REVIEW AND SITUATIONAL ANALYSIS OF THE UK MORTGAGE MARKET

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Welcome to the second issue of our UK bulletin – a periodic publication that focuses attention on the residential mortgage market with specific emphasis on the high loan-to-value segment. This publication examines changes facing the industry and takes a look at how other countries are addressing similar issues.

Genworth Financial is insuring residential mortgages in 7 European countries today – UK, Ireland, Spain, Portugal, Italy, Sweden and Germany. This gives us a unique perspective on variations in mortgage products, consumer trends and underwriting methodology.

In this issue, we examine the various ways that lenders measure affordability. It is a hot topic in the UK since many first time buyers are priced out of the market. The results are dramatic and, while there is no single right way to qualify a borrower for a mortgage, the analysis shows that lenders who maintain the most simplistic approaches are likely to be accepting the most risky borrowers or missing out on potential volume!

We also take a look at the regulatory changes facing lenders. Even as M-Day is behind us, a number of other significant challenges are presenting themselves – the Capital Requirements Directive and IFRS are impacting lenders financial statements and we've seen restatements from many already.

During the first half of 2005 we participated in several industry events including the Building Societies Association conference in Harrogate. Congratulations to Dean Waddingham of Britannia BS who won our raffle of Wimbledon tickets and to Peter Richardson of Derbyshire BS who won the Andre Agassi signed tennis racquet.

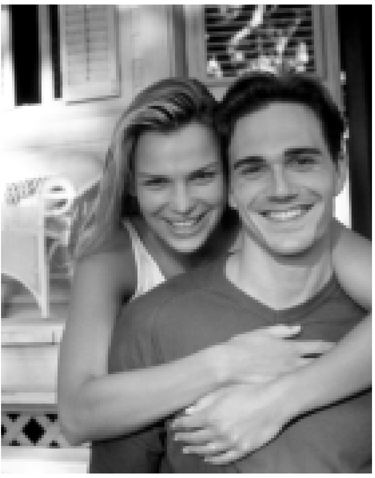
The bulletin closes with some coming events that Genworth Financial is participating in over the second half of 2005. We look forward to our 4th year of sponsoring the CML's annual dinner in December and to our 4th year of sponsoring the EuroCatalyst Conference being held in Rome in September.

ABOUT GENWORTH FINANCIAL

Genworth Financial is a leading insurance holding company, serving the lifestyle protection, retirement income, investment and mortgage insurance needs of more than 15 million customers, with operations in more than 20 countries, including Australia, Canada, Denmark, Finland, France, Italy, Ireland, Germany, The Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, the UK and the US.

Tammy Richardson
Managing Director, UK & Ireland
Genworth Financial
Mortgage Insurance

AFFORDABILITY - A KEY COMPONENT IN ASSESSING MORTGAGE RISK



AFFORDABILITY (ABILITY TO PAY) IS ONE OF THE KEY COMPONENTS IN ASSESSING MORTGAGE RISK

The rise in mortgage and consumer borrowing in recent years are two of the most significant warning signs in the UK market. Outstanding personal borrowing now accounts for around 120% of net disposable household income, which compares unfavourably with the early 1990s when it was around 90%. The historical rise in house prices and recent interest rate hikes makes managing personal financial requirements much more difficult. The average house price to income ratio, as quoted by HBOS, has risen above the five times threshold. However, despite last year's increases, we still have virtually record low interest rates and a wide range of mortgage products designed to ease the borrowers payment burden (such as interest only, discounted rates, longer loan terms, and flexible payment options). There is little or no room left to ease this debt burden further, and it seems that one of the only ways left is further expansion of the affordability ratio.

However, it is widely accepted that high affordability ratios combined with high LTV lending significantly increases the potential for loss.

AFFORDABILITY RATIOS

From the lenders' point of view, they must have the processes and controls in place in order to recognise and deal accordingly with these risk signals. Emphasis needs to be placed on how banks are assessing their portfolio and which affordability measure the banks are using. Different lenders across different markets are using a range of affordability ratios; there are no clear opinions or standards as to which ratios are the best to use for each market, economic cycle and/or product. In this article, we will illustrate some of the differences in the relative predictiveness between the main affordability ratios that are in use in the market today. We will start by illustrating a range of affordability measures and later we will show some benchmarking calculations and analysis based on those ratios.

