

Risky Business? The Challenge of Residential Mortgage Markets

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Like all activities tied to global finance, residential mortgage lending is a risky business, for everyone involved. There is, as the trade press makes clear, a range of risks to lenders; the risks to borrowers are increasingly well-documented in writings on social policy; and national governments – recognising the close entanglement of housing markets with the wider economy – are concerned with systemic risks to economic stability and sustainable home-ownership.

Whether mortgage lending is more or less risky than other market activities, or other financial transactions, is not the prime concern of this paper, though there are instances – for example in the case of Japan – where non-performing home loans have helped undermine entire economies. The aim here is to set out the different kinds of risk built into to the business of residential mortgages, and to address the question of how they are apportioned. Some of these risks are well-rehearsed, some are less widely appreciated, and still others have yet to come into play.

Setting the scene

In most developed economies housing market dynamics are driven by home purchase. Home-ownership has become the *tenure de rigueur* for the higher income countries especially in the English-speaking world. Here, owner-occupation is the largest tenure sector, and it is distinctive in the way

it is financed (through commercial mortgages, rather than, say, family wealth), insured (privately) and securitised. In the UK – the example featured in the following discussion – owner-occupation is currently at its highest ever levels, accommodating almost 70% of all households, rising to 85% among those in mid-life. Furthermore, figures collated by the UK's Council of Mortgage Lenders suggest that 76% of households aspire to be (or remain) owner-buyers within the next two years, rising to 82% over a 10-year time horizon.

This is, moreover, the kind of housing system that governments and the international banking system increasingly favour. More than a decade ago, the World Bank (1993) referred to governments' new role as enablers rather than providers of housing. The Bank's priorities were 'facilitating and encouraging housing activities by the private sector' (p.19) to ensure that residential mortgage loans (as a proportion of the consolidated assets of the financial system) would grow from next to nothing, to 25% at moderate levels of economic development to 40% in some industrial countries. Currently, in the UK, therefore, domestic mortgages are the largest category of exposures of the major UK-owned banks, accounting for 23% of their total assets (Bank of England 2004). This is in line with a world trend towards housing markets characterised by the steady expansion of owner-occupation, based on a growing residential mortgage market prompting, in the end, a shift in households' financial strategies towards secured borrowing to fund all kinds of spend.

A round-up of risks

In economies driven increasingly by credit rather than cash, in which secured loans may have interest rates several percentage points lower than other kinds of borrowing, mortgages open up a wide range of consumption opportunities to many home buyers. This was initially prompted by the deregulation of mortgage markets (ending mortgage rationing and facilitating over-mortgaging); it has been stimulated more recently by a generation of more flexible mortgages which allow home buyers to tap quickly, easily and cheaply, into their accumulating housing equity (Smith et al. 2002). It is therefore worth noting at the outset that financial exclusion (from owner-occupation) may, in the long run, be as big a risk to non-owners – as much a loss to lenders and as vexing for policy makers – as is over-indebtedness among those actually on the property ladder.

It is also worth noting that the very idea of risk implies that there is something to gain (or at least to hold on to) as well as something to lose. In the last decade or so, to continue the UK example – though it is true in other settings too – those gains have been considerable, for whole economies as well as for (some) individual households. The causes, consequences, benefits and drawbacks of the changing nature of housing assets in Britain are reviewed in Smith (2005). Whether the result of careful speculation or a gamble that paid off, HM Treasury (2003) recognises that, as an investment, housing has performed particularly well; the UK (together with Spain) topped the OECD league table for

average annual increases in real house prices between 1971 and 2002¹ and real rates of house price inflation averaged over three per cent per year between 1995 and 2002. Since 2000 alone, prices have risen by 60% (ODPM, Survey of Mortgage Lenders), exceeding the peak of the 1980s boom (Vass, 2004). The wealth of some owner-occupiers has, then, been accumulating faster in their homes than through their incomes, to the extent that, by the end of 2003, the average (median) home-owner/buyer had, amongst their assets, as much as £56,000 of unmortgaged housing equity (Smith & Vass, 2004).

On the other hand, the profits of the housing market are profoundly unevenly spread; and individuals with least to gain often have most to lose. Thomas & Dorling (2004) have recently presented a vivid reminder of this for the UK. The picture is complicated, because now that owner-occupation has expanded to accommodate half the poor as well as most of the rich, and the value of the housing stock has once again been appreciating, the distribution of housing wealth is (in relative terms) marginally improving rather than substantially detracting from the position of the bottom half – indeed 3/4 – of the wealth hierarchy (Smith 2005). Nevertheless, between 1993 and 2003, the housing wealth of the ‘best off’ ten per cent of areas rose ten times

more than that in the ‘worst off’ ten per cent, raising the possibility that because of the distribution of housing assets, the UK is becoming more divided by wealth now than it was in Victorian times.

