# Risky Business? The Challenge of Residential Mortgage Markets

## By Susan J. Smith Department of Geography, Durham University

## Risky business? The challenge of residential mortgage markets

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 homeownership.

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 rigeur* 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 overmortgaging); 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 owneroccupation) 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 2002<sup>1</sup> 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
<b>Risk of default:</b> 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)
<i>Risk of asset depreciation:</i> 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.

<sup>1</sup> 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 homeownership 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 interests 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 nonperforming 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-tovalue 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.

### i) 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).<sup>2</sup> 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 'quasiconsumer 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 homeownership is the risk of failing to strike a balance between the investment and welfare functions for the expanding stock of

<sup>&</sup>lt;sup>2</sup> 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 guality 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 concerned<sup>s</sup>), 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

<sup>&</sup>lt;sup>3</sup> 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.

### Acknowledgement

This article draws, with permission, on some elements of a paper commissioned by the Joseph Rowntree Foundation Inquiry into Home Ownership 2010 (Smith, 2005)<sup>4</sup>. The wider programme of research encasing this is supported by the Economic and Social Research Council (RES-051-27-0126).

### References

- Bank of England (2004). *Financial stability review*. No. 17. London, BoE
- Banks, J, R. Blundell, Z. Oldfield and J. P. Smith (2004), "Housing Wealth over the Life Cycle in the Presence of House Price Volatility", *National Bureau of Economic Research*, Cambridge, Massachusetts.
- Barker, K. (2004). *Review of housing supply. Final Report*. London, HMSO/ HM Treasury.

- Benito, A. and J. Power (2004). "Housing equity and consumption: insights from the Survey of English Housing." *Bank of England Quarterly Bulletin* (Autumn): 302-309.
- Bridges, S., R. Disney and A. Henley (2004). 'Housing wealth and the accumulation of financial debt: evidence from UK households', *in* Bertola, G., R. Disney and C. Grant (eds.), *The economics* of consumer credit, Cambridge, Massachusetts, MIT Press.
- Catte, P., N. Girouard, et al. (2004). "Housing markets, wealth and the business cycle." *OECD Economics Department Working Paper* **394**.
- Easterlow, D. and S. J. Smith (2004). "Housing for health: can the market care?" *Environment and Planning A* **36**: 999-1017.
- Ford, J., D. Quilgars, et al. (2003). *Risk, homeowners and safety-nets: MPPI and beyond*. London, Office of the Deputy Prime Minister.
- HM Treasury (2003). *Housing, consumption and EMU*. London, Stationery Office.
- May, O, M. Tudela and G. Young (2004). British household indebtedness and financial stress: a household level picture. Bank of England Quarterly Bulletin, winter, 414-428.
- Miles, D. (2004). *The UK mortgage market: taking a longer view*. London, HMSO / HM Treasury.
- Muellbauer, J. and A. Murphy (1997). "Booms and busts in the UK housing market." *Economic Journal* **107**: 1701-17027.
- Smith, J. and J. Vass (2004). "Mortgage equity withdrawal and remortgaging activity." *Housing Finance* **63**: 22-33.

- Smith, S. J. (2005). "Banking on housing? Speculating on the role and relevance of housing wealth in Britain". In Joseph Rowntree Foundation (2005) Inquiry into Home Ownership 2010 and Beyond. York, JRF
- Smith, S. J. (2004). *Making housing markets work: growth and regeneration*? Plenary lecture to the European Network for Housing Research Cambridge, July (available from the author)
- Smith, S. J. and J. Ford (2002). "Home ownership: flexible and sustainable?" *Housing Finance* **55**: 36-53.
- Smith, S. J., J. Ford and M. Munro with R. Davis (2002). A review of flexible mortgages. London, Council of Mortgage Lenders.
- Thomas, B. and D. Dorling (2004). *Know* your place. Housing wealth and inequality in Great Britain 1980-2003 and beyond. London, Shelter.
- Vass, J. (2004), "Affordability: Testing Times Ahead", *Housing Finance*, Vol 63, 34-44, London, Council of Mortgage Lenders.
- Westaway, P. (1993). "Mortgage equity withdrawal: causes and consequences." National Institute of Economic and Social Research Discussion Paper 59.
- World Bank (1993). *Housing. Enabling markets to work.* Washington DC, The World Bank.

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

# A Glass Half Full/Half Empty: The "Internationalisation" of Mortgage Insurance

By Eric Klopfer, Vice-President, International Strategic Development and Regulatory Affairs for AIG United Guaranty<sup>1</sup>

Like other similar articles, Anna Whittingham's article (see page 20) proposes a bright future for mortgage insurance ("MI") as a form of credit risk transfer. Emphasis on the "future" is apposite, because MI currently occupies a peripheral role in the world's leading housing finance systems outside its homelands of the United States, Canada and Australia. This article will discuss MI's prospects as a form of credit risk transfer and concludes that MI has much to offer in terms of specialist assistance in loss avoidance and risk spreading based on real experience, not simply theoretical justification. However, the article also concludes that MI as it is offered currently faces substantial barriers to widespread acceptance, including:

- Perception that MI does not pay its claims among mortgage market stakeholders in key development markets;
- Persistence of low credit loss environments discouraging risk transfer at a commercially acceptable price;
- Insistence on a comprehensive institutional design based on past successes rather than future needs;
- Competing product alternatives more willing to offer credit protection on a cyclical basis; and
- · Regulatory barriers based on existing

custom and bank supervisory suspicion of insurance products.

### **MI** fundamentals

At its simplest and as explained in the Whittingham article in this issue, MI is a form of insurance offering credit protection on residential mortgages. Typically provided on high loan-to-value ("LTV") loans<sup>2</sup>, all forms of MI commit to indemnify the policyholder or the beneficiary for the difference between the amount owed on a mortgage loan and the amount collected once the mortgage property is recovered and sold due to borrower default – up to a contractually defined limit.

In some senses, past is prologue for MI, which is fundamentally a credit risk management tool that combines a process for reducing loss with an insurance product for transferring the reduced risk portion. Despite considerable attention paid to how MI can be harmonised with Basel II, the International Financial Reporting Standards and other recent financial regulatory initiatives, it is worth remembering that MI predated the Basel Accord and has been used in residential mortgage lending for more than a hundred years (and the use of guarantees or sureties in similar contexts has an even longer history). Thus, MI needs to be seen in two dimensions - first, in

terms of its market-based uses, and then in terms of what supervisory incentives have been developed to encourage its use.

First, its uses. Broadly, MI serves as an alternative to outright credit rationing by providing a form of additional security and limiting the extent to which lenders are exposed to risk of loss from defaults by their customers<sup>3</sup>. Addressing traditional bank supervisory concerns regarding asset price volatility specifically regarding residential mortgages and the greater likelihood of default by borrowers with little invested in a property, MI provides a market-tested alternative to the "substantial margin of additional security" required by bank supervisors and has been used by financial institution credit risk committees when considering business plans for lending to customers with greater credit risk than they might otherwise consider; developing new products; or broadening the availability of high LTV loans. Additionally, because MI has been offered on a standardised portfolio basis by experienced, highly solvent counterparties, rating agencies and investors value MI as credit enhancement in secondary market transactions such as securitisations or portfolio loan sales. As such, the presence of MI adds stability to the prime lending market and facilitates lending to the under-served and sub-prime market segments.

<sup>1</sup> The opinions expressed in the Article are his own, and in part are intended to update earlier HFI contributions such as David Liu, "Exporting Mortgage Insurance Beyond the United States," *Housing Finance International*, Vol. XIV, No. 4 (June 2000).

<sup>2</sup> As the term suggests, LTV refers to the ratio of borrowed funds to the property "value", whether measured on an appraised, market or other supervisory definition. The "risk frontier" between less and more risky residential mortgage loans will vary by market, but 80% represents a general standard in advanced mortgage markets, and 50-60% in less advanced markets.

<sup>3</sup> See Buckley et al, Comparing Mortgage Credit Policies: An Options Based Approach, World Bank Research Working Paper 3047 (May 2003).

By its terms, MI transfers credit risk on mortgages to regulated third parties outside the banking industry that are mainly specialists in higher risk lending and the analysis of those risks<sup>4</sup>. For lenders, this transfer of risk improves asset quality, helps provide liquidity to the market and encourages/facilitates more participation due to:

- limitation of lender losses;
- timely payment of claims;
- more predictable earnings profiles; and
- more efficient underwriting process where protection provider criteria are met.

Increased liquidity creates competition and hence better interest rates for borrowers.

The benefits of MI, i.e., improved market liquidity, greater social inclusion, more robust underwriting processes, improved management information and transfer of risk outside the banking sector support the supervisory aim of maintaining a strong, well controlled mortgage lending market.

Second, incentives for use<sup>5</sup>. Regulatory capital relief for lenders using MI was made available in certain markets, notwithstanding the fact that the original Basel Accord did not consider the use of MI directly for several reasons. Because the Basel Committee could not agree on a uniform measure of LTV and because residential mortgage assets were considered "local"

compared to other types of banking activities for "internationally active" institutions, the Accord established only a minimum risk weight for residential mortgages and committed any further action to national supervisory discretion. Additionally, as noted above, the Basel Accord restricted the scope of instruments for credit risk transfer to traditional interbank guarantees and counterparties to banks and securities firms<sup>6</sup>.

Countries such as the United States or Australia that wished to acknowledge a role for MI did so in two steps:

- First, the additional risk of higher LTV loans was reflected in a higher risk weight for those loans.
- Second, the use of MI on these higher risk loans was understood to provide protection against the additional risk (both in terms of additional underwriting rigor and process diligence and risk transfer), and was allowed to eliminate the additional risk charge.

Other countries such as Canada approached the issue even more simply. Provisions in banking and trust company legislation predating the Basel Accord set a LTV threshold (75%) and simply required use of MI for loans made above the threshold. Italy borrowed aspects of both approaches<sup>7</sup>.

Unsurprisingly, incentives work better than no incentives, and not all incentives are created equal. In the case of the US, the legislative decision taken in 1970 to require Fannie Mae and Freddie Mac to have credit enhancement on loans exceeding 80% LTV has proved to be substantially more important as a source of business opportunity for mortgage insurers than Accord-inspired subsequent Basel regulatory capital incentives - but even then so-called "80/10/10" structured loans have bled considerable volume away from mortgage insurers<sup>8</sup>.

Similarly, Canada's decision in 1954 to require mortgage insurance use by federally regulated lenders continues to spur volumes, minimise the underwriting risks of adverse selection and sustains a measure of cross-subsidisation between Canadian borrowers, but the real source of value for lenders is the Government's willingness to provide back-stop credit guarantees to the mortgage insurers that dramatically reduce regulatory capital charges for lenders (90-100%)<sup>9</sup>.

Thus, so long as MI was (and is) seen as a tool for effectively reducing risk to lenders and investors, creating new opportunities for borrowers <u>and</u> also benefiting from incentives stimulating its use, it flourished (and flourishes).

<sup>4</sup>Interestingly, MI as a form of cross-sectoral credit risk transfer has received little or no attention by financial regulators, especially compared with risk transfer via derivatives and capital market instruments, even though the cross-sectoral interaction is more direct and perhaps more valuable. See, e.g., The Joint Forum, *Credit Risk Transfer* (BIS: March 2005).

<sup>5</sup> Roger Blood has covered this subject in a number of publications and presentations, including an article published in Housing Finance International. See, for example, e.g., Blood, "Mortgage Default Insurance: Credit Enhancement for Home-ownership," Housing Finance International, Vol. XVI, No. 1 (Sept. 2001).

<sup>&</sup>lt;sup>6</sup> See generally Linda Allen, "The Basel Capital Accords and International Mortgage Markets: A Survey of the Literature," *Financial Markets, Institutions & Instruments*, Vol. 13, Issue 2, Page 41 (May 2004).

<sup>&</sup>lt;sup>7</sup> Italy uses an approach midway between the US and Canadian approaches – mortgage loans without credit protection are assessed additional capital because they are not considered "residential mortgage loans", but the additional capital charge is eliminated (and more favourable treatment for the recovery of the mortgaged collateral is given) when officially approved forms of credit protection such as MI are used.

<sup>&</sup>lt;sup>e</sup> "80/10/10" loans are constructed to avoid the use of MI (80% first mortgage, 10% borrower down payment and a 10% second mortgage).

<sup>&</sup>lt;sup>9</sup> Because the Canada Mortgage & Housing Corporation is treated as a sovereign under Basel Accord rules, CMHC-insured mortgages are considered essentially riskless obligations meriting a zero risk weighting. Because Government policymakers wished to introduce some measure of competition, they provided GE (now Genworth), CMHC's "private" competitor, with a 90% sovereign guarantee, and presumably would have to extend similar arrangements to other private competitors to spur additional competition. Indeed, although there has been some scholarly work done comparing US and Canadian housing finance systems, it remains unexplained why mortgage insurers in the US have competed successfully against the Federal Housing Administration's Mutual Mortgage Insurance Fund, also a sovereign credit guarantor, but have been unable to in Canada. Likely the answer involves the role of Fannie Mae and Freddie Mac and the scale and concentration differences between the two markets.