INCOME MULTIPLE

In the UK, the generally accepted affordability measure is income multiple. This represents the ratio of the loan amount to a borrower's annual income (typically gross income but can be net income):

$$\text{Income Multiple} = \frac{\text{Mortgage Loan Amount + Other Debt}}{\text{Gross Annual Income}} \quad (1)$$

This measure provides an adequate reflection of a borrower's ability to repay a loan, but does not take into account mortgage interest rates or the maturity of the loan, and as such it is very difficult to assess the effects of interest rate changes using this measure.

DEBT-TO-INCOME (DTI) RATIO.

In general terms, DTI is a ratio of the borrower's monthly debt obligation expressed as a percentage of monthly income. In practice, dozens of different variations of DTI ratios exist. For the purpose of this article, we will focus on those that are more frequently used in the UK mortgage market.

As with the income multiple calculation, we have the same consideration as to whether we use gross or net incomes, one or more borrower's incomes:

$$\text{Net DTI} = \frac{\text{Monthly Mortgage Payments}}{\text{Net Monthly Income}} \quad (2)$$

$$\text{Gross DTI} = \frac{\text{Monthly Mortgage Payments}}{\text{Gross Monthly Income}} \quad (3)$$

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Also, DTI ratios can include other debt commitments. In practice, some lenders add these other debts in the numerator whilst others subtract them in the denominator. We will show later (using the net DTI ratio only) that the impact of this change is largely dependent on the level of other debt commitments.

$$\text{Net DTI} = \frac{\text{Monthly Mortgage Payments + Other Debt}}{\text{Net Monthly Income}} \quad (4)$$

$$\text{Net DTI} = \frac{\text{Monthly Mortgage Payments}}{\text{Gross Monthly Income - Other Debt}} \quad (5)$$

Other lenders are using a yet more detailed (and in our view, a more valid) ratio, taking account of all the factors mentioned above but also including living expenses or minimum living costs (MLC) in some countries, i.e. additional spending on spouse and dependents. The MLC can vary country by country and by lender, and must be clearly described in the lender's underwriting guidelines. This is known as the Net Disposable Debt To Income (Net DDTI) ratio.

$$\text{Net DDTI} = \frac{\text{Monthly Mortgage Payments}}{\text{Gross Monthly Income - Other Debt - MLC}} \quad (6)$$

AFFORDABILITY BENCHMARKING

As illustrated, there is a wide range of affordability ratios available and in use today, producing a different output. Some lenders will only apply one of the ratios, but some will apply a combination of several. To us, the latter makes sense as it could help to avoid systematic errors.

We will now benchmark the main affordability measures against each other to highlight the differences between them as interest rates rise. To start, we will compare Income Multiple and the basic Debt To Income ratio (see table 1).

Obviously the income multiples stay the same as they are not sensitive to interest rate changes. However, it should be noted that in this analysis we have used the DTI ratio that only includes mortgage debt. No other debts are being considered (i.e. credit cards or unsecured loans), which would make the difference in the calculations even more dramatic.

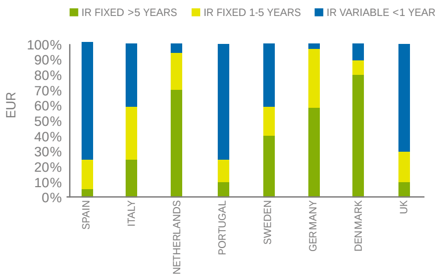
Income multiples are a satisfactory measure but we would recommend to using this method with a supplemental measure, such as DTI in order to establish a more exact calculation. This is especially important in those markets where the majority of loans have floating interest rates (see figure 1). In practice, some mortgage lenders calculate DTI using stressed interest rates (1% to 2%) in order to account for a degree of interest rate shock.

Table 1: Affordability calculations for an average mortgage in the UK

Assumptions	Average Mortgage Rate %	Average Monthly Payment £	Income Multiple	Net DTI %
	4.0	775.65	4.58	33.28%
Average Mortgage £128,000	5.5	880.50	4.58	37.77%
Average Duration 20 (Yrs)	6.0	917.03	4.58	39.34%
Average Monthly Household Income:	6.5	954.33	4.58	40.94%
Gross Household Income £3,041	7.0	992.38	4.58	42.57%
Total Income Tax £461	7.5	1,031.16	4.58	44.24%
Total NI Contribution £250	8.0	1,070.64	4.58	45.93%
Household Incomes After Tax and NI £2,331	8.5	1,110.81	4.58	47.65%

AFFORDABILITY - A KEY COMPONENT IN ASSESSING MORTGAGE RISK

Figure 1: Mortgage interest rate structures on outstanding mortgages



Source:Genworth Financial

From figure 1 we can see that the UK and Spanish markets will be the most sensitive to interest rate changes because the majority of loans have variable interest rates. Additionally, a number of markets which traditionally had a higher proportion of fixed rate originations have experienced a recent trend towards variable rate mortgages. This trend is especially evident in Italy, Sweden and even Denmark (where traditionally, variable loans accounted around for a mere 20% of all originations; last year, this soared to 60%).

