	over different	time horizons

The table shows the standard deviation and average absolute change in base rates over all non-overlapping periods since 1950.

Chart B2 shows a histogram of annual base rate changes over the past 50 years. This and **B.5** subsequent charts use non-overlapping periods. For over half of this period base rates have moved by 100 basis points or less over one year horizons, but base rates have frequently changed by 200 basis points in a year and there have been exceptional periods where changes have been very much greater.



**B.6** Chart B3 shows that over a two-year horizon the distribution of interest rate changes was, not surprisingly, wider than over one year with a substantial proportion of interest rate increases of between 2 and 4 per cent.



**B.7** Chart B4 shows that over five-year horizons the distribution of base rate changes is wider again.



**B.8** Correlations, shown in Table B2, show the relationship between changes in base rates over different horizons. The correlations between rate changes over different horizons are high. This implies that, starting from a particular date, there is a high correlation between the change in base rates two and three years ahead and between rate changes three and four years ahead. This implies that there is a good deal of persistence in nominal interest rates. This means that if rates move above or below what people expect they tend to stay there for some time.

	1 year	2 year	3 year	4 year	5 year
1 year	Х				
2 year	0.80	Х			
3 year	0.77	0.84	Х		
4 year	0.42	0.55	0.84	Х	
5 year	0.47	0.90	0.93	0.84	Х
Source: Bank of England, Miles Review calculations					

#### Table B2: Cross correlations of changes in base rates over different horizons

**ANALYSIS OF BASE RATES SINCE 1992** 

**B.9** The advent of inflation targeting in 1992, followed by the granting of operational independence to the Bank of England in 1997, has enhanced the credibility of UK monetary policy. Movements in base rates have been less extreme since 1992 than they have been at most times over the past 50 years. Interest rate changes since 1992 may give a better guide to potential interest rate movements under the new monetary policy regime. However, there are relatively few observation points on which to base such a judgement.

**B.10** Chart B5 shows a histogram of the level of base rates since 1992. All the observations of 4 per cent base rates or lower have occurred since 2001.



#### **B.11** Chart B6 shows the distribution of annual changes in base rates since 1992.



**B.12** Chart B7 shows a histogram of base rate changes over two-year horizons between 1992 and 2003. The histogram is very similar to that for one year.



**B.13** Looking at base rate changes over a longer time horizon than two years quickly reduces the number of observations. Given these significant limitations no histograms are included.

**B.14** The lack of data since the adoption of inflation targeting and Bank of England independence makes it difficult to draw any firm conclusions on the probability distribution of future interest rate changes. One way of attempting to gauge this is to consider earlier periods where inflation and interest rates have been stable. The following histograms look at interest rates and interest rate changes in the 1950s and 1960s – an era of generally low inflation and more stable interest rates than the period between 1970 and 1992.

Chart B8 shows a histogram of the level of base rates from January 1950 to December **B.15** 1969. Charts B9 and B10 show changes in base rates over one and two-year horizons.







## **Consultation list**

Many individuals and organisations were consulted during the course of this Review. Thanks are due to:

Abbey National Group

AGUS

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John Charcol Ltd.

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Cheltenham & Gloucester

Cheshire Building Society

Citadel Investment Group

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Congressional Research Service (US) Consumers' Association Corporate Training Partnerships Limited Council of Mortgage Lenders Countrywide Plc. Credit Suisse First Boston Danica Pension Danish National Bank Danske Bank Department of Housing & Urban Development (US) Deutsche Bank AG London Deutsche Bundesbank Dresdner Kleinwort Wasserstein Egg Banking plc Dr. Don Egginton Dr Lina El-Jahel Euro Hypo AG European Central Bank European Commission European Mortgage Federation European Mortgage Finance Agency FannieMae Federal Reserve Finance Development Centre Limited Financial Ombudsman Service Financial Services Authority Fitch Ratings Ltd Freddie Mac GMAC-RFC Limited

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Nykredit

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Standard Life Bank

Standard & Poor's

Tillinghast-Towers Perrin

Mark Tinker

UBS

UK Accounting Standards Board

Woolwich

### References

Banking Ombudsman (1999), Annual Report, 1998-1999.

British Bankers Association (2003), The Banking Code, March 2003.

Calhoun, C. A. and Deng, Y. (2002), 'A dynamic analysis of fixed and adjustable-rate mortgage terminations', *Journal of Real Estate Finance and Economics*, 2002, 24: 1/2, p9-33.

Campbell, J. and Cocco, J. (2003), 'Household Risk Management and Optimal Mortgage Choice', *Quarterly Journal of Economics*, 118, pp 1449-1494, November 2003.

Council of Mortgage Lenders (2004), *Annual Mortgage Surveys*, carried out for CML by NOP/MINTEL, February 2004.

Cunningham, D. and Capone, C. (1990), 'The relative termination experience of adjustable to fixed-rate mortgages', *Journal of Finance*, 1990, 45(5), pp 1687-1703.

Europe Economics (1999), *The compliance costs of extending financial regulation to mortgage advice:* A report for the Financial Services Authority, October 1999.

European Mortgage Federation (2003), *Mortgage Banks and the Mortgage Bond in Europe - 4th Edition*, November 2003.

Financial Services Consumer Panel Research Report (2003). Understanding Financial Needs. Spring 2003.

Financial Services Consumer Panel (1999), Mortgage Research Study, August 1999.

Financial Services Authority (1999), A Cost Benefit Analysis of Statutory Regulation of Mortgage Advice, October 1999.

FSA (2000a), Informed Decisions? How Consumers Use Key Features: a synthesis of research on the use of product information at the point of sale. Consumer Research 5. November 2000.

FSA (2000b) Consultation Paper 70: *Mortgage Regulation – The FSA's high level approach*. November 2000.

FSA (2001a) Consultation Paper 98: *The Draft Mortgage Sourcebook, including Policy Statement* on CP70. June 2001.

FSA (2001b), Choosing a Mortgage: Report of a research review and qualitative research on the mortgage buying process. Consumer Research 8. June 2001.

FSA (2002a), Feedback on CP98 (the Draft Mortgage Sourcebook). August 2002.

FSA (2002b), Better Informed Mortgage Customers: Research on financial promotions and product disclosure in the mortgage market. Consumer Research 14. August 2002.

FSA (2003a), Mortgage Regulation: Draft conduct of business rules and feedback on CP146. Consultation Paper 186. May 2003.

FSA (2003b). Towards a national strategy for financial capability. November 2003.

FSA (2004). Financial Services Authority, Financial Risk Outlook. 2004.

FSA (2004-05). Financial Services Authority Business Plan. 2004-05.

National Association of Citizens Advice Bureaux (2001). Summing up: bridging the financial literacy divide. November 2001.

National Economic Research Associates (2003). The economic costs of the proposed regulation of mortgage sales: A final report for the Financial Services Authority, May 2003.

Office of Fair Trading (1997) *Consumer Detriment under Conditions of Imperfect Information*, OFT research paper number 11, prepared for the OFT by London Economics, August 1997.

OFT (2003) *Switching Costs - Part One: Economic Models and Policy Implications*, OFT discussion paper number 5, prepared for the OFT by London Economics, April 2003.

The Mortgage Code Compliance Board (2003). Annual Report, September 2003.

The Mortgage Code Compliance Board (2003). Consumer Research Report, October 2003.

VanderHoff, J. (1996), 'Adjustable and fixed-rate mortgage termination, option values and local market conditions: an empirical analysis', *Real Estate Economics*, 1996, Vol. 24(3), pp379-406.