## Challenge No. 1: Is MI a reliable source of credit risk transfer?

The description of MI in its existing markets sounds appealing. Certainly there was (and is) consumer resentment over "unnecessary" coverage, lender indifference to credit risk, investor suspicion over potential downgrade risk and supervisory conservatism regarding new forms of credit risk transfer – but MI performs an important role of managing residential mortgage credit risk without eliminating it entirely.

So why hasn't MI taken root quickly in new markets outside its traditional strongholds? In part, slower progress results from the simple fact that other alternatives already appear to be working fine within particular markets10. And in part, MI has been successful, since use of MI (or comparable mortgage guarantees) is being suggested routinely by multilateral development banks and aid agencies in emerging market housing finance systems as disparate as Mexico, India, Kazakhstan, Lithuania, Estonia and the Dominican Republic. In these markets, the desire to increase homeownership or improve housing stock requires additional assurance to creditors regarding the creditworthiness of borrowers, and the desire to attract nonlocal sources of funds through bonds issued by secondary market facilities also stimulates interest in MI.

However, promising as those markets are in terms of global housing demand, they are small compared to more developed housing markets currently, which is where MI as a commercial insurance product needs to take root in order to consider its expansion efforts successful. In these markets mortgage insurers must meet the needs of sophisticated lenders and sceptical banking supervisors better than competing alternatives, expressed in the form of five significant challenges.

The first challenge is one of perception regarding its reliability as a means of risk transfer. MI has experienced periodic housing market downturns and survived with its reputation intact in its home markets in the US, Canada and Australia – individual mortgage insurers faced financial difficulties in high claim environments and were forced to cease doing business or merge with stronger competitors, but neither lenders nor supervisors have doubted the overall value of MI to their respective housing finance systems.

MI's difficulty outside its core markets occurs in part as a result of the sharp housing market downturn experienced by the UK in the early 1990s. Prior to the downturn, MI (known as "mortgage indemnity guaranty", or "MIG" in UK insurance parlance) had been offered for years with favourable loss experience even through periodic housing market credit cycles. Indeed, given the "back to the future" reliance by actuaries on historical loss data, there was no reason to suspect that massive unanticipated losses were in the offing.

But they were. As in any upward phase of a credit cycle, good credit performance encouraged progressive extension of more credit to more borrowers, so that individuals borrowing 100% of the purchase price (on a market value basis) became more common. Volumes were strong, encouraging operational accommodations in terms of underwriting, risk reporting and loan administration, and also encouraging lenders to demand increasingly larger commissions for the placement of MIG on its own behalf. Any delinquencies were sold into a rising market, minimising net losses.

Interestingly, there is no reliable account of MIG performance during the downturn, which explains why the conventional wisdom emerged in a way that has been damaging to the future prospects of MI in the UK, Europe's largest and most innovative housing market<sup>11</sup>. Prices declined, delinguencies and negative equity mounted and problems emerged - in the form of insuring agreements that never had been finalised, delinquent risk insured on a pre-agreed delegated basis but ineligible based on pre-agreed underwriting criteria, commission income taken to income by lenders and not held back on a contingent basis in reserve against loan performance, and incomplete claims submissions. In short, the downturn reminded everybody of the complementary roles of insurer and insured, of correlative rights and obligations and the sheer amount of money at stake.

However, the MIG providers paid - a lot around half of the £10 billion in losses suffered by lenders in the downturn. Looking back, many have an incentive to forget or distort, but it remains somewhat mysterious how the conventional wisdom emerged that MIG providers had fallen at the fence (perhaps at some of the later fences, but not the first one). For all the retrospective grumbling about non-payment of claims. lenders were paid billions of pounds in indemnities that otherwise would have sorely tested the UK housing finance system, and only a fraction of the indemnities were recovered in subrogation actions brought by insurers against borrowers. In other words, the MIG product worked reasonably well considering the unanticipated scale of the downturn. Of course, claimants needed to satisfy the terms of the insuring agreement (not always easy given the era of good feeling that preceded the downturn), and borrowers probably never really

<sup>&</sup>lt;sup>10</sup> France is perhaps the best example with its *prêt immobilier cautionne* loans dominated by the Credit Logement facility. See Stone and Zissu, "Le Pret Immobilier Cautionne: An Innovative Substitute for the French Mortgage," *Journal of Housing Research*, Vol. 3, No. 2.

<sup>&</sup>lt;sup>11</sup> Peter Akers provides a short, even-handed account. See Akers, Sinister Risks (Presented to the Staple Inn Actuarial Society on 12 October 1999), pp. 12-13.

understood the purpose of MIG (which was not intended to protect them or allow a clean break from their mortgage debt)<sup>12</sup>.

Bank and building society supervisors patched the wounds and moved on, encouraging the creation and use of affiliated captive insurance companies located in "light touch" tax and regulatory jurisdictions. Insurance intermediaries shifted attention from procuring cover to managing captives and arranging reinsurance cover, and insurers isolated and wound down MI operations. The psychological scars were deep and longlasting - other mortgage market participants, and particularly lenders, were given credit for learning from the experience and improving systems and processes as a result, but a large question mark still hangs over the mortgage insurers (even those that did not participate in the UK market during the period!).

Perception hardens into reality sometimes, and timing is important. As the UK market melted down, the US mortgage insurers looking across the Atlantic hesitated. Insurance is an unsentimental business, where plans to recoup losses as terms tighten and prices rise are constantly being frustrated by new market capacity unburdened by past losses. In the case of MI, however, this new commercial capacity did not arrive quickly enough or initially offer anything demonstrably different. Captives already had replaced commercial insurers as the principal means of risk transfer (albeit internal risk transfer between affiliates, but using external reinsurance capacity to manage risk exposures and lessons learned regarding the importance of process rigor, enforceable terms and conditions and pricing now adjusted to reflect the possibility of a severe downturn in the future).

Preoccupied with their own credit events, US mortgage insurers held back and missed a very good chance of introducing MI as an alternative way of thinking about credit risk transfer.

# Challenge No. 2: Who needs credit protection in a low credit loss market?

With perceptions hardening in the wrong form, the second challenge relates to market timing. Insurance experts refer to MI as a "long-tail" risk. That is, the mortgage insurer accepts the bargain of protecting the creditor against loss for a long period of time (generally 10 years or the life of the loan) without the ability to re-price the protection to account for deteriorating market conditions. For this reason, mortgage insurers have a keen interest in mortgage credit cycles. Entering new markets at the bottom of the credit cycle allows the mortgage insurer to benefit from increasing transaction volumes and housing prices and minimises the likelihood of unfavourable underwriting results.

Although local European credit markets did (and do) not move in complete unison, many

markets experienced sharp downturns similar to the UK's at the same time or shortly after. Today's lenders, supervisors and rating agencies feign forgetfulness, but much of the Nordic region experienced a real credit crisis, and France, Spain and Italy also experienced downturns (less visible given the less developed nature of their housing finance systems, particularly regarding high LTV lending). Germany's reunification-induced housing investment boom sustained its market a bit longer, but it followed its European neighbours. In short, every one of the big European mortgage markets had some nervousness regarding banking assets that were supposedly "as safe as houses".

However, at least in Western Europe, mortgage insurers appear to have entered markets too late into the recovery phase to reshape fundamental attitudes regarding credit risk management during this market cycle. Whether GE (now Genworth) in 2001, or AIG United Guaranty and PMI in 2003-4, the mortgage insurers entered into markets that were five years or more into their credit upswing. At this phase, credit institutions either are new or are experiencing one of the recurrent "new era" thought waves that sustain credit cycles<sup>13</sup>. Credit origination processes adopted in the wake of the prior downturn have been institutionalised and "debugged", credit losses are low even as volumes mount<sup>14</sup> and the principal strategic concerns in the residential mortgage business appear to involve distribution (how to sell more faster) than credit risk<sup>15</sup>. Indeed, the prospect of monetary union in

<sup>12</sup> Insurance law can be a trap for the unwary, because policyholders are expected to comply with the terms of the policy in order to have a claim settled – not in a bureaucratic "forms in triplicate" sense, but in the fuller sense of disclosing material information in the underwriting process, apprising the insurer of loan performance status and cooperating with the insurer to manage the non-performing loan to minimise losses. Failure to do these results in denied or reduced claims, but other forms of credit guarantee are no different. With borrowers, arguably MIG belongs to "the decade of mis-selling" – along with personal pension schemes, endowment mortgages and other financial instruments that seemed too good to be true, and were. A guarantee is a promise to pay on behalf of another, with the understanding that the guarantor will be repaid as well. Indeed, most guarantee or surety agreements require a specific "reimbursement agreement", the insurance equivalent of which is a right of subrogation. Borrowers were not told this, of course, so the mortgage insurer came off as the villain of the piece when they attempted to recover amounts paid on behalf of the borrower using conventional insurance law principles.

<sup>13</sup> Robert Schiller finds housing markets susceptible to the same psychological "irrational exuberance" that periodically grips the capital markets. in the updated version of his now famous book. See R. Schiller, *Irrational Exuberance* (2nd ed. 2005) (esp. chapter 2 and Part Two). For mortgage insurers, "exuberance" creates over-confident lenders and borrowers resentful of having to pay for the additional risk protection provided by MI.

<sup>14</sup> Residential mortgage performance correlates strongly with overall macroeconomic performance, which keeps defaults low in a recovering economy, and credit losses take some time to develop – only when loans "season" for several years do problems (first delinquencies and then defaults) appear.

<sup>15</sup> Mercer Oliver Wyman has made a spirited case that risk management will matter once again in the future within a lending environment characterised by substantial overcapacity, surplus capital generated by Basel II and higher risk consumer demand for product innovation. See Mercer Oliver Wyman, *Risk and Funding in European Residential Mortgages – responding to changes in mortgage demand* (MITA Occasional Paper: April 2005). Continental Europe, formal independence for the Bank of England in the UK and persistent global deflationary pressures also reduced nominal interest rates, enlarging the market and pushing through traditional concerns about credit rationing.

And what were the mortgage insurers offering when they entered new markets? Sensibly, in terms of institutional competencies, mortgage insurers offered the credit insurance equivalent of Coke, Big Macs, Gap jeans and Harley-Davidsons that is, an exportable version of a USderived MI product, in many cases relying on US delinquency data and pricing assumptions<sup>16</sup>. The product offered to open doors that were already open using underwriting criteria that frequently were more conservative than their prospective customers on assets that already were considered among the safest parts of the By itself, credit balance sheet. conservatism is not bad when based on thoughtful assessment of all available data, but such conservatism is not likely to win many customers in the ascending phase of a mortgage credit cycle.

Have any lessons been learned yet in this long period of low mortgage credit losses? Well, yes and no. In terms of yes, the specialist ethic of mortgage insurers has caused them to redouble efforts to retool product and service offerings to meet the needs of relevant mortgage market stakeholders. Rather than content themselves with a simple risk transfer role, mortgage insurers are attempting to extend their scope of influence within their lender customers to finding borrowers, improving risk selection, creating new mortgage products, streamlining underwriting and monitoring processes and introducing new loan workout and loss mitigation concepts and techniques. And, unlike a public agency that survives in the face of falling demand, profit-seeking mortgage insurers are under considerable pressure to convert possibilities into solid sources of business.

In terms of no, much of this effort has not connected meaningfully with lenders yet. With volumes rising, customers find lenders rather than vice versa, new mortgage products are copied easily, streamlined underwriting consists of saying yes more quickly and loss mitigation remains a theoretical discussion. Consequently, a falling cost of risk results in price competition, looser terms and conditions and generally the type of pro-cyclical competitive behaviour that mortgage insurers are supposed to resist.

Of course, these issues are derivative of similar pressures faced by lenders, which is why credit cycles have not disappeared – and will not disappear<sup>17</sup>. However, perhaps the forbidding competitive environment unintentionally contains a silver lining. Lender-retained risk, even in the face of declining prices, means less low priced, long-tail business vulnerable to a housing market downturn held on the books of the mortgage insurers. That fact and the willingness of mortgage insurers to explore how their competencies might help their customers position them well for the future.

## Challenge No. 3: Does MI need special regulation to work?

Unlike perceptions of unreliability or the persistent asset price boom, the third

challenge arguably is self-inflicted by mortgage insurers. Regulatory and supervisory fashions come and go, but certain underlying consistencies remain. The dilemma of mortgage insurers intent on building substantial businesses outside traditional MI markets has been how to best package the considerable specialist knowledge they have accumulated over the years but still respond to changing commercial and supervisory needs. However, the insistence of mortgage insurers on exporting the specialist "monoline" entity form and its attendant regulatory apparatus has slowed broad acceptance of MI.