The more dominant owner-occupation becomes, the more apparent and pressing is the character and (uneven) distribution of the many risks it contains. However, the risks associated with the mortgage market are the primary concern here. It is usual to talk about these risks in terms of their ‘individual’ or ‘systemic’ causes and consequences; to recognise that there are factors which can destabilise whole housing systems (and the economies encasing them) as well as circumstances which affect the sustainability of home-ownership for vulnerable individuals, and for groups of households. Not all individual risks have systemic effects (though they may be widespread enough to attract policy intervention). Systemic failures, however, may have a disproportionate effect on those households who are most exposed to other kinds of risk.

This way of framing risks is useful, though recognising some risks as distinctively, perhaps uniquely, ‘individual’ helps conflate *risks to individuals* with *risky individuals*. This is problematic given changes to the regulatory regime for mortgage lending (the EU’s Basel II accord being a case in point)

which raise the possibility of more pronounced risk-related pricing for mortgage products, substantially shifting the balance of risks associated with housing market participation, and reducing the extent to which they are shared. The individual-systematic framework also tends to concentrate debate on residential mortgage risk around a rather narrow (if important) set of questions. For households, the focus is on the individual precursors of mortgage default and repossession, rather than on the risks embedded in neighbourhood dynamics. For systems the destabilising effects of rising interest rates and price volatility on whole economies receive far more attention than the pervasive consequences of more localised (economic and other) shocks to housing systems.

It may therefore be helpful, and it is probably important, to overlay ideas about individual and systemic risks with another set of ideas: to think of risk first, in terms of a range of factors working at a variety of scales to interrupt the flow of finance required to service debts; and, second, as a cluster of environmental as well as economic events and circumstances depressing the value of the assets against which loans are secured. Combined, these two interlinked dimensions of risk – systematic/individual; income streams/asset values – provide a reasonably

Table 1: A framework for analysing residential mortgage risk

Type of Risk	Systemic Risks	Individual Risks
Risk of default: risk to the banking system of non-performing loans; risk to individuals of over-indebtedness and repossession	Rising interest rates Falling employment rates	Biographical disruption (unemployment, ill-health, disability, loss of main earner, increase dependents)
Risk of asset depreciation: risk of negative equity; risk of debt deflation; risk of decline in quality/condition of housing stock	Price volatility Equity ‘leakage’ Illiquid assets	Changing geography of demand/ neighbourhood dynamics: geopolitical threat; environmental change; antisocial behaviour; software sorting.

¹ OECD countries referred to in this paper are the 18 included in the International Settlements’ residential property price database, plus New Zealand (see Catte et al., 2004).

comprehensive framework for exploring the mix of economic, environmental and technological factors which have a bearing on residential mortgage risk. This framework is set out in table 1, and the discussion which follows is broadly organised around it.

Risk of default

In the English-speaking world, at least, high rates of home-ownership go hand in hand with high levels of mortgage debt. In the UK, for example, aggregate levels of secured debt relative to income have tripled since 1980, rising from 95% to 125% of post-tax income in the five years to 2004. In the decade 1992-2002 UK mortgage debt rose from 56% to 64% of GDP (Catte et al., 2004), and is now one of the highest in the developed world, exceeded only by Denmark (74%) and the Netherlands (79%). Not surprisingly, mortgages constitute by far the majority of household debt in the UK, accounting for three quarters of UK households' total interest-bearing liabilities.

Furthermore, mortgage debt increases households' credit-worthiness, so that home-owners are twice as likely as renters to have credit cards, more likely to have borrowings against these cards, and more likely to have unsecured loans of other kinds (Bridges et al. 2004). This may underpin the high rates of growth of unsecured lending by UK banks; in the last five years this has exceeded the rate of growth in mortgage lending, though it still accounts for less than 20% of all lending to UK residents (Bank of England, 2004).