This sort of trend would represent less of an issue if interest rates were going down, but with rates nearly at a historic low, there is not much scope for further reductions. Once interest rates start to rise, as they have in the UK market, affordability will start to become stretched.

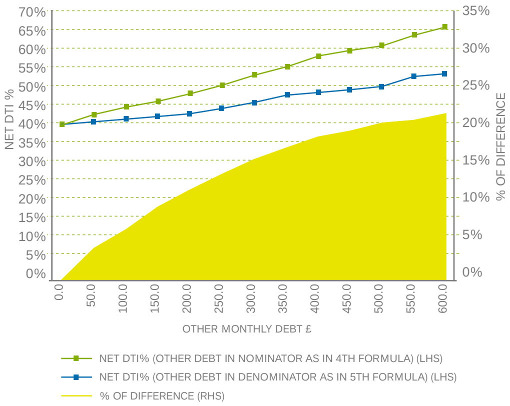
Table 2: DTI variance on an average loan

	Average Monthly Payment £	Other Monthly Debt £	Net DTI % (Other Debt in denominator as in 4th formula)	Net DTI % (Other Debt in denominator as in 5th formula)	% of Difference
	931.86	0.00	39.98%	39.98%	0.00%
Average Mortgage £128,000	931.86	50.00	42.12%	40.85%	3.11%
Average Duration 20 (Yrs)	931.86	100.00	44.27%	41.77%	5.98%
Average Monthly Household Income	931.86	150.00	46.41%	42.73%	8.63%
Gross Household Income £3,041	931.86	200.00	48.56%	43.73%	11.04%
Total Income Tax £461	931.86	250.00	50.70%	44.78%	13.23%
Total NI Contribution £250	931.86	300.00	52.85%	45.88%	15.18%
Household Incomes After Tax and NI £2,331	931.86	350.00	54.99%	47.08%	16.90%
	931.86	400.00	57.14%	48.26%	18.40%
	931.86	450.00	59.28%	49.54%	19.66%
	931.86	500.00	61.43%	50.89%	20.70%
	931.86	550.00	63.57%	52.32%	21.50%
	931.86	600.00	65.72%	53.83%	22.07%

AFFORDABILITY - A KEY COMPONENT IN ASSESSING MORTGAGE RISK

As shown in table 2, depending on the level of external debt commitments, the difference between the two formulas could be significant. DTI formula (5) could systematically underestimate the importance of any other debt and it can lead to the underestimation of risks associated with a borrower's ability to repay their liabilities.

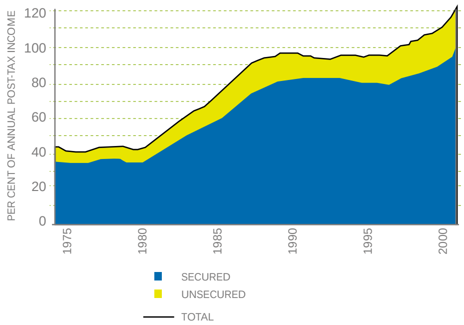
Figure 2: DTI variance



The majority of European lenders are using DTI ratios, although it is often unclear as to which characteristics they are using in the calculation. For example, referring back to equations (4) and (5), some lenders may not realise the difference between the two calculations. Figure 2 highlights this difference. Equation (4) produces a DTI ratio that is more than 20% higher than equation (5) if other monthly debt equals £600.

This point is especially important for markets such as the UK, where other debt has increased strongly in recent years. The risks arising from aggregated debt is far more significant if this debt is concentrated among more vulnerable borrowers. The accumulation of debt has led to a rise in the overall household sector debt-to-income (total debt/post tax income), which reached a record recently (figure 3).