As a regulated industry (insurance) serving a largely regulated customer base (banks, building societies and their equivalents), regulatory policy always has been important contested terrain for mortgage insurers. Particularly within the European Union18, there has been a struggle between local custom and harmonisation, and an effort to encourage freer circulation of goods, services, labour and capital. For a newcomer, the struggle can be doubly frustrating, because local custom finds a way to survive (often through the interstices of implementation in the directive process) and introducing new concepts intended to apply broadly across the European Union needs substantial momentum to succeed.

Specialist "mono-line" insurance regulation often has been urged by MI providers for a mix of theoretical and practical reasons. In terms of theory, the "mono-line" (specialising in only one type of activity) concept has substantial commercial and prudential merit. Commercially, specialists generally outperform non-specialists

<sup>16</sup> Pricing MI is more like pricing earthquake insurance than motor insurance. That is, the mortgage insurer knows where the "economic fault lines" are and the major factors that relate to borrower default (unemployment, disability, death, divorce etc), but how these factors will combine with more general economic developments requires more art than science. When prospective customers say that past downturns will not be repeated, they are probably right – future downturns will involve new combinations of events occurring at relatively unpredictable times, and this uncertainty needs to be anticipated by the mortgage insurer. This is a tough message to deliver in a low loss credit environment.

<sup>17</sup> The Economist has been the most forceful critic of the run up in asset values, noting that *"[m]easured by the increase in asset values over the past five years, the global housing boom is the biggest financial bubble in history."* See, e.g., "After the Fall," The Economist (June 18th-24th 2005) (emphasis supplied).

<sup>18</sup> Because it is impossible within the scope of this Article to summarise the variety of global housing finance systems, I have used the European Union as the principal example of regulatory policy in advanced housing finance systems outside the traditional MI markets in the US, Canada and Australia. Japan, the world's 2nd largest mortgage market with its system of affiliated mortgage guarantee companies, terribly performing "housing loan guaranty insurance" and long slide of property price following the 1980s property bubble, deserves separate treatment. See, e.g., Koh et al, "Bank lending and real estate in Asia: market optimism and asset bubbles," *Journal of Asian Economics* 15 (2005) 1103-1118.

because expertise is concentrated, processes are streamlined and attention is undiluted, particularly in areas of activity where demand is expected to continue to grow. That is why mono-line credit card banks are common, and even why so-called "universal banks" have continued to run mortgage operations out of specialist units. A similar logic underpins the MI mono-line approach: mortgage lending is a large enough area of activity (usually the largest component of household debt, and one of the largest categories of assets held on balance sheet by banks), and high LTV lending is a large enough area of activity (usually 25-40% of first-time home purchases) to permit specialisation over an entire market.

Prudentially, mono-lines represent the adage of putting all your eggs in one basket and watching that basket carefully. In effect a supervisory division of labour theory, the "specialist principle" has a solid lineage in bank and insurance regulation. Within European financial regulation, mortgage banks and building societies (whether of the UK or German variety) have allowed risk to be isolated and credit to be allocated via special purpose institutions. Prudential restrictions applied to mortgage banks gave investors the confidence to invest in longterm bonds issued by mortgage banks, which in turn allowed supervisory concerns about commercial banking exposure to illiquid mortgage obligations and asset/liability mismatches to be allayed. Similar restrictions allowed building societies to concentrate on the role of mobilising savings and increasing homeownership, leaving to commercial banks the task of ensuring stability in the payment system, providing credit to corporate and other commercial lenders, participating in shorter term inter-bank lending and supplying wholesale banking services.

However, the trend toward consolidated financial supervision has eroded the "specialist principle" significantly, with the new emphasis being placed more on function than form – where more attention is paid to supervising the activity rather than creating special institutions and supervising those<sup>19</sup>. By itself, this trend poses a difficult challenge to the recognition of mono-line *MI*.

Experience matters as well. Different regulatory traditions within the insurance industry between the US and Europe complicate the case for mono-line MI. Within the US, historical experience with MI prior to the US Great Depression of the 1930s resembled the UK - MI was combined with other forms of non-life insurance, principally title insurance, and other forms of real estate-related activity. When the Depression occurred, all companies involved in the MI business went insolvent (as did many other businesses). Since New York was the centre of the MI industry, the NY Insurance Department conducted an inquiry. The ensuing report, known as the "Alger Report", criticised many of the prevailing market practices and raised serious doubts about the commercial viability of MI<sup>20</sup>.

Thus, in order to rebuild confidence in residential mortgage lending, the national government created the Mutual Mortgage Insurance Fund of the Federal Housing Administration. Organised (perhaps unintentionally) as a mono-line, the FHA-MMIF accomplished its task well enough by the 1950s for lenders to be able to worry less about credit risk and worry more about service standards. In turn, these shortcomings created the opportunity for a group of entrepreneurs to argue that the FHA needed private competition. Not wishing to have regulatory suspicion

foreclose the opportunity, they embraced the recommendations of the Alger Report, which in effect created the mono-line strain in US insurance regulation (copied over to financial guarantee insurance as well). The mono-line approach became entrenched further by creation of a Model Act on MI by the National Association of Insurance Commissioners and through adoption by Fannie Mae and Freddie Mac of the Model Act<sup>21</sup>. In effect, an implicit bargain was struck - mortgage insurers accepted substantial limits on the way they operated their businesses (reinforced further by the rating agencies) in return for being seen as the preferred means by which the additional credit risk associated with higher LTV residential mortgage loans was to be managed. And, because this inflexibility created substantial barriers to entry, competition did not erode prudential standards or financial returns as quickly.

Europe (and indeed most of the world) lacks a similar regulatory or supervisory tradition. Within Europe, MI is treated simply as a form of credit insurance that any non-life insurer may offer with the appropriate license authority. European insurance regulation does not impose a mono-line requirement or any specific prudential restrictions on marketing, underwriting, reserving or investment - all of which are included within the mono-line approach and no preference given for use of the cover like that which exists in mono-line markets for MI<sup>22</sup>. Insurers may self-limit their scope of operations, but no regulatory advantage inures to them for doing so. Given these circumstances, it is unclear why mortgage insurers continue to organise themselves as mono-lines or define their role so narrowly for reasons other than market-derived ones (why exclude commercial property, for example, or other types of consumer assets or financial risks?).

<sup>&</sup>lt;sup>19</sup> See, e.g., Clive Briault, The Rationale for a Single National Financial Services Regulator, UK FSA Occasional Paper Series No. 2 (May 1999).

<sup>&</sup>lt;sup>20</sup> See Dwight Jaffee, Monoline Restrictions, with Applications to Mortgage Insurance and Title Insurance (January 27, 2004) (http://irm.wharton. upenn.edu/S04-Jaffee.pdf).

<sup>&</sup>lt;sup>21</sup> In effect, the "qualified insurer" requirements imposed by Fannie Mae and (especially) Freddie Mac have mattered more than state insurance regulation since the Model Act has been adopted only by a minority of states.

<sup>&</sup>lt;sup>22</sup> Even Italy, which has perhaps the most MI-friendly approach to high LTV lending and capital regulation, allows alternative forms of credit protection to meet its standards.

More seriously, the mono-line regulatory tradition within mature MI markets arguably has caused mortgage insurers to underestimate the importance of keeping abreast of market needs in favour of satisfying a regulatory mandate. Like immigrants wishing to recreate their homeland in a different place, the mono-line approach has been pushed aggressively in new markets as well. Although eminently defensible as one way to organise credit protection, the mono-line regulatory programme is unlikely to succeed in the short term for predictable reasons unless combined with a strong market-based need for credit protection on residential mortgages. Insurance regulation requires sustained effort at the European Union level, and any change in the form of a directive or regulation has to have broad-based support and a strong policy justification. Because MI is a start up product in Europe, broadbased support is lacking, and because mortgage credit losses are low currently the need to create specialist entities to manage high LTV mortgage credit risk is not apparent<sup>23</sup>. Thus, even well thought out and presented arguments for creating mono-line regulatory schemes might be considered as the regulatory equivalent of re-fighting old battles on the wrong battlefield.

# Challenge No. 4: Does MI meet the needs of the market for credit risk transfer?

Along with perceived UK MIG failure, persistent low credit losses and the failure (so far) of a regulatory meeting of the minds, the pace of financial market innovation poses the fourth challenge for mortgage insurers.

The same logic that prompted emergence of MI as a specialist product now threatens its progress in two respects:

First, the pace of "unbundling" has been too The logic of specialisation is slow. compelling for strategic types since it resonates with notions of competency, comparative advantage, rapid response and organisational dexterity. From a strategic perspective, MI can be seen as a specialist discipline intended to provide greater understanding and risk control on a higher risk form of credit origination. For operational types, however, the logic is less compelling since it resonates with loss of control over core banking functions, administrative complexity (matrix management, anyone?), contracts to administer and scepticism that a specialist's touch (especially an external specialist) is needed. From an operational perspective, MI can be seen as additional complexity (amending credit policy, creating information technology linkages, requiring external reporting) on a risk that does not justify the effort24. Consequently, this pushpull tension results in plenty of assessment but less action to restructure organisations to anticipate the "unbundled", horizontally integrated market predicted as "inevitable" by its proponents.

This makes for a very uneven path of development for an "unbundling" service proposition like MI. The fact that other service propositions – most notably residential loan administration and title insurance – have had similarly tough international expansion experiences provides little consolation. Compared to the US, Europe (and Japan) remains a world of vertically integrated lenders that obtain their own funding, create their own mortgage

products, find their own borrowers, administer their own loans and manage their own risk.

Second, within the "unbundling" area of credit risk transfer, new products and providers continue to appear, particularly in the capital markets. Low credit loss environments embolden more than the originating lender regarding credit risk competencies. Investors in credit risk have their own cycles as well, in which the risk premiums for assuming risk decline, which forces investors either to withdraw from the market, bid more aggressively on a given level of risk or be willing to assume even more risk than previously – in other words, participate in a process very much like mortgage insurers are experiencing.

Within this context, mortgage insurers can customise MI, but they cannot write derivative contracts directly, regularly purchase mortgage-backed securities for cash or otherwise participate in the capital markets in any form other than as a provider of insurance credit protection<sup>25</sup>.

These limitations are unfortunate, because recently the capital markets have pressed forward on three important fronts:

 Capital markets emphasise tradability, an increasingly important part of lender portfolio management, rather than fundamental credit risk management. Mortgage insurers concentrate on understanding risk and improving processes within a longer term relationship. By contrast, the capital markets are less relationship-oriented and process-intensive and simply price for risk, which is not likely to be held to maturity anyway. Arguably, this

<sup>&</sup>lt;sup>23</sup> Of course, the optimist's view of rejection of the mono-line case is that it leaves mortgage insurers free to apply their considerable credit expertise to related lines of business, whether commercial mortgage insurance or credit insurance on other types of consumer assets.

<sup>&</sup>lt;sup>24</sup> As noted below, a good argument can be made that this additional operational complexity is offset by the value of having a well informed third party continuously participating in the lender's entire operations – akin to an auditor or rating agency with its own capital at risk.

<sup>&</sup>lt;sup>25</sup> Ironically, given the discussion of supervisory movement away from form to a more functionally-driven basis of review, mortgage insurers suffer from the inability to package their considerable credit risk expertise in the form the market demands it. Banks and investment firms can use credit derivatives to transfer risk and reduce regulatory capital – mortgage insurers cannot. Mortgage insurers can participate in capital markets transactions on an indirect basis, where either the underlying collateral is protected by MI or layers of credit risk are assumed via a series of intermediate steps involving non-insurance entities or special "transformer" entities which participate in a derivative or other capital markets transaction and then purchase insurance as protection against the credit exposure. However, mortgage insurance credit enhancement and "transformer" transactions compete on a "best execution" basis and represent a small portion of transactions compared to either conventional credit derivatives or the issuance and purchase of securities for cash.

addresses the central "fair value" theme of the International Financial Reporting Standards<sup>26</sup>. Instruments like credit derivatives can be marked-to-market, and increasingly are traded on a standardised basis. Insurance accounting is moving toward a mark-tomarket approach (albeit slowly), but the absence of standardised forms and a strong "originate and hold" orientation suggests MI tradability is not likely soon.