A high level of debt does, of course, provide an income stream to lenders and – where borrowing takes the form of equity withdrawal to fuel non-housing consumption – it may also have positive economic effects. However, this may be compromised for households who experience any one of a wide range of biographical disruptions, particularly in economies where the expansion of home-ownership has gone hand in hand with a decline in levels of social protection. There may, further, be systemic consequences if

ability to pay is more widely compromised by economic shocks in the form of either (or both) rising interest rates and increased levels of unemployment, particularly if mortgage lending with high loan-to-value ratios is concentrated among borrowers experiencing financial stress (for example if their loan-to-income ratios are also high). A key dimension of residential mortgage risk is thus the possibility for individuals of default and repossession, and the prospect for lenders of holding too many non-performing loans.

Currently, it is the risk of rising interest rates which dominates discussion around mortgage default and the serviceability of loans. Employment in the UK, in particular, is at an all-time high and for most (though not all) commentators, the outlook seems robust. Interest rates on the other hand are still relatively low (they averaged 5% between 2000 and 2004, in contrast to 7% in the 1990s and 11% in the 1970s and 1980s). Although it is not clear whether and to what extent they might rise in the medium term, commentators generally agree that the sustainability of owner-occupation is vulnerable to even a small increase (one or two per cent) in interest rates. In countries like the UK, moreover, where there is a widespread preference for variable rate loans (an average of 65% of mortgages held between 2000 and 2002 were of this type) borrowers may be especially vulnerable to a change in short-term interest rates (Miles, 2004).

It is important to recognise that even (perhaps especially) in a benign economic climate – even if unemployment and interest rates both stay low – highly indebted borrowers (in a setting where the average house price to earnings ratio is now 5.7, exceeding its 1980s peak) remain vulnerable to the financial consequences of biographical disruptions of all kind. These include relationship breakdown, ill-health and premature death of a mortgagor – hazards for which, so far, neither state nor private safety nets offer a comprehensive protection package (Easterlow and Smith, 2004; Ford et al., 2003). For households faced with these critical life events, even today's relatively low aggregate loan-to-

value ratios might not have sufficient protective effects. Indeed, it seems more likely that households in these circumstances will be regarded as risks rather than recognised to be at risk. This may not affect (or protect) whole economic systems, nor will it undermine (or secure) the sustainability of whole housing systems, but it does raise important questions about the systemic, and systematic, risks to social welfare that may be associated with residential mortgage markets in a globalised economy.

Risk of asset depreciation

The defining characteristic of a residential mortgage is that it is secured against property. The sustainability of residential mortgage lending depends on the financial value of housing assets being maintained or increased in the medium term. If property values fall, both individuals and, in extremis, economies are vulnerable. There are two sets of risk factors here: price volatility and asset deterioration.

Volatility is linked to the dynamics of housing (as well as land and property) markets; it is about how well housing performs as an investment and how effectively debts are protected from deflation. Volatile prices imply losses as well as gains, hence they contain an element of risk. The risk of asset depreciation is also a function of the quality and condition of the housing stock: of levels of reinvestment; of individuals and governments maintaining a flow of equity into housing. If quality, condition and other localised indicators or value are not maintained, the basis for mortgage lending is at risk, and the sustainability of the housing system in question.

j) Volatile Prices

House prices are surprisingly and notoriously volatile, especially in the UK, which is one of only four OECD countries (with Italy, Spain and Finland) whose standard deviation of annual percentage changes in house prices between 1971 and 2002 exceeded ten per cent (Catte et al,

2004).² This is rather close to the cushion which Smith and Vass (2004) suggest is available to the average British home buyer, who has sufficient housing wealth (at what may be a house price peak) to withstand a price slump of up to ten per cent. On the one hand, as Banks et al (2004) point out, volatility itself increases demand, and produces a price spiral, as buyers who might once have rented are prompted to enter the market early in a setting where 'insuring [against] the risk of house price rises is more important than avoiding the risk of a house price fall' (p. 9). This may be one reason why housing is an exception to the 'rule' that risk averse individuals avoid risky assets as price volatility increases. On the other hand, volatility brings the risk of 'overshooting', leading to the slumps associated with price 'correction'. Both the uncertainty implied in volatility and the losses embedded in this are risky for individuals as well as for housing systems and economies. HM Treasury (2003) is thus concerned that any instability in housing markets may be translated into instability in economic activity more generally while Barker (2004) argues that this has already created problems both for business and economic policy makers.