Figure 3: Household Debt



Source:Bank of England

SUMMARY

From this article we can see that there is a wide range of affordability ratios available and in use today, each producing different outputs. Some ratios are more sensitive to house prices, some to interest rate changes and some to other factors.

We believe that banks and financial institutions, to avoid systematic errors, should use more than one calculation for the affordability ratio especially when market conditions are changing.

QUESTIONS & ANSWERS

With Barry Naisbitt, Chief Economist, Abbey

Q. In the UK it is becoming increasingly difficult for first-time buyers to gather the necessary deposit to get on the property ladder. Is this an increasingly common trend?

A. Abbey's latest survey of FTBs shows that the rise in house prices seen over the past three years has led to FTBs requiring higher deposits for their purchase. Of the FTBs we recently surveyed one in three (30%) potential first-time buyers want to buy this year but only 5% are confident they'll be able to do so compared with 18% at the beginning of the year. Clearly, for many potential FTBs building their savings will become more of a priority with 25% of FTBs aiming to have at least a 10% deposit and 28% aim to have more than a 20% deposit.

Q. What do you believe are the biggest issues for first-time buyers in the UK today?

A. FTBs, like many home buyers, have to make compromises in what they can afford to buy and where they can afford to buy. Stamp duty has clearly been a barrier for many FTBs and the Chancellor's recent decision to raise the zero rate threshold to £120,000 may result in improvement in FTB confidence. Property prices have been a barrier but with the levelling off of the market many are now waiting to see if prices will come down even more before buying. Of course, the general low levels of interest rates seen in the past ten years, and their relative stability which has accompanied overall economic stability and rising employment, will have helped FTBs to feel more confident in their longer-term plans relative to their counterparts a decade or so ago.

Q. What do you believe lenders can do to help first-time buyers get their first home?

A. Although, as Abbey's survey showed, many potential FTBs are experiencing some degree of difficulty in the current housing market, they can still benefit from the wide choice of and flexibility in mortgages now available. FTBs need to think about the amount of debt they are taking on and how capable they are of making the repayments, including considering other things, such as the possibility of illness or job loss, that are not often 'front of mind' when purchasing a first home. So lenders can help FTBs to understand their positions and some of the possible risks they might face as well as offering solutions, ranging from fixed rate mortgages to keep payments steady, to flexible mortgages which allow early repayment and payment protection insurance. There are also other avenues of less conventional approaches to house purchase, such as shared ownership or buying with friends or family.

QUESTIONS & ANSWERS

With Barry Naisbitt, Chief Economist, Abbey

Q. In your opinion, do you see UK house prices increasing or decreasing in the next five years?

A. It was Niels Bohr, the Nobel prize winning physicist who said "prediction is very difficult, especially about the future". This is certainly true for economic magnitudes such as exchange rates or house prices. We have passed through a period of rapid house price growth - indeed, a period in which house prices have increased consistently faster than many forecasters predicted. What we have seen in the past nine months or so has been a change in that profile. Month on month house price changes have hovered close to zero - some months just above and some just below - which is well below the rates of increase seen in early 2004. As a result, annual house price growth has dropped below double digit rates and is now - according the government's house price index - at 6.9%. Abbey expects this pace of annual growth to slow further, to be around 2% by the end of this year. Looking further forward, it is difficult to be categorical but if the economy continues to show growth at around its trend, inflation remains close to its 2% target and employment levels remain high - as most forecasters expect - this should support the housing market and rather slow growth in house prices. A return to double digit house price growth looks, from today's vantage point, an unlikely prospect.

THE ROLE OF MORTGAGE INSURANCE UNDER THE NEW BASEL II REGULATORY FRAMEWORK

SUMMARY AND OVERVIEW

The introduction of changes to the regulatory landscape means that banks are going through an immense period of change in the way they 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.

Mortgage insurance (MI) is a product which could address some of the issues currently being faced by lenders. The aim of this article is to consider:

The potential recognition of the benefits of MI under the new capital requirements regime. The increase in 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 requirements. Lenders should be encouraged to investigate the benefits of using credit risk mitigants, such as MI, within their capital calculations.

THE POTENTIAL RECOGNITION OF MI UNDER THE NEW CAPITAL REGIME

In the US, Canada and Australia, MI is a well established product, and its use is actively encouraged by 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[1]. The MI market within Europe is also gathering pace as the risk mitigating benefits of MI are increasingly recognised, although currently only Italy reflects the risk mitigating benefits of MI in the risk weight applicable to a mortgage covered by the product[2].