- Capital markets investors are willing to take more risk. Whether due to naiveté or superior analytics, capital markets investors are willing to accept an enlarged definition of credit risk compared to mortgage insurers. For example, years of doing business in geographic regions with substantial natural catastrophe risk have caused mortgage insurers to exclude this risk or require that any physical property damage be repaired. MI policies also include other defensible exclusions developed after painful trial and error offering "life of loan" credit protection in common law jurisdictions (where legal rules, not just economic conditions, can change without the mortgage insurer having an opportunity to amend or reprice its credit protection contract). Capital markets investors simply assume the risk.
- Capital markets investors might have structural advantages in terms of capital requirements. Broad diffusion of structured finance analytics and emergence of unregulated or lightly regulated investors mean that investors might not have to operate within the confines of a regulated or rated environment, so the investor's bet can

be on losses only – perhaps using a highly leveraged capital structure (debt to equity) to magnify returns. Because a major component of a mortgage insurer's pricing is capital, the mortgage insurer is at a significant disadvantage when this occurs – and the divergence in treatment is likely to widen further<sup>27</sup>. Additionally, these investors are willing to pay cash to purchase a security rather than providing risk protection on the underlying collateral – from the issuer's perspective, the cash investor provides complete risk transfer without any retained downgrade risk<sup>28</sup>.

Thus, the capital markets have emerged as a significant threat to MI. In theory, MI and the capital markets are complementary: MI ensures intelligent risk selection, consistent loan performance reporting, more rigorous loan administration and imaginative loan workout techniques to avoid loss. Additionally, the first loss nature of MI cover helps to improve asset quality, reducing the need and size of deeply subordinated securities in securitisation transactions and facilitating the issuance of large, more tradable and hence more liquid securities. However, in practice the ability of issuers to find investors to take risk for a return on a cyclical basis places strains on the MI business model, which operates on a "through the credit cycle" approach.

In short, MI requires mortgage markets to dis-intermediate like Goldilocks' porridge cools – neither too slow (which means lenders will be suspicious about sharing key credit-granting and risk management functions) or too fast (which means lenders embrace capital markets solutions before examining other alternatives), but just right.

## Challenge No. 5: Can custom and regulation be reshaped to include MI?

The fifth challenge faced by MI is a two-fold one – the first is historical custom in local markets and the willingness of governments to subsidise credit guarantees, and the second one mixes abstraction, prejudice and unfamiliarity in a supervisory witch's brew being mixed in slow motion. The brew is "Basel II", its regional and national counterparts and a protracted implementation process. For shorthand purposes, this final challenge can be thought of as custom and definition.

"Custom" has two parts. The first part is the existing institutional infrastructure used to originate residential mortgages and how high LTV mortgages fit in – or don't. Mortgage insurers never assumed that large European mortgage markets were unexplored territory, but underestimated how deeply settled were ordinary credit risk management processes in at least three respects:

 Obtaining additional security Particularly within Mediterranean Europe, personal guarantees have been used for many years as a form of additional security on loans considered to be higher risk. Because the guarantees are frequently given by family members, they were assumed to have considerable primary value as a means of reducing delinquencies and defaults by drawing on family pride and fear of being shamed. The ability to absorb loss is secondary, but still important. Mortgage insurers have had some success in Spain competing against personal guarantees in terms of greater process rigor to meet bank supervisory expectations, reduced complexity in

<sup>&</sup>lt;sup>26</sup> The IFRS offers in this respect represent a half-full glass for mortgage insurers – potential opportunities exist in the form of tougher standards on expected loss reserving and for derecognition of securitised assets/liabilities, but also potential threats in the form of an absence of standardisation and difficulty with tradability.

<sup>&</sup>lt;sup>27</sup> For example, hedge funds have emerged as the most active purchasers of (or providers of protection on) sub-investment grade portions of mortgage-backed securities, and the combination of the UK FSA's tightening of capital and operational standards for insurers in anticipation of "Solvency II" with the proposed continuation of its "light touch" approach to hedge fund regulation is likely to reinforce this trend.

<sup>&</sup>lt;sup>28</sup> Credit spreads in structured finance transactions do vary over time, but have tightened considerably as investors have become more comfortable with the performance of residential mortgage-backed securities. This is unwelcome news for mortgage insurers, whose credit protection is not competitive at investment grade (BBB or better) levels on the type of prime residential mortgage collateral they are most comfortable with, and competitiveness is eroding even at less than investment grade levels as well. Apart from its role as improving the credit profile of the underlying collateral, MI is simply ceasing to be relevant in the RMBS world (at least in Europe).

underwriting and loan administration (no need to track guarantor solvency) and demonstrably higher financial strength (externally rated companies benefiting from risk-spreading against individual or family net worth offering its guarantee without cost). However, despite the admonition that "you get what you pay for," the use of guarantees is rising in non-traditional markets like the UK and Ireland on a simple affordability basis. Guarantees are not an immediate out-ofpocket expense for the guarantor or borrower, and lenders are willing to allow increased borrowing limits. As with MIG prior to the UK housing market downturn, it is unclear whether participants in guarantee transactions understand completely what is being put at risk.

 Using top up loans – Existing government regulation should not be underestimated as a competitive barrier, either. Particularly within Continental Europe and Scandinavia, mortgage covered bonds are used as a source of funding for residential mortgage lending. As noted above, application of the "specialist principle" to mortgage banking gave investors confidence to

invest in longer duration bonds, but the confidence was (and is) underpinned by mortgage assets available as a source of secondary security. And because investors wished to minimise credit risk associated with this secondary security, eligibility criteria imposed strict conditions regarding LTV ratios. For high LTV borrowers. LTV eligibility limits in mortgage covered bond laws pose a problem - either the borrower accumulates the additional funds or borrows additional funds on a second lien or charge basis. Either alternative introduces competition for mortgage insurers: the savings route is often stateassisted, and second lien route often involves credit being extended by another part of the lender's operations not subject to the mortgage covered bond law<sup>29</sup>. Theoretically, of course, MI represents a simpler alternative with one loan with less administrative complexity also benefiting from highly rated credit protection<sup>30</sup>. Practically, the barriers are significant: both government policymakers and investors are conservative, and MI faces an uphill battle in the absence of real enthusiasm from either to embrace the concept of adding risk but neutralising it through third party means.31

• Government credit intervention - The last custom faced by mortgage insurers is the willingness of governments to provide credit protection to the residential mortgage market on highly advantageous terms. Certainly mortgage insurers are accustomed to competing with public facilities - indeed, a good case could be made that public facilities should precede private ones, since public facilities have a greater ability to standardise market terms and conditions<sup>32</sup>. However, public facilities used to actively intervene in the residential mortgage credit market can create nearly insuperable barriers to start up credit protection products like MI. For example, both the Netherlands and Germany have public schemes that encourage credit risk transfer on terms that mortgage insurers find difficult to In the Netherlands, the match. Guarantee Fund for Home-ownership ("NHG") benefits greatly from an unlimited backstop credit guarantee from the Dutch Government that allows it to operate on a basis that cannot be matched by any private competitor<sup>33</sup>. In

<sup>29</sup> So-called "contract savings plans" express a policy preference that the borrower save before participating in that mixture of investment and consumption that is a housing purchase, and these plans often benefit from favourable tax treatment – in contrast to MI, which often is disadvantaged by imposition of an insurance premium tax on the procurement of the insurance policy.

<sup>30</sup> Arguably, MI provides a superior means of recognising and mitigating the additional credit risk. A high LTV divided into two or three pieces is still a high LTV loan subject to an increased probability of default and greater loss severity when the default occurs, which is why banking supervisors should measure credit risk on an aggregate or combined LTV ("CLTV") basis. If CLTV were measured and disclosed to investors, it is unclear what the principled basis would be for refusing regular inclusion of credit enhanced high LTV loans as mortgage collateral eligible for inclusion in cover asset pools. Indeed, some countries do allow inclusion of high LTV loans, with the understanding that the loan portion exceeding the stated LTV limit is to be treated as over-collateralisation not capable of generating any direct funding benefit.

<sup>31</sup> The proposed imposition of an 80% LTV limit as an EU-wide standard contained in the European Commission's Risk-Based Capital Directive represents the latest restatement of the conventional approach even given the increasing amount of high LTV borrowing within Europe.

<sup>22</sup> See, e.g., Eric Klopfer, "Public/Private Partnerships in Emerging Mortgage Markets," *International Union for Housing Finance Newsletter* (June 2004) (<u>http://www.housingfinance.org/pdfstorage/0604\_newsletter.pdf</u>). Where the credit protection is provided on a commercial basis, particularly in the partial cover form characteristic of traditional MI, there is no reason to expect anything other than ordinary commercial competition – as is the case in Sweden, Finland and the Baltic states.

<sup>33</sup> The NHG, the successor to a tri-party municipal guarantee scheme, has been offered consistently by its proponents as a "private" model capable of wider use that has performed well under the (now ending) benign credit market conditions. However, the NHG arguably introduces substantial distortion into the Dutch credit risk transfer market. No other "private" entity has been offered unlimited credit support by the Dutch Government on a similar non-commercial (*i.e.*, free) basis – even in Canada, where credit support is provided, the guarantee is priced and paid for on an ongoing basis. Additionally, in a business where risk capital is the biggest element of pricing, the NHG operates on risk to capital ratios more than ten times greater than its potential commercial competition. Finally, the 100% credit protection (which the Government guarantee converts into highly beneficial regulatory capital treatment for lenders), allows lenders to reduce interest rates to borrowers to that the NHG protection in effect pays for itself immediately. Were these benefits directed specifically to market segments or borrowers thought to require credit subsidies based on lower incomes or other economic or social disabilities, the NHG's advantages would be more defensible on policy grounds. However, as with Fannie Mae or Freddie Mac, the NHG's remit is limited only by property price, which is set high enough to make much of a mortgage insurer's traditional market base simply unavailable (even taking into account some of the NHG's credit policy restrictions and ways of doing business).

Germany, the "Provide" credit risk transfer facility offered by the Government's development bank also offers advantages that cannot be matched by any private competitor<sup>34</sup>. Recently the UK Government has proposed a "shared equity" scheme that would have the Government absorb credit losses in a manner traditionally associated with MI<sup>35</sup>. With each of those, occurring as they are in some of Europe's (and the world's) largest mortgage markets, mortgage insurers face the unenviable task of explaining to those governments why the schemes should not be allowed to shape national credit markets in a way that forecloses private competition.

Thus, in some respects, the fact that European markets in many cases already have approaches to managing high LTV mortgage credit risk is unsurprising. However, historical custom and government credit intervention should not be underestimated as a competitive barrier.

Finally, Basel II offers opportunity and threat for mortgage insurers. In terms of opportunity, Basel II promises to be more risk-sensitive and reward risk management. Because MI in effect exists to mitigate relative risk within the residential mortgage asset class, one of the largest components on bank balance sheets, its future would seem to be bright. Additionally, because MI encourages risk reduction as well as risk transfer and involves a highly motivated specialist to monitor risk selection, loan administration and loss mitigation of nonperforming loans, its process emphasis would seem to be welcome under all three "pillars" of Basel II.

However, Basel II also poses two distinct threats to mortgage insurers.

First, particularly for mortgage insurers intent on operating as mono-line providers of MI. Basel II will reduce regulatory capital required to be held against residential mortgages. The standard risk weight will be reduced from 50% (or four per cent capital expressed as a percentage of the eight per cent international minimum capital requirement) to 35%, and more sophisticated lenders are likely to see further reductions. Maximum risk weights for high LTV loans are likely to be reduced (in markets where they have been imposed) from 100% (or eight per cent capital) to 75% (or six per cent capital). Thus, even without any form of credit risk mitigation, residential mortgage assets held by regulated entities on balance sheet will become "safer", reinforcing the tendency to see residential mortgages as a safe enough asset not to need further credit risk mitigation.

Second, Basel II requires interpretation to determine whether MI should be recognised as a valid form of credit risk mitigation ("CRM"). Although MI is well established as a CRM technique used in the mortgage industry and has been accepted by banking supervisors in markets where its use has been accepted by lenders, Basel II and its EU counterpart do not discuss specific CRM techniques within particular asset categories. Thus, apart from supervisors in markets within which MI already has been established, supervisors unfamiliar with MI lack basic knowledge regarding MI and the extent to which banks may recognise MI in regulatory capital calculations.

Banking supervisors must consider how MI might be incorporated into the regulatory capital calculations in terms of *form* and *substance*:

Regarding form, or the type of CRM category within which MI should be placed, supervisors need to determine whether MI should be considered as a form of guarantee<sup>36</sup>. However, because regulatory guidance still remains at a highly abstract level, some uncertainty exists regarding how "conditional" MI may be and satisfy the guarantee criteria. Additionally, because MI originated as a form of residual credit protection, some uncertainty also exists regarding how the "timely payment" requirement of the guarantee criteria may be applied to MI. At a time when financial regulators are concerned whether insurers provide sufficient "contract certainty"37, the willingness of those regulators to consider MI on its own terms as a special form of guarantee is an open question.

**Regarding substance**, or how the CRM provided by MI should be valued, particularly when the protection is partial, first-loss coverage, supervisors arguably have an even tougher decision. Because MI

<sup>35</sup>Mortgage subsidies also represent a potential barrier – in theory, interest subsidies reduce debt service obligations and are complementary with MI, which reduces down payment obligations, but many subsidy programs impose LTV limits (e.g., Spain).