In the UK policy arena the favoured explanations for price volatility hinge around housing supply issues, on the one hand, and the nature of the mortgage market, on the other. For the UK case, supply issues are dealt with in a recent government report – the Barker review – which argues that although enhancing supply is unlikely to be a cure-all for price volatility, attending to supply has a sufficiently wide range of additional social, as well as economic, benefits to place it high on the policy agenda for the medium term (Barker, 2004). However, volatility may also be rooted in the mortgage environment. As many as 60% of UK mortgages are interest-sensitive variable rate loans. No other European country matches this – Italy comes closest with 35%. This may have knock on effects into price fluctuations, and it also means

that households' disposable incomes, as well as their ability to service debts, are over-exposed to interest rate variations. Miles (2004) therefore argues that if borrowers could be persuaded to look to the medium term risks that are associated with variable rate loans (rather than to immediate housing outlays) they might choose longer term fixed rates, and this might reduce volatility and mitigate its attendant risks.

There are, of course, other factors encouraging price volatility. Muellbauer and Murphy (1997) attribute volatility to the high gearing permitted by lenders, low transactions costs, and a history of positive investment returns. Westaway (1993), reflecting on the strong growth in Mortgage Equity Withdrawal in the 1980s, argues that this was fuelled by a stream of 'quasi-consumer credit' which itself made the housing market more volatile than it might otherwise have been. This attention to credit-based effects might merit more attention in the current economic and policy environment.

What is, nevertheless, curious about these discussions is the extent to which debate around adverse 'shocks' to the housing system has focussed almost entirely on shocks associated with macroeconomic processes and international finance. While this connects appropriately with debates around systemic risk, price volatility is, of course, also risky for individuals, and an aspect of this which has received relatively little attention is its localisation. While this may be of less immediate interest to the readership of this journal, it is important to recognise that some localised risks can have system-wide ramifications. For example what is the impact on urban house prices in some major world cities of the threat – as well as the reality – of terrorist attack? To what extent do environmental 'shocks' – flood risk, sea level rise, climate change more broadly – together with changing public understandings of the science with which these risks are

calibrated, impact on actors in the housing market? And how, and with what consequences, is demand changing as 'software sorting' alters the information content of the system for buying and selling homes? There is a general consensus that price volatility is a key individual and systemic risk associated with residential mortgage lending. So far, however, it has been encased in a rather narrow set of debates which make it difficult to account for and even harder to predict.

ii) Fixed asset 'stripping'?

There is currently some debate over whether historically high house prices across many of the more economically developed countries are the volatile product of a dangerously overheated market, or part of a one-off adjustment to a lower interest rate regime (in the way that a previous housing 'boom' may have been an adjustment to the effects of deregulated lending). As far as mitigating mortgage risk is concerned, the latter is preferable; it is less likely to be associated with a price correction, or slump. However, even – perhaps especially – in that case there is one set of risks which have attracted surprisingly little attention. Owned housing may be an investment and an asset for households, but owner-occupation is also – and increasingly – relied on to fulfill a range of human needs and provide a stream of services that are important for social welfare. In the UK, for example, the major expansion of owner-occupation in the last twenty years has been a process of tenure change, as social tenants exercised their right to buy. So the market for housing has expanded into spaces once celebrated for their social concern, raising a whole series of questions pertaining to its welfare role that are explored in Easterlow and Smith (2004). Perhaps the major systemic risk associated with the future of home-ownership is the risk of failing to strike a balance between the investment and welfare functions for the expanding stock of

² Though puzzlingly, using data labelled 'average percentage deviation of real house price from trend 1970-2001' for eleven European countries, Bridges et al (2004) identifies only France as having levels less than 10 per cent. This measure is highest in the Netherlands (25%) with the UK in the middle (15%).

owner-occupied homes. And one key factor affecting that balance is the enhanced opportunities borrowers now have to divert equity out of the housing stock; to spend it in places where it can no longer maintain the quality, condition and future standards of home-ownership.

There has always been some concern about the possibility of housing equity 'leaking' into other areas of the economy. Prior to the UK's financial deregulations of the 1980s this was a minor consideration, not least because it formed a tiny proportion of personal disposable income. What concern there was at this time centred on the extent to which such 'leakage' might constrain housing market activity (Westaway, 1993). More recently, however, within a framework of deregulation, prompted by growing competition in the financial services industry, the main trend in the mortgage market has been to promote secured borrowing. This has grown alongside, rather than at the expense of, unsecured loans (May et al, 2004), releasing potentially large amounts of housing wealth for spending on other things (Smith et al, 2002).

