Banc Ceannais na hÉireann
Central Bank of Ireland
Eurosystem

Mortgage insurance in an Irish context

Niamh Hallissey[1]

Economic Letter Series

Vol 2015, No. 5

Abstract

The Central Bank of Ireland consultation paper on macro-prudential policy for residential real estate asked whether adequately insured mortgages should be exempt from the proposed loan-to-value (LTV) limit. An exemption for insured mortgages could alleviate the liquidity constraints associated with a LTV cap, particularly for first-time buyers. However, such an exemption could also reduce the effectiveness of a LTV cap in dampening the pro-cyclicality of property lending. Mortgage insurance is used in several other countries around the world and this Economic Letter examines the structure of the market in some of these countries and considers any policy implications for the Irish market.

1 Introduction

The Central Bank of Ireland (Central Bank) consultation paper CP87 (CBI, 2014) proposed the introduction of proportionate loan-to-value (LTV) and loan-to-income (LTI) limits on Irish mortgages. As part of this consultation, the Central Bank asked whether suitably insured mortgages with high LTVs should be exempt from the proposed LTV limit. This exemption was to be considered in light of the trade-off between improving credit underwriting quality and protecting lenders from default on the one hand, and against the potential for such a scheme to weaken the effectiveness of the macro-prudential measures in achieving the objective of dampening the pro-cyclicality of mortgage lending on the other. The results of the consultation process can be found in CBI (2015a) and the final policy position is outlined in CBI (2015b). The consultation process elicited a range of views on mortgage insurance, with similar numbers agreeing and disagreeing as to whether insured mortgages should be exempted from the LTV measure. The final policy did not provide for an exemption for insured mortgages, as outlined in CBI (2015a).

Mortgage insurance (MI) is available in many countries but only widely used in a few. The mechanics of the schemes in these countries differ significantly. One of the defining differences between MI schemes relates to who provides the insurance: governments or private mortgage insurers. Another area of difference is whether it is mandatory for certain loans or incentivised through lower capital requirements for banks.

This letter looks at what mortgage insurance

[1]Author: niamh.hallissey@centralbank.ie. The views expressed in this paper are those of the author and do not necessarily reflect the views of the Central Bank of Ireland. I would like to thank Mark Cassidy, Gerard O'Reilly, and Maria Woods for very helpful comments.

is (Section 2), the structure of MI programs across several countries (Section 3) and the regulatory considerations that would need to be taken into account in the introduction of MI (Section 4). Section 5 concludes by discussing some specific considerations from a macro-prudential and micro-prudential perspective for any exemption to the LTV limits for insured loans in the Irish market.

2 What is mortgage insurance?

Mortgage insurance protects lenders by transferring some or all of the mortgage default risk from lenders to insurers, thereby reducing the loss to a lender in the event of a default. From a macro-prudential perspective, MI is intended to cover risks that would arise in the event of a systemic crisis which is accompanied by large falls in property prices and would result in widespread losses across the financial sector, rather than idiosyncratic borrower risks. While a mortgage insurance contract is agreed between a lender and an insurer, the borrower is not covered by the policy and is still liable to the insurance company for any losses. However, in another way MI can benefit borrowers as it can in certain cases be used to allow otherwise credit-worthy borrowers, who do not have a large enough deposit, access to credit.

MI schemes can take very different forms, both in the type of risk that is covered and the type of entity which provides the insurance. In many countries, MI takes a *first loss position*, where it insures a lender for the first portion, usually around 20 per cent, of a loss (see the Coverage column in Table 1). This shifts this portion of the risk from the mortgage issuer to the insurance company. An alternative approach sees the entire value of the mortgage insured. This is the case for the US Government's Federal Housing Administration (FHA) home mortgage insurance coverage. In these cases, although the total value insured is much higher, the risk of losses is not correspondingly higher as the value of the collateral will cover a portion of the losses in the event of a default. In general, the trigger for a MI claim from a lender to an insurer happens on the foreclosure of the property, when the exact loss to the lender can be calculated. A mortgage insurer will usually only pay out on a claim if the documentation is fully in order and the loan conforms to the criteria laid out in the policy between lender and insurer.