<sup>37</sup> See Contract Certainty in the Insurance Market (Record of Meeting between the Insurance Industry and the FSA) (20 Dec 2004) (http://www.fsa.gov.uk/Pages/Library/Other\_publications/Miscellaneous/2005/contract\_insurance.shtml).

<sup>&</sup>lt;sup>34</sup> KfW's Provide programme offers lenders (originally German, but now including French, Dutch and UK users as well) the opportunity to reduce regulatory capital via a "synthetic securitisation", where credit risk, but not the actual asset, is transferred to investors. Since the German regulatory capital framework penalises high LTV risk most heavily, lenders have the biggest incentive to transfer risk on high LTV loans. Although the impetus for Provide was standardisation of documents and process, the transaction can be done by private entities (even the standardisation part via commonly agreed definitions), but not by mortgage insurers on a direct basis as noted above. Provide offers one additional advantage that the private sector cannot match, however. Credit guarantees given by KfW as counterparty in effect converts high LTV asset risk into a public guarantee of repayment, which allows the high LTV mortgages to be included as eligible collateral in "public sector covered bonds", so lenders can transfer risk and realise a funding benefit as well. No private entity can do this, which gives Provide a material advantage in the German credit risk transfer market and allows German lenders and supervisors to manage high LTV credit risk without the use of mortgage insurance.

<sup>&</sup>lt;sup>30</sup> See, e.g., Aicher, Cotton and Khan, "Credit Enhancement: Letters of Credit, Guaranties, Insurance and Swaps (The Clash of Cultures)", *The Business Lawyer*, *Vol.* 59 (May 2004) (describing types and variety of guarantees).

provides protection on an asset already partially protected by collateral in the form of a mortgage, MI presents a unique valuation issue as well. Although MI originally provided by Government facilities protected the entire loan amount as an inducement for lenders to extend credit, most current MI facilities (public or private) provide partial cover only. The mechanics of MI mean that, in many cases, only a small proportion of an exposure's principal appears protected even though a significantly greater proportion of the credit risk is covered, e.g. in the case of 20% first loss cover, substantially more than 20% of the credit risk is actually covered due to the collateral in place. MI reduces the quantum of loss associated with default - "loss given default" - and also improves the quality of risk selection and the processes used by creditors to monitor their residential mortgage credit exposures. Supervisors have a variety of valuation techniques ranging from local discretion to substitution to full application of principles developed for securitisation transactions to give credit for the risk-reducing benefits of MI.

Good reasons may be given for characterising MI as a guarantee qualified as a form of CRM under Basel II, and more appropriate valuation methods also might be suggested to give lenders the full value of the mortgage credit protection provided by MI. However, as this brief discussion suggests, Basel II introduces substantial complexity into a lender's assessment of MI. Faced with this complexity on what supervisors deem to be a "safe" asset category, lenders may choose to skip the complexity altogether either by not using MI or using MI only when it is provided in a 100% coverage whose value is easy to measure.

### Conclusion

Mortgage insurers face tough, but not insurmountable, challenges. This article introduced five major challenges and attempted to provide the reader with some of the context surrounding each challenge. Failure by mortgage insurers, or less than complete success, to meet any individual challenge is unlikely to be fatal, and much of the context is subject to rapid revision. Although the glass is half-full at best, there are some reasons to expect a slow filling, including:

- Perceptions of reliability The UK MIG "failure" rests on a slim factual basis and a rigorous re-examination could revise conclusions substantially.
- Persistence of low credit loss environments - Prompted by their own thoughts and a growing chorus in the financial press<sup>38</sup>, banking supervisors are unlikely to share the optimism of the uninformed regarding the permanence of low credit loss environments. Indeed, the UK and Spain pose good examples of the supervisory dilemma: housing asset prices have risen faster than housing debt, improving household balance sheets, but leaving households in both increasingly exposed to any downturn since housing assets dwarf other forms of financial assets held by individuals. The re-emergence of credit risk is more likely now than it was previously.
- Mono-line regulatory approach Certainly a credible way to provide specialist protection, mortgage insurers arguably have overemphasised its benefits and importance, but it is

important for supervisors to ensure economic stress scenarios can be handled by credit protection sellers and buyers.

- Product and service alternatives Because MI is both process and product and capable of being involved in lender processes in the front, middle and back of their operations, it can seem overly ambitious for the lender looking for "sleep easy" protection and insufficiently specialised when compared to products or services developed for only one part of the lender's operations. However, MI has considerable value as a "common denominator" and consistent source of third party experience regarding the markets in which lenders compete.
- Customary and regulatory barriers -Perhaps the toughest challenge, because customs change more slowly than retail fashion. Disappointingly (so far) few regulators or supervisors seem willing to propose a "grand unified theory" linking together custom, regulatory and supervisory arrangements that have evolved over time and seismic shifts like Basel II and the IFRS. However. "so far" does not mean "never", and the willingness by mortgage insurers to remain open to repackaging their considerable skills in different forms suggest that it is too early to conclude the expansion effort has failed.

<sup>30</sup> See, e.g., "In come the waves: the global housing boom," The Economist (June 18th 2005).

# The Role of Mortgage Insurance under the New Global Regulatory Frameworks

## By Anna Whittingham Regulatory Analyst, Genworth Financial – Mortgage Insurance Europe

### Summary and Overview

The introduction of fundamental changes to the regulatory requirements means that lenders are going through an immense period of change in the way they will conduct their business. This brings with it the opportunity to revisit current business strategies and to consider whether alternative products offer greater benefits under the new regulatory framework in terms of risk and capital management.

The aim of this article is to consider the role that MI might play under the new capital requirements regime. The increased risk sensitivity introduced by the Capital Requirements Directive (CRD) will mean that some business lines are more capital intensive than they have historically been. Even where this is not the case, the broader recognition of credit risk mitigants provides lenders with the opportunity to better manage their risk and reduce their capital Lenders should requirements. be encouraged to investigate the benefits of using credit risk mitigants, such as MI, guarantees and credit derivatives within their capital calculations.

### How does MI work?

There are several forms of MI but for the purposes of this article, reference will be made to "flow" MI.<sup>1</sup>

Flow MI is a form of credit risk cover that protects lenders from losses on residential mortgages where the borrower has defaulted and the proceeds from the sale of the foreclosed property are insufficient to cover the outstanding debt. The product works by providing first loss cover on a loan-by-loan basis for all residential mortgage loans covered by the policy. The current practice is for this cover to be subject to the maximum claim amount agreed with the lender. The level of cover varies throughout the industry but can cover all losses related to borrower default: unrecovered principal outstanding, normal past due interest up to the date of the claim, and reasonable recovery and foreclosure costs.

The amount of cover provided under the policy is established at the time of mortgage origination; the level of cover is usually tied to the initial borrower deposit and the preference of the lender, with higher LTV mortgages generally requiring higher levels of cover. The level of cover provided usually ranges between 20% and 30% of the total loan amount at origination.

If the borrower defaults on the mortgage, and a foreclosure on the property results, where the proceeds from the foreclosure of the property are insufficient to cover the debt outstanding, the lender will submit a claim and will receive payment within a reasonably short time period, possibly as little as 15 days.

An example of how MI works in practice at origination is set out in Example 1.

### The role of MI

In the US, Canada and Australia, MI is a well-established product, and its use is actively encouraged by financial regulators. For example, in Canada, a loan above 75% loan-to-value (LTV) must either be guaranteed by the Government, or covered by MI provided by a licensed mortgage insurance company, and in the US, mortgages over 80% LTV must be covered by MI provided from a monoline provider rated at least AA, before being admitted to a Government Sponsored Enterprise scheme.<sup>2</sup> The MI market within Europe is also gathering pace as the risk mitigating benefits of MI are increasingly recognised, although currently only Italy reflects these benefits in the risk weight applicable to a mortgage covered by the product.3

<sup>&</sup>lt;sup>1</sup> For more details on other forms of MI please see MITA Mercer Oliver Wyman joint study (2005), Risk and Funding in European Residential Mortgages: Responding to Changes in Mortgage Demand.

<sup>&</sup>lt;sup>2</sup> For example Freddie Mac or Fannie Mae. Use of MI for mortgages with an LTV greater than 90% in the US, and 80% in Australia also has capital benefits, see later discussion.

<sup>&</sup>lt;sup>3</sup> Under the existing UK and Spanish regimes, use of MI does not provide capital relief to lenders, even where the benefits are explicitly recognised, for example see IPRU (BSOC) Chapter 8, Mortgage Indemnity Insurance.

Example 1			LTV	
	Borrower Equity	100%		
Purchase price = £200,000 Original mortgage = £190,0 Borrower deposit = £10,00	Genworth Cover (21% of Ioan)	95%		
LTV = 95% Lender cover down to = 75 Genworth MI covers 21%	Lender Retained Risk	75%		
Maximum claim amount: 21% * £190,000 = £40,000	)		0%	
Loss on foreclosure (£)	Without M	I With MI		
Outstanding debt	(180,000)	(180,000)		
Past due interest	(20,000)	(20,000)		
Foreclosure costs	(10,000)	(10,000)		
Total exposure	(210,000)	(210,000)		
Sale price	175,000	175,000		
Total gross loss	(35,000)	(35,000)		
MI claim payment	0	35,000		
Net loss for lender	(35,000)	0		

MI is a new concept in most European countries but its acceptance as a good product for consumers, lenders and regulators is steadily growing. Consumers are able to gain access to housing through higher loan-to-values than are traditionally available, as lenders can mitigate the higher credit risk associated with high LTV lending. For regulators, having a second pair of eyes from a global mortgage risk expert who is reviewing lending practices is an added benefit.

### How Would MI Be Recognised Under the New Framework?

The implementation of the Capital Requirements Directive (CRD) in Europe,<sup>4</sup> and the Basel II Accord across the rest of the globe creates the opportunity for regulators to recognise the benefits of MI. Within Europe, regulators are starting to consider implementation of the Directive; in the UK the Financial Services Authority (FSA) is the first regulator to give an indication of its intended approach to implementation of the CRD, and more

specifically to the future proposed treatment of MI in the UK,<sup>5</sup> and as such provides the starting point for comparable treatment of MI across the rest of Europe.

### MI in the UK

Under the new regime, the FSA intends to recognise the risk mitigating benefits of MI under retail IRB by allowing MI to be taken into account in the loss given default (LGD) calculation.<sup>6</sup> Whilst the probability of default (PD) remains the same, banks are able to reduce their capital requirements by reflecting the lower LGD generated where MI, or another credit risk mitigant, is used. The lower LGD reflects the fact that the use of a risk mitigant reduces losses by transferring credit risk to another party.

The treatment of MI for lenders using the Standardised Approach is still under consideration. However, it is arguable that, provided the credit risk transfer benefits of MI can be proven, consistent recognition of the benefits of MI under both the Standardised and IRB Approaches should be allowed.

Existing practice of the recognition of MI, and the indication given in the FSA CP, suggest that there are two options for recognition of MI under the Standardised Approach, the first option is to reflect the use of MI in the applicable risk weight, and the second is to recognise MI as a credit risk mitigant.

Under the first option MI could be recognised in the following way; under the FSA's current proposals<sup>7</sup> a 35% risk weight is applied to mortgages with a LTV of 80% and below, and a marginal risk weight of 75% is applied to the portion of the mortgage over 80% LTV. If MI is recognised

<sup>7</sup> CP 05/3 (2005), "Strengthening Capital Standards,", paragraph 5.10 onwards.

<sup>&</sup>lt;sup>4</sup> The implementation of the Basel II rules within Europe. The implementation of the Capital Requirements Directive runs in parallel to the implementation of Basel II in countries outside of the EU.

<sup>&</sup>lt;sup>5</sup> Financial Services Authority CP 05/3 (2005), "Strengthening Capital Standards",

<sup>&</sup>lt;sup>6</sup> CP 05/3 (2005), "Strengthening Capital Standards", paragraph 7.202, footnote 177.

in the applicable risk weight, the FSA could allow the application of the 35% risk weight up to a higher LTV level for mortgages with MI. An example of how this would work in practice can be seen in the approach currently employed in Italy and the US; in Italy additional guarantees, which can include MI, are required for mortgages with an LTV greater than 80% in order to maintain a 50% risk weight. Similarly, in the US, mortgages with an LTV greater than 90% apply a 100% risk weight to the whole loan unless MI is used, in which case a 50% risk weight is applicable. This approach is also currently employed in Australia, and the Australian Prudential Regulation Authority (APRA) has recently stated that it intends to continue to reflect use of MI in this way.8

The second option is to consider MI in terms of recognition under the credit risk mitigation (CRM) rules.<sup>9</sup> This would explicitly recognise the benefits of transferring credit risk to a third party, and would place the use of MI on a par with guarantees and credit derivatives. When considering the nature of MI, and the definition of unfunded credit protection in the CRD,<sup>10</sup> there is a strong argument for recognising MI in this way. Application of the CRM rules would allow lenders to recognise the credit quality and capability of the MI provider through the application of the substitution approach,<sup>11</sup> and it should be carefully considered whether blanket recognition through a risk weight, which ignores the credit rating of individual MI providers, maintains a lender's incentive to ensure that protection is provided by the most appropriate and best qualified MI company.