There is undoubtedly a wide range of financial and material benefits to home buyers in all this. Governments struggling with a pensions gap and a crisis of care in older age are keen on this turn in residential mortgage lending too. But there are some notable systemic risks embedded in it. One is that this level of spending against housing equity is to an extent a one-off. Even if property prices appreciate over time, some heroic assumptions would be needed to allow their asset value both to be drawn on today to provide a safety net against unemployment, or to fund education or boost high street consumption, and relied on tomorrow to supplement pensions or fund health and social care.

A second risk is that so much flexibility in how housing wealth is spent may come at the expense of reinvestment in the housing stock. At a time when borrowers are seeking

secured credit to fuel all kinds of spend, in an environment where governments are looking to housing wealth not only as an insurance policy for later life, but for other kinds of securities, and in a regime where vulnerable borrowers may be increasingly at risk of predatory lending, the question of what happens to the stock of housing itself merits careful attention. In the UK, for example, the government is clear that responsibility for maintaining the quality and condition of the owned housing stock rests with individual households, precisely because owned homes are a financial asset as well as a housing service. The general consensus, however, is that only about half the gross equity released from housing is reinvested in the stock. This is confirmed in recent analyses based on the Survey of English Housing (Benito and Power, 2004), who found that half those who withdrew equity spent it on home improvements.

There is a tendency to view this figure with some satisfaction: as much as half the flow of equity out of housing is reinvested into the stock. But this means that at least half (and probably more where the most flexible mortgages are concerned³), flows into other things. At the moment there is no clear sense of whether or not this matters. There are no targets set for reinvestment, no warnings or guidelines issued to householders about how to spend their housing wealth, and – especially when prices are rising rapidly – no effective penalties in the housing market for failing to keep the property up to scratch.

And what of the fifty per cent of equity that is, apparently, reinvested? Nearly all our knowledge of this comes either from gross estimates based on aggregate figures, or from a relatively small amount of questionnaire survey data in which, at best, spend on home repairs, renovations and extensions are one of half a dozen 'tick box' responses. There has therefore been no systematic attention to the way in which this might contribute to processes of neighbourhood improvement or decline.

Does anti-social behaviour, perceptions of risk and incivility, low social cohesion and other indicators of neighbourhood decline encourage equity to leak out of the housing environments that need it most? Or is it the pull of a holiday home or an overseas investment opportunity that does this? Does peer-pressure, cultural engagement and other local effects encourage reinvestment and improvement? Or do lenders and households need a steer from policy and politics on what to do with housing equity in order to mitigate risks?

Whether as a means of funding consumption preferences, or as a way to meet key financial needs, the enhanced access to accumulating housing wealth now encouraged by residential mortgage lending has the potential to allow significant leakage of housing equity out of the housing infrastructure and into other areas. People have an incentive to grow the housing market – to build up their housing wealth – precisely because of this. As a consequence, the whole system may lean towards short term revenue rather than long-run regeneration; towards individual financial gain and individual risk mitigation rather than towards social or environmental sustainability. The wider range of concerns this raises are set out in (Smith, 2004). A key question is whether from a systemic perspective this kind of lending risk is sustainable; is it wise to encourage so much personal wealth to be invested in, and extracted from, housing? Certainly, once personal wealth, and the housing equity with which it is increasingly interchangeable, is treated in this way, it cannot, in the current environment at least, be guaranteed to function in the way policy makers anticipate or hope.

Conclusion

This paper contains an overview of the many dimensions of risk associated with residential mortgages. The aim has been to set these out in a reasonably systematic

³ Among those interviewed in a recent survey of flexible mortgage holders – i.e. among borrowers choosing the kind of mortgage designed to make equity release easier – only one in three of those who withdrew any equity spent it on their home. Two thirds used it to service other debts or to buy treats and luxuries (Smith et al. 2002)

way, and to consider their consequences for vulnerable individuals as well as for whole housing systems and for the economies which contain them. In many of the most developed economies, with the highest rates of owner-occupation, there has been a steady shift in risk bearing away from governments and towards individuals (and their private insurance arrangements). While the brief for this article is to provide an account of risks, not a speculation on mitigation, the discussion does indicate some limits to 'self-protection' even with increased financial education and enhanced financial capability. It also points to a broad range of opportunities for effective intervention – to the scope there is for governments and the financial services industry to apply precautionary principles across a range of potential risks, to minimise actual risks and to manage the consequences of exposure to them.

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⁴ This document can be found at: <http://www.jrf.org.uk/knowledge/consultation/homeownershipinquiry/documents/housingwealth.pdf>