The implementation of the Capital Requirements Directive (CRD) in Europe, 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; the UK FSA is the first regulator to give an indication of its intended approach to implementation of the CRD, and specifically to the future proposed treatment of MI in the UK[3], and as such provides a basis for comparable treatment of MI across the rest of Europe.

[1] 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.
[2] 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.
[3] CP 05/3, "Strengthening Capital Standards".

THE ROLE OF MORTGAGE INSURANCE UNDER THE NEW BASEL II REGULATORY FRAMEWORK

How Would MI Be Recognised Under the New Framework?

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[4].

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 the use 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[5] 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 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[6].

The second option is to consider MI in terms of recognition under the credit risk mitigation (CRM) rules[7]. 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[8], 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[9], 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 and sensitivity to credit risk.

[4] CP 05/3, "Strengthening Capital Standards", paragraph 7.202, footnote 177.

[5] CP 05/3, "Strengthening Capital Standards", paragraph 5.10 onwards.

[6] APRA, Discussion Paper, "Implementation of the Basel II Capital Framework – Standardised Approach to Credit Risk," April 2005.

[7] 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.

[8] CRD, Article 4(32).

[9] The substitution approach applies a risk weight which is linked to the credit rating of the counterparty providing the protection.

THE ROLE OF MORTGAGE INSURANCE UNDER THE NEW BASEL II REGULATORY FRAMEWORK

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

Recognition of MI as a credit risk mitigant is a new approach which was not directly considered in the CRD. As such, it needs to be fully understood how MI can be recognised within these rules. Article 4(32) of the CRD contains the definition of unfunded credit protection[10]. 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[11].

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:

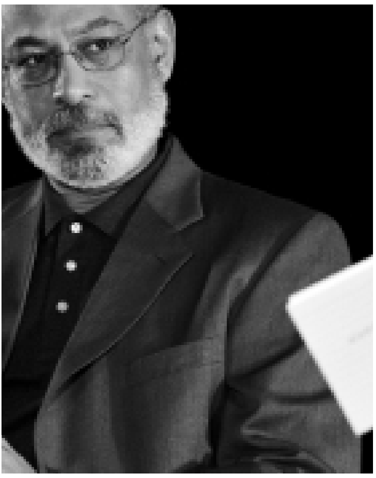
The first reason is that it is important to recognise the benefits to a lender where a significant level of credit risk is transferred. MI reduces the LGD by acting as a "first loss cover", where the proceeds of sale on foreclosure are insufficient to cover the outstanding debt of the borrower and foreclosure costs. The flexible nature of the product means that lenders can set the level of cover to ensure that they suffer no losses in the event of default by the borrower. Depending on the level of cover chosen, 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.

[10] 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."

[11] This suggestion is supported by the Basel Committee, BIS, QIS3 FAQ:E. Credit Risk Mitigation, question 6.

THE ROLE OF MORTGAGE INSURANCE UNDER THE NEW BASEL II REGULATORY FRAMEWORK



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 processes can be improved through the use of more sophisticated underwriting, risk management and loss mitigation techniques as a result of third party oversight in the mortgage lending process. Furthermore, third party provision of mortgage scoring mechanisms, in addition to the origination data and performance data requirements 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, 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 suit their particular needs at a particular point in time.

CONCLUSION

MI has the potential to meet the growing needs of lenders under the new approach to the calculation of capital within the new Basel II regulatory framework. 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.

This article is not intended to contain definitive tax, accounting or legal advice.

UPCOMING GENWORTH EVENTS

Wimbledon 2005

Genworth Financial is sponsoring events during the middle weekend of Wimbledon
– June 24th & 25th.

CML First-time-buyer's seminar

This event will take place on July 5th in London's CBI conference centre, Centre Point.
Genworth Financial is the title sponsor of the seminar.

EuroCatalyst 2005

Genworth Financial is sponsoring this conference in 2005 for the 4th consecutive year. The event will take place in Rome from September 26th – 28th.

CML annual conference and dinner

Genworth Financial is the title sponsor of this event again in 2005 for the 4th consecutive year. The event will take place on December 6th in London's Novotel Hotel, Hammersmith.

EDITORIAL TEAM

Matt Wilson
Head of European Analytics

Anna Whittingham
Regulatory Analyst

For further information on any of the featured articles please contact:

Aimée Le Couteur
UK & Ireland Assistant
Genworth Financial

t: 020 7599 1569

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