However, irrespective of which approach is chosen by a national regulator, use of MI will

enhance a lender's risk management strategy.

### Can MI Be Recognised as a Credit Risk Mitigant Under Basel II or the CRD?

Recognition of MI as a credit risk mitigant is a new approach which was not directly considered in either the Basel Accord or the CRD. As such, it needs to be fully understood how MI can be recognised within the credit risk mitigation rules<sup>12</sup>. Article 4(32) of the CRD contains the definition of unfunded credit protection.<sup>13</sup> Although there is no explicit mention of MI, or insurance products more generally, the presumption is that, provided a product meets the criteria contained in Article VIII of the CRD, it can be recognised as a credit risk mitigant.<sup>14</sup>

On the basis that MI could be recognised, we then need to ask the question, what would it be recognised as? There is no explicit mention of MI or insurance products in Annex VIII, therefore the product would need to be recognised as either a guarantee or a credit derivative. The Basel Committee QIS 3 FAQ response suggests that MI could be recognised as a guarantee, and this seems to fit more logically with the way the product works. The characteristics of MI, and the way it works in practice are more closely aligned to a guarantee than a credit derivative. In practice, the legal and economic effect of MI is similar to a guarantee, and therefore could be recognised as such.

# Should MI Be Recognised as a Credit Risk Mitigant Under the CRD?

The other issue to be considered is whether MI should be recognised as a credit risk mitigant. This requires a consideration of the extent to which credit risk is transferred, and the benefits of transferring credit risk to a third party rather than managing it internally.

There are a number of reasons why MI should be recognised as an eligible credit risk mitigant under the CRM rules:

The first is that it is important to recognise the benefits to a lender where a significant level of credit risk is transferred. MI reduces the LGD by acting as a "first loss cover", where the proceeds of sale on foreclosure are insufficient to cover the outstanding debt of the borrower and foreclosure costs. The flexible nature of the product means that lenders can set the level of cover to ensure that losses can either be completely eliminated, or substantially reduced.

MI can reduce both the frequency of loss and the total amount of loss incurred by the lender; these two factors combine to reduce both expected and unexpected losses. The extent to which MI reduces unexpected losses means that the capital held by a lender could be reduced to bring about a closer alignment of regulatory capital to retained risks.

MI can also play a role in a lender's risk management strategy. The CRD places greater emphasis on risk management, both in general terms, and more specifically under Pillar 2. A lender's risk management

<sup>&</sup>lt;sup>8</sup> APRA Discussion Paper (2005), "Implementation of the Basel II Capital Framework – Standardised Approach to Credit Risk.".

<sup>&</sup>lt;sup>9</sup> The credit risk mitigation rules are contained in Annex VIII of the Capital Requirements Directive. The indication from the FSA appears to be that MI could be recognised in this way; paragraph 5.13 of the FSA's CP discusses MI in terms of "unfunded protection", suggesting the application of the CRM rules. <sup>10</sup> CRD, Article 4(32).

<sup>&</sup>lt;sup>11</sup> The substitution approach applies a risk weight which is linked to the credit rating of the counterparty providing the protection.

<sup>&</sup>lt;sup>12</sup> Contained in Annex VIII of the CRD and paragraph 189 onwards of the Basel Accord.

<sup>&</sup>lt;sup>13</sup> CRD Article 4(32) defines unfunded credit protection as, "a technique of credit risk mitigation where the reduction of the credit risk on the exposure of a credit institution derives from the undertaking of a third party to pay an amount in the event of the default of the borrower or on the occurrence of other specified events."

<sup>&</sup>lt;sup>14</sup> This suggestion is supported by the Basel Committee, BIS, (2003) QIS3 FAQ:E. Credit Risk Mitigation, question 6.

processes can be improved through the use of more sophisticated underwriting, risk management and loss mitigation techniques as a result of third party oversight and involvement in the mortgage lending process. MI providers are also able to use their experience of the mortgage market to provide a third party perspective of the credit risk in a lenders mortgage portfolio. Furthermore, third party provision of mortgage scoring mechanisms,15 in addition to origination data and performance data required by MI providers will help to improve a lender's internal risk management, and will also improve transparency.

The second reason concerns consistency of treatment between credit derivatives and guarantees. Recognition that the economic effect and commercial use of MI is equivalent to a guarantee product would reduce inconsistencies between the treatment of guarantees and credit derivatives. Under the CRD,16 transactions which are "economically effectively similar" to credit derivatives transactions can be recognised, however, there is no corresponding language for products which have a similar economic effect to a guarantee. In addition, allowing for flexibility in the interpretation of guarantees and credit derivatives will allow for future product innovation without the need for legislative intervention to amend the Directive, thereby reducing the time delay in introducing new products to the market.

The third reason is that recognition of a broader range of products, and the institutions which can provide those products, affords lenders a wider choice of risk management techniques, thereby allowing lenders to use a product which best meets their particular needs.

### Why use MI?

The Basel Accord and the CRD allow broader recognition of credit risk mitigants,

both guarantees and credit derivatives can be considered by lenders as viable credit risk mitigants, as can MI. However, when deciding which product best meets the needs of the lender a balance will need to be struck between the level of credit risk transferred, the cost of protection, the asset being protected and whether the product also provides other benefits. Furthermore, third party oversight of the underwriting process and improvements to risk management are services which are unique to MI and are not available under other forms of credit protection.

### Willingness to Pay

A further consideration will be whether an MI provider is willing to pay a claim. In the UK, MI in the 1980s and 1990s tended to be provided by multiline insurers which underestimated the risk of high loan-to-value lending and offered the product simply to obtain the building and contents business. They tended to have inadequate underwriting standards and less rigorous independent oversight and many of them suffered heavy losses and subsequently exited the market. They also typically did not have separately rated entities providing the coverage.

MI companies operating around the world today are more likely to be writing the business out of separately rated entities where the sole business line is the provision of MI. These monoline insurers have a specialist expertise in high loan-to-value mortgage risk and since they take only one type of risk, they are not exposed to other general insurance risks. Australia and the US both have specific monoline requirements for MI providers and although European regulators do not require mortgage insurers to be a monoline, the vast majority of MI providers which are currently active in the EU work on a monoline basis. In the UK, MI continues to be provided by both monoline and general insurers.

The MI industry in the UK as a whole has matured substantially since the previous downturn and has addressed the problems encountered, such as lack of underwriting rigour, in order to provide a strong and legally robust insurance product which withstands scrutiny and which will ensure payments in the event of default.

In relation to the broader concerns regarding an insurer's willingness to pay claims, it is important to note that, unlike other forms of insurance, monoline MI providers have an economic incentive to pay all valid insurance claims on a timely basis. First, the size of individual mortgage claims arising under an MI policy makes it uneconomic for an MI provider to routinely challenge its obligation to pay a claim to the lender. Second, the future growth and development of MI is reliant on the fact that providers will pay claims in a timely manner. In other words, failing to pay an individual claim would have profound business consequences, which would not be offset by any financial gains.

### Conclusion

MI has the potential to meet the growing needs of lenders under the new approach to the calculation of capital. Under the CRD, use of MI allows lenders to transfer credit risk to a third party, thereby potentially allowing for a reduction in capital requirements and an improvement in the lender's internal risk management.

### Note

This article is not intended to contain definitive tax accounting or legal advice, which should be sought as appropriate in relation to any particular transaction.

### References

Australian Prudential Regulation Authority (2005) Discussion Paper on the Impact of the Basel II Capital Framework – Standardised Approach to Credit Risk.

<sup>16</sup> CRD, Annex VIII, Part 1, paragraph 29.

<sup>&</sup>lt;sup>15</sup> Mortgage scoring is more sophisticated than credit scoring, which takes into account only the borrower's credit score. Mortgage scoring considers not only this variable, but also takes into account the mortgage product, duration of the mortgage, repayment type, property type etc.

MORTGAGE INSURANCE UNDER NEW REGULATIONS

- Basel Committee on Banking Supervision (2003) QIS 3 FAQ:E – Credit Risk Mitigation.
- Basel Committee on Banking Supervision (2004) International Convergence of Capital Measurement and Capital Standards: A Revised Framework.
- European Commission (2004) Re-Casting Directive 2000/12/EC of the European

Parliament and of the Council of 20 March 2000 Relating to the Taking Up and Pursuit of the Business of Credit Institutions and Council Directive 93/6/EEC of 15 March 1993 in the Capital Adequacy of Investment Firms and Credit Institutions.

- Financial Services Authority, *IPRU (BSOC), Chapter 8 Mortgage Indemnity Insurance.*
- Financial Services Authority (2005) *CP 05/3* Strengthening Capital Standards.
- MITA & Mercer Oliver Wyman (2005) *Risk* and Funding in European Residential Mortgages: Responding to Changes in Mortgage Demand.

# Guarantee Funds: An International Perspective

By Hans Mersmann and Karel Schiffer Homeownership Guarantee Fund, Netherlands

### Introduction

International interest in guarantee systems in housing finance markets is growing. This development can be seen as an outcome of discussions in a number of countries on how to improve the functioning of housing finance and housing markets in the context of promoting home-ownership. Supply-side government intervention by way of creating guarantee funds has proved to be an effective and efficient way of increasing the accessibility and affordability of housing markets. Some funds are also designed to provide credit enhancement as a facility to develop the secondary mortgage market.

Today, several countries all over the world have set up, or are in the process of developing, guarantee systems which are mostly structured by government support. In the Netherlands, there is a long history of stimulating home-ownership. In the social rental sector, as well as the owner-occupied sector, two government backed guarantee funds are currently in operation. The experience of the Dutch guarantee system may be useful to other countries, for example, those which have recently entered the European Union or are planning to do so. Of current interest in this respect is the question of whether this may result in the creation of a ladder of opportunity, ie, from a subsidy oriented to a property ownership/security oriented system as has been evident in Dutch housing policy.

Against this background, three Dutch organisations (Bank Netherlands Municipalities, Foundation Social Housing

Guarantee Fund and Foundation Homeownership Guarantee) decided to carry out a study using an international survey (NHG, 2004). The aim of the study was to consider how the different schemes were working and through that to show policymakers and others the types of guarantee systems that exist in the various countries and the ways they contribute towards the effective functioning of mortgage and housing markets. The study was done by the research bureaus Onderzoeksinstituut OTB and Rigo Research & Advice.

The study investigated both the rental and owner-occupied sectors, but this article is concerned only with the owner-occupied sector and indeed with the primary mortgage market. Although this study was based on an international comparison, no efforts were made to answer the question of what the best guarantee system would be.

### The Survey

The twelve countries described in the study are:

Inside Europe:

- Netherlands
- Belgium
- Denmark
- France
- GermanyLithuania
- Slovak Republic
- Sweden
- United Kingdom

- Outside Europe:
- JapanCanada
- United States

Germany and the UK are different to other countries in a sense that they do not have central government backed guarantee systems. Germany does not have a full national scheme, whereas, in the UK, private mortgage insurance products are the norm (though Scotland has recently introduced a government backed mortgage 'rescue' scheme). Some of the countries, like the USA, consider home-ownership to be a central focus whilst in other countries policy is tenure-neutral. In general, the main issues in all the countries are about improving availability and affordability.

In some countries, the mortgage guarantee has been developed as the main instrument, thus replacing interest subsidies and government loans as an alternative strategy. This development could be seen as the result of shrinking government budgets, a more efficient way of allocating capital and changing opinions regarding government intervention in the market mechanism.

### Differences in design and risk profile

The structure of guarantee funds varies across countries with both government 'owned' institutions and privatised organisations being apparent. Government 'owned' includes guarantee funds in the USA (albeit privatised but with an implicit

	Neth	Bel	Can	Fr	Lit	Sw	USA
Upfront or per annum (p.a.)	Upfront	n.r.	Upfront	Upfront and p.a.	Upfront	p.a.	Upfront and p.a.
Differentiation	n.r.	n.r.	LTV	n.r.	LTV	n.r.	n.k.
% of loan	0.28	0	0.5-4.5	2.0 Upfront 0.15 p.a.	Max. 4.43	0.5	1.5 Upfront, 0.5 p.a.
Premium paid by	Borrower	n.r.	Borrower	Bank and government	Borrower	Borrower	Borrower

Table 1: Fee Structure, Government-backed guarantee funds

Source: country studies; n.r.: not relevant; n.k.: not known

guarantee), Canada, Lithuania, Sweden and the Slovak Republic.

The position of the Homeownership Guarantee Fund in the Netherlands, as a private foundation providing guarantees for the primary mortgage market, is unique. This fund is the successor of the Municipal Guarantee in operation from 1956 to 1995. As of 1995, the guarantee system was redefined and was set up as a private non profit fund with close ties to the government. Annual adjustments to the guarantee terms and standards need the approval of the central and local government.

In risk management, most funds show a range of risk cover from a 100% guarantee for both loan and transaction costs, to only a part of the loan amount. In most countries, fees are the main source of earnings to build up reserves to cover the credit risks of mortgage loans. Typically, profit related prices do not play any role in government backed guarantee systems. So

what concerns such guarantee systems is an actuarial fair cost price based risk premium to meet default losses under volatile economic circumstances. Due to different economic stages and different housing policies among countries, various risk profiles affect the form and extent of the premium.

All funds collect premiums ranging from a single up-front fee in the Netherlands, to a combination of a single up-front fee and annual payments. Belgium's guarantees are free and in France the single up-front fee is paid by participating lenders and the government. French lenders pay an annual premium on top of the up-front fee. Table 1 shows what has to be paid to the several guarantee funds.

### Criteria

The assessment procedures, which are followed by all guarantee funds in the study, state that borrowers have to meet a number

of criteria of which the home purchase costto-income ratio, loan-to-value ratio and the earnings conditions are the principal ones. Sometimes the interest level is a crucial issue in the size of loan amount. These qualifications differ among the described countries. In Belgium, guarantees are based around a set of maximum income level and maximum price level. The Dutch regulation has been built on a combination of a maximum loan amount and a maximum house price dictating the guarantee loan amount. The French guarantee system is open to borrowers who are eligible for a subsidy. Sweden's guarantees are granted only for new housing. Lithuania does not seem to have strict rules regarding income, house prices and loan limits. Some countries do not allow borrowers to freely decide to take a guarantee or their options may be limited. In the USA, Canada, France, UK and Lithuania, each mortgage loan exceeding a loan-to-value of 80 % respectively 75 % requires a (public) mortgage insurance (Table 2).

Table 2: Maximum loan-to-value with and without government guarantee or private insurance
---

	Public/private guarantee funds						Private insurance			
	Bel	Can	Fr	Lit	Neth	Sw	US	Can	UK	USA
Max. LTV without guarantee	100	75	60	70	>100	95	78	75	70	78
Max. LTV with guarantee	100	95	100	95	112	95	97	95	100	100

Source: European Central Bank (2003)

	Government-backed guarantee						Private insurance			
	Bel	Can	Fr	Lit	Neth	Sw	USA	Can	UK	USA
Costs	0	3,250	0	4,430	280	2,043	3,565	3,315	1,600	3,221
Interest discount (basis points)	130	46	75	100	30	n.k.	35	46	20	35
Interest discount	8,680	4,667	5,107	6,993	2,159	n.k.	2,933	4,667	1,990	2,993

### Table 3: Costs and benefits for a €100,000 mortgage of a guarantee/insurance for a home-owner

Source: Survey

## Comparison of cost and benefits for home-owners

By creating government supported guarantees, it is of crucial importance to have the full trust and financial support of the government for the long term. The success of such systems also depends on the attitude of lenders. In fact, the system can only work satisfactorily when it generates added value to lenders. For example, for a guaranteed loan under the National Mortgage Guarantee scheme of the Homeownership Guarantee Fund in the Netherlands, lenders are not obliged to build up reserves on their balance sheets. Mortgage loans connected to this so-called zero solvency ratio result in lower funding costs. In the case of competitive markets, for example the Dutch market, mortgage lenders are passing these lower capital costs onto borrowers. In terms of basis points, borrowers benefit up to 50 basis points. The benefits for borrowers are difficult to compare in an international study. Both research institutes have tried to compare the benefits and costs from a borrower's point of view. One way of doing so is by expressing costs and benefits in the present value method. Table 3 presents the costs and benefits for a home-owner.

In terms of costs, borrowers in Belgium and France have nothing to pay while costs are the highest in Lithuania. Dutch borrowers are third best off, only having to pay a single up-front fee of  $\in$ 280 for a mortgage of  $\in$ 100,000 in 2005. In Canada, the USA and Lithuania, direct costs are considerably higher. This might reflect a substantially higher risk profile in these countries. In terms of the value of the interest discounts, the ranking is rather different.

### Conclusions

Guarantee funds are instruments to improve the affordability and accessibility of the housing sector. Through their economies of scales, guarantee funds can obviously manage credit risks better and more efficiently than individual lenders. We argue that government backed guarantee funds can help housing policies to successfully and effectively influence economic welfare, more so than commercial insurance organisations. As the international survey shows, all government guarantees have different structures, especially when markets require their own equity guarantee funds, which will stimulate the working of the mortgage markets. By getting a higher

volume of mortgages, demand for housing will increase. Of course, the effect depends on the market share of the government backed guarantees. The market share differs among countries and is very small in Sweden and Belgium. In our view, countries considering options on how to promote home-ownership could find the experience of all operating guarantee funds very helpful and readers are very welcome to contact the Dutch home-ownership guarantee fund for advice (www.nhg.nl).

### Reference

National Hypotek Guarantee (2004) Government Guarantees in the Rental and Owner-Occupied Sector: An International Comparison 2004, Part 3, NHG Series and published by Foundation Homeownership Guarantee Fund, Bank Netherlands Municipalities and Foundation Social Housing Guarantee Fund, Po Box 309, 2700 AH Zoetermer, The Netherlands.

# Is Creditor Insurance an Effective Risk Management Tool?

By Steve Devine, Director of Corporate Communications, Cardif Pinnacle, London, UK with

Alex Solomon, Senior Policy Advisor, Council of Mortgage Lenders, London

### Introduction

This article explores the effectiveness of creditor insurance as a means of managing creditor risk, ie, its effectiveness in helping borrowers to maintain their debt repayments, in the face of adversities such as periods of unemployment or sickness.

The article begins with a brief summary of the European mortgage market. It then outlines the risks facing mortgage borrowers across Europe and beyond. drawing upon the results of recent research commissioned by Cardif, and undertaken by TNS Sofres, into consumers' attitudes to and behaviour when protecting their financial commitments. Attention then turns briefly to an examination of the European creditor insurance market before focusing in on the UK market and, in particular, Mortgage Payment Protection Insurance (MPPI). Finally, some thoughts are presented as to what the future might hold for creditor insurance.

### **European Mortgage Market**

According to European Mortgage Federation statistics, the European mortgage market has more than doubled in size over the last ten years. In 1993 the total stock of outstanding residential mortgage loans was under 2 trillion euros. By the end of 2003 the figure had risen to 4.2 trillion euros.

A few high level statistics relating to the European mortgage market are set out below.

- Hungary has the highest and Germany the lowest level of home-ownership.
- Mortgage debt now represents around two thirds of total household debt in Europe.
- The average mortgage debt in Europe is around 45% of GDP. In Poland, Greece, and Spain, mortgage debt in terms of GDP increased more than 100%, followed by Portugal, Ireland, and Italy, with more than 80%.
- The most indebted countries are the Netherlands and Denmark.

There is something of a north-south divide, largely historical and cultural, with greater use of debt in the north. The situation is, however, changing, with the southern European mortgage markets exhibiting higher growth rates than those in the north.

### Creditor Risk – A European Perspective

Although there is a great deal of integration across Europe, each country also has its

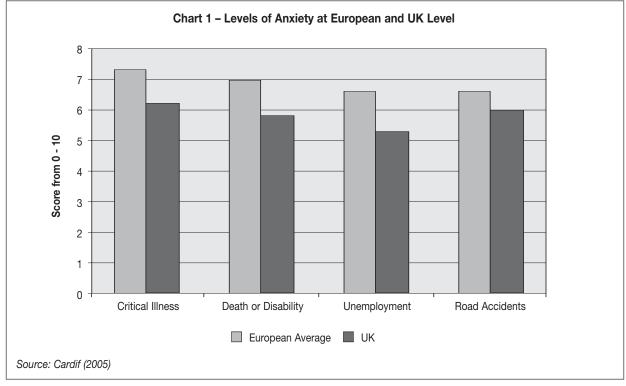
own laws, economic arrangements, culture, and personality. This heterogeneity makes the prospect of a single market in mortgages a very long way off indeed, not least in the light of recent referenda on the EU constitution, political posturing by Europe's leaders about the European budget and, indeed, the future of the EU itself.

These differences were evident in the results of independent research commissioned by Cardif and undertaken by TNS Sofres during March 2005 (Cardif, 2005). The research's conclusions are drawn from an international survey of consumers' behaviours and expectations regarding the protection of their financial commitments. The survey, which took place during January and February 2005, consisted of 14,000 telephone or web based interviews with consumers in 14 different countries<sup>1</sup>.

Chart 1 presents survey results that sought to identify the extent of consumers' anxiety with respect to a number of eventualities. Compared to the European average, consumers in the UK seem slightly less concerned with adverse events.

The European average does, however, hide a quite large variance. Chart 2 presents the average anxiety level<sup>2</sup> across European countries. There, again, seems to be a clear

<sup>&</sup>lt;sup>1</sup> These were Belgium, Brazil, Chile, France, Spain, Germany, Italy, Japan, the Netherlands, Poland, Portugal, Switzerland, Taiwan and the United Kingdom. <sup>2</sup> The events on which respondents were asked to comment were critical illness, death or disability, unemployment, road accidents, severe events for family members, unexpected expenses, divorce or separation, change in professional status, multiple births, moving and a birth.



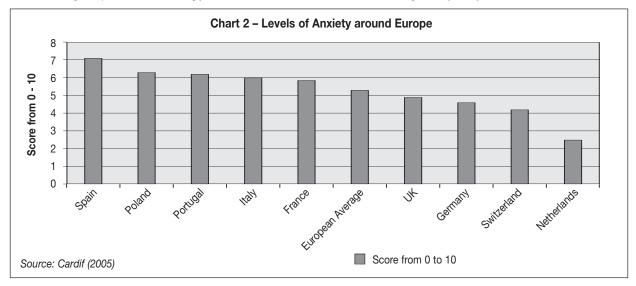
north south divide evident in the data, with southern countries being more anxious than those in the north.

The least concerned EU citizens were those consumers surveyed in the Netherlands, with an average of just 2.5, an amazingly

low score compared to the European average of 5.3 and the fact that the Netherlands has one of the highest debt levels in Europe.

In terms of financial vulnerability, the research found that 36% of the working

population, aged between 18-65, would find it impossible to maintain their current standard of living if they lost their job. To put this in context, it is worth mentioning that 25% of respondents had experienced difficulty with monthly instalments, although they finally overcame them.



### **Creditor insurance**

Estimating the size of the creditor insurance market in Europe is far from easy, as it is not often reported as a single insurance classification. In the UK, data is split between life insurance and pecuniary loss (special risks). It is also the case that product offerings differ across Europe, with different forms of coverage available, including life, disability, unemployment, critical illness, and permanent disability. For instance, in the UK, creditor policies usually consist of temporary unemployment or incapacity modules, commonly referred to as accident, sickness and unemployment (ASU). In Europe, however, products are more likely to offer life insurance and permanent disability cover.

According to Finaccord's 2003 European Creditor Insurance report (Finaccord, 2003), and using the broadest definition of creditor insurance, that includes life and the permanent disability elements, the total value of the European Creditor market at the end of 2002 was 25.75 billion euros. Of this, the total for ASU type of creditor was 8.45 billion euros. This can be broken down further into 5.23 billion euros for personal loans and motor finance, 1.93 billion euros for mortgage related products and 1.29 billion euros for the credit card sector.

### Mortgage Payment Protection Insurance (MPPI) in the UK

Most, if not all, mortgage lenders in the UK offer similar types of MPPI cover. There are differences in such things as excess periods, exclusions, premiums and, benefits. However, they all have essentially the same basic "ASU" insurance modules. This reflects the work undertaken since 1998 to improve the "safety net" available to home-owners, part of which was the creation of a "baseline" specification for MPPI.

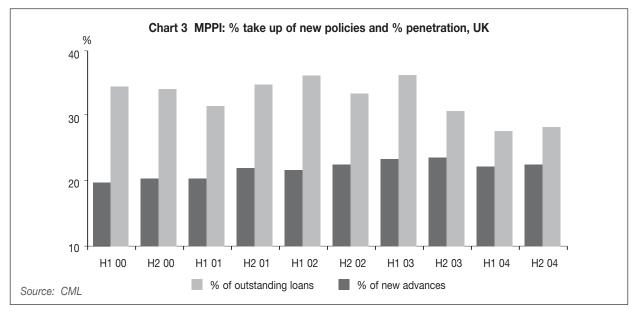
The baseline specification is part of the Sustainable Home Ownership Initiative (SusHo). The initiative, initially a partnership between the Council of Mortgage Lenders (CML), the Association of British Insurers (ABI) and a number of Government departments involved with home-ownership policy (the Office of the Deputy Prime Minister and the Department for Work and Pensions), seeks to enhance both the quality of the safety net available to homeowners and their willingness to access it. This year, the SusHo initiative's steering group has expanded to include the Association of Mortgage Intermediaries, HM Treasury and the Financial Services Authority (FSA); the statutory regulator that has overseen both the mortgage and

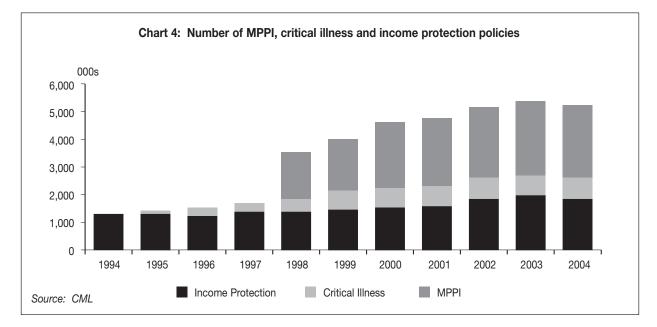
general insurance markets since 31 October 2004 and 14 January 2005, respectively.

Establishing a baseline specification for MPPI has enhanced the quality of the policies. It sets out a minimum standard that MPPI policies must adhere to, covering, amongst other things, terms and conditions, benefits and exclusions. Intended to raise the bar, in terms of the quality of MPPI policies offered alongside first charge mortgages, the baseline was introduced in 1999 and has the support of the vast majority of mortgage lenders in the UK.

To track the progress of the SusHo initiative, insurers and lenders collect half yearly figures to show the status of MPPI and the safety net it provides mortgage borrowers.

The total number of MPPI policies in force at the end of 2004 was 2.62 million, nearly 23% of the 11,512,000 mortgages outstanding. In terms of sales distribution, 73% of policies are currently sold by lenders, 7% direct to the customer by an insurance company and 21% via financial intermediaries. The average MPPI premium was £4.98 per £100 of cover and the average length of claims is 196 days for accident & sickness and 186 days for unemployment.





Turning to MPPI policies taken out with new mortgages, penetration rates are currently 28.1%, a fall from the peak of 34.8% in 2002. After some significant progress in the early years of the SusHo initiative, it is clear that the advance of MPPI sales has slowed in the last two years. This is largely due to the benign economic environment in the UK and high consumer confidence fuelled by rampant house price inflation.

It is also the case that the introduction of statutory regulation by the FSA of both mortgages and general insurance has also undoubtedly affected sales of MPPI. Lenders who offered free introductory periods have generally withdrawn or reduced them. This is because the FSA deem "free" insurance to be identical to "paid for" insurance and apply the same regulatory requirements. This has made lenders and intermediaries cautious about exposing themselves to the risk of making an inappropriate sale or providing inappropriate advice due to complacency at the point of sale with the insurance being a no cost sale to the borrower. The FSA has also expressed concerns about product "bundling" (products or multiple insurance products sold on the back of another primary product such as a mortgage or loan). This nervousness on the part of lenders to be exposed to such regulatory risk may become more evident in the next set of MPPI figures for the first half of 2005.

MPPI policies form part of a wider safety net comprising other types of insurance cover taken out to protect mortgage payments, such as critical illness and income protection. Research undertaken by the Centre for Housing Studies at the University of York, Risk, Homeowners and Safety-Nets: MPPI and Beyond (Ford et al, 2004), revealed that 60% of borrowers have some form of insurance cover, and that almost a third of borrowers have multiple insurance. The most prevalent combination was MPPI and Critical Illness (9%). Chart 4 shows the volume of MPPI, critical illness and income protection policies in place over the last few vears.

### The Reputation of MPPI

Despite the improvements made through the development of the baseline by the SusHo, it is still the case that creditor insurance in the UK has a negative image in the media and among consumer lobbying organisations. For some years now there has been a sustained campaign by parts of the media to suggest that lenders have been selling creditor insurance to borrowers primarily because of the high commissions that they receive for the sale.

This has proved to be a convenient stick to beat mortgage lenders with. Recently however, the media and national press have changed tack and are also now suggesting creditor insurance has little value and that people do not need to buy it. This is based on 'the fact' that only a few people actually claim on the insurance (in reality it can be estimated that payouts are worth around £300 million per annum, roughly the same amount as the current state scheme to support those in longer term difficulties). There is a real danger that borrowers will respond to this by not being prepared to take out the sensible insurance protection.

This is particularly true in the light of the substantial levels of personal debt in the UK, which recently passed the trillion pound mark (over 80% of which are mortgages according to the EMF). According to the Department of Trade and Industry's Overindebtedness Monitoring Paper (DTI, 2005), published early in 2005 -

"the growth rate of borrowing continues to outstrip that of earnings, pushing up the total debt to income ratio to just under 150% of annual income. Average earnings growth has remained relatively static at around 4.5%, so we can expect debt-income ratios to continue to rise in the short term"

Other research from the DTI reveals that 9% of people spend more than half their income on credit repayments and, according to an organisation called Credit Action, the average amount owed by every person in the UK is approximately £18,000. Concern regarding the growth of the debt rises when it is noted that according to research by Datamonitor consumer borrowing for each adult in the UK through credit cards, motor and retail finance deals, overdrafts and unsecured personal loans has risen to more than £4,000. This is an increase of 10%, in just one year and almost 50% since 2000.

Although the growth of debt is a worldwide issue, it has risen faster in the UK than in other countries. A Bank of England report (BoE, 2004) suggests that household debt in the UK is now 140% of aggregate income. This is above the level in most European countries and in the USA. Such debt burdens are sustainable when wages continue to rise, interest rates are stable or falling and house prices are rising. However, in the UK, mortgage costs have increased due to five increases in the Bank of England base rate over the last 18 months.

The UK economy is starting to show some telling signs that an economic downturn and all its consequences could be just around the corner and unemployment is on the rise again. The claimant count has just risen for the fourth month in succession, according to the ONS. The last time it rose for four months in a row was in December 1992. There were 2.96 million workless households in autumn 2004, representing 15.8% of all working-age households. There were 4.15 million working-age people living in workless households, representing 11.4% of the working-age population. Personal bankruptcies are up 28% in the past year and a fifth higher than they were in the early 1990s. The housing market is

cooling, with gross UK lending in May 2005 of £22.3 billion, according to the latest data from the CML, a 7% fall from the £24.1 billion lent in May 2004.

Given these statistics and trends, the continuing negative comments in the UK media diminish the value of creditor insurance (including MPPI, one of the most significant parts of the existing safety net for mortgage borrowers) in the eyes of advisers and potential customers. Media comment is typically based on a combination of out of date views on the quality of the product, pricing and the fact that some claims are declined (as is bound to be with a product underwritten at the point of claim). In reality some 85% to 90% of MPPI claims are met. pricing has fallen over time and the guality increased. MPPI is just one choice in a range of options borrowers can choose to protect themselves with if they cannot work and pay the mortgage repayments. It is definitely not the only option borrowers should consider but given the high levels of unsecured debt and the low average levels of savings in the UK some form of protection does make considerable sense.

This was evident in the Cardif research cited earlier. Some 66% of mortgage borrowers were interested in an insurance to protect their repayments and around the same proportion claimed to be aware of their entitlements to state benefits in the event of difficulties. In the UK state benefits and specifically, income support for mortgage interest, provide a partial alternative to private insurance. However, most mortgage borrowers are subject to a nine month delay before state benefits kick in to pay the interest on their mortgages (at a set interest rate which may be higher or lower than the actual rate to be paid). There is also the complexity and stigma (for many people) attached to claiming state benefits, especially when they are means-tested. Private insurance will pay out much sooner and in that sense provides a more immediate safety net. In that regard MPPI provides an important option for borrowers, alongside other insurance such as Critical Illness Insurance and Income Protection. It will usually be the most

affordable insurance option and, unlike other options, covers unemployment, a major concern to them.

The adage " there is no longer a job for life" is well understood in the UK, especially amongst the younger generations. No matter how well educated, proficient, or productive workers might be, they can still be the victims of globalisation, mergers, market changes, and many other factors that can cause periods of unemployment. The latest SusHo MPPI figures show that the average duration of unemployment claims were 196 days, that is between six and seven months. So the average benefit period associated with MPPI policies, 12 months (although some are 24 months), offers customers a reasonable period of time to get back into employment. In addition, the benefits can be used again for another full claim period, providing the customers re-qualify by working for a sufficient period before the second claim. Given that people who are made redundant once are more likely to be made redundant again, this is a feature of the MPPI product that cannot be understated.

### Conclusions

Arguably, the UK mortgage market is the beating pulse of the UK economy. The current Government is now examining the feasibility of ownership levels rising from 70% towards perhaps 75%. This will further stretch the existing safety net, perhaps too far, if there is no significant change in attitude by consumers towards protecting their capacity to make debt repayments.

To this end, both the lending and insurance industries and the regulator's efforts to improve consumer education and awareness relating to the protection of financial commitments and understanding of borrowing and consumer credit really does need to pick up speed. There is a low level of public awareness, typified in the Financial Services Consumer Panel Annual Report, which revealed that only 14% of respondents to their research knew that the FSA existed (FSA, 2004). Perhaps there will also be a solution to the negativity in the media regarding creditor insurance via the FSA's current investigation into the creditor insurance market, which is due to be completed later this year. Hopefully the findings will help address any problems and also dispel some of the myths that exist around the product and how it is distributed, purchased and sold. In addition, the work the FSA is undertaking regarding the financial capability of the consumer is an important adjunct to this issue. The lending industry has been working with the FSA on the creation of a borrowing 'tool' designed to help raise borrower awareness of risk and the options they may have for dealing with this (see Solomon, 2005). Better informed customers, alongside better products and processes could go some way to improving both awareness of risk and the actual safety nets in place to help borrowers when in times of difficulty.

Given the risks that exist, it can be argued it is important that the UK creditor insurance market does not go down the same route as it has in the USA. There, take up has been slashed and insurance replaced by noninsurance alternatives such as debt cancellation and debt suspension. These products have all the virtues of creditor insurance but state that they are not insurance contracts. The product benefits of these non-insurance contracts can be customised and priced at the lender's discretion. It is unclear just how the FSA would view these contracts but it could be that they would fall outside their jurisdiction. This will probably need to be decided in the law courts.

In 1999/2000 the net written premiums for all credit related coverage in the USA totalled \$7.22 billion. By the end of 2003 this total declined 32% to \$4.93 billion. There are already examples of these noninsurance products appearing on credit cards in the UK, so the process has already started. Creditor insurance has a vital role to play as one of the safety net options that mortgage borrowers should be aware of when considering how to protect themselves and their families. However, if non-insurance contracts do begin to replace insurance policies in the UK, will they be subject to the same level of regulatory constraint as insurance contracts?

From a European perspective, creditor insurance is still very young compared to the UK and certainly the USA. There is growth potential for the product in these countries, especially if they seek to restructure their welfare regimes along more "liberal" lines, with an emphasis on the market as the dominant means of support, with state benefits heavily means tested and targeted.

Creditor insurance was first introduced into the UK from the USA in the early 1960s and has matured into a £5.2 billion market. Whilst there is still obviously room for further growth in the UK market, the prospects for growth elsewhere in Europe are substantially higher, especially in the less developed member states, as consumers aspire to reach the same living standards of their European neighbours.

It will be slower and steadier growth in those other countries, which might be looking to rely more on the market than the state in future. This is because of the time it will take to engineer and deliver the desired welfare reforms. In addition, subject to the resolution of continuing teething problems, the EU could help speed up these welfare reforms and thus create the environment for all European borrowers to consider their options in protecting their financial commitments.

### Note

Cardif Pinnacle is part of Cardif, a French insurance company, which is a member of the BNP Paribas Group. Cardif offers creditor insurance in 30 countries and is the third largest provider of creditor insurance in the world, offering products in 30 countries.

### References

- BoE (2004) Financial Stability Review December 2004, Bank of England, London.
- Cardif (2005) Protecting Financial Commitments; Consumer behaviour and expectations in 14 Countries, a survey undertaken by TNS Sofres, Cardif, Paris.
- DTI (2005) Over-indebtedness Monitoring Paper Q1 2005, DTI, London.
- Ford, J et al (2004) Homeowners Risk and Safety Nets; Mortgage Payment Protection (MPPI) and beyond, ODPM, London.
- Finaccord (2003) European Creditor Insurance 2003, Finaccord, London.
- FSA (2004) Annual Report, Financial Services Consumer Panel, FSA, London.
- Solomon, A. (2005) First-time buyers, mortgage risk and the "Debt Test", CML, London.