MI can be paid by either the borrower or the lender and this also varies across jurisdictions. Generally, the cost of lender-paid MI will be passed on to the borrower through a higher rate. The rate paid by the borrower can be as an annual fee (until the loan amortises down to below a certain point, usually below 80 per cent LTV) or as an upfront fee, which could be capitalised onto the loan. The overall cost to the borrower will depend on a number of factors. As with all insurance, the cost of MI will depend on the expected losses, the cost of capital held by an insurer against the risk, and the costs of providing the insurance. Inputs into the calculation of expected losses include predicted default rates, time-to-default, and assumptions around the loss-given-default. Offsetting these can be factors related to the benefits to the lender of having MI, which include lower expected losses, lower funding costs, and, depending on the regulatory treatment of MI, lower capital charges. These may be passed on to the borrower in the form of a lower interest rate. Moreover, while the upfront or annual costs of MI to the borrower are clear, there are additional considerations in quantifying the ultimate cost to the borrower. For example, when a borrower is able to purchase a house with a lower deposit, there is an additional cost over the life of the loan from the higher debt burden and the resultant higher interest rate and repayments but there may be also be a benefit to having bought earlier, particularly in an environment of rising house prices.

MI is inherently sensitive to the problem of adverse selection, as lenders have better information on the credit quality of an individual loan, while the insurer takes the losses, or at least the first portion of a loss. In general, lenders tend to resist the mandatory use of MI, as can be seen in the response of the banking sector to the question raised in CP87.[2] In an environment where there is strong competition for business between mortgage insurers and a small number of dominant lenders, profit-maximising lenders could use MI selectively

[2] Concerns raised by lenders through this forum include the cost of such insurance to the borrower, the large counterparty risk a lender would have to take on in the absence of a government scheme, and the difficulty in claiming against these policies. Lenders felt that it would be more efficient to mitigate the risk of higher LTV loans through pricing than to insure against it. See the submissions to CP87 on the Central Bank website for more details.

and retain the full credit risk for better quality credits. Lenders could even only use MI to issue products or particular mortgage contracts which they would not issue without insurance. One policy option to minimise the problem of adverse selection is to make MI mandatory, on either all loans or all loans with a LTV above a certain threshold, as is the case in Canada. Blood (2009) hypothesises that, as a practical matter, any country which makes MI mandatory would probably need a MI programme which is underwritten by the government, with private insurers operating in the market if market conditions permit. This would bring with it a large increase in the exposure of the government finances to the property market and a potentially large increase in contingent liabilities relating to any guarantee.

The very nature of MI means that its effectiveness can decline during a crisis. Insurers are more sensitive to mortgage defaults than original lenders, as they bear the first loss portion on loans which have higher LTVs. This was highlighted by the subprime crisis of the US, where mortgage insurers were subject to significant stress. Two of the five large US mortgage insurers were placed under orders of supervision and the other three emerged from the crisis at sub-investment grade, and all five were investment grade before the crisis (Joint Forum, 2013).

The UK also experienced a crisis in the MI market in the late 1990s, as discussed in Boléat (1996). MI, or mortgage indemnity insurance as it was known, had played a significant role in the major expansion of credit to the housing market that happened in the late 1980s. Underwriting standards were lax, mortgage insurance policies between banks and insurance companies were loose, and banks had less incentive to make sensible lending decisions. There were no specialist mortgage insurers in the market and the majority of the business was underwritten by the four main composite insurers. This culminated in a spike in mortgage possessions and arrears between 1989 and 1995 and led to significant difficulties for mortgage insurance providers in the subsequent years. No precise figures for losses are available, but estimates of over £6 billion between 1991 and 1996 have been suggested. This led to a large restructuring of the mortgage indemnity insurance market. One interesting feature of the UK crisis is that there were some media and other interests arguing after the crisis that, as the borrower had paid for the insurance, the borrower should be entitled to benefit directly from it (and deal with negative equity through simply giving back the keys). It took a concentrated effort on the part of lenders and insurers to dispel this notion (Boléat, 1996).

3 Who provides mortgage insurance

When considering the structure of MI in other countries, it is important to note the different features of the housing markets in these countries. In particular, the prevalence of fixed-rate mortgages, the stability of the rental market, and the degree of competition in the banking sector will all affect how MI is developed in each country.

Government mortgage insurance

In Canada, Hong Kong, the Netherlands, the UK, and the US, the government participates in the mortgage insurance market. The use of MI in these countries is achieved either by requiring insurance on certain loans or by allowing capital relief for mortgages covered by government guarantee schemes.

In the *US*, the Government-Sponsored Enterprises (GSEs) require MI on loans that have LTV ratios above 80 per cent. This insurance can be from private mortgage insurers, or from the FHA, which insures loans made by private lenders. FHA loans allow borrowers to pay a deposit as low as 3 per cent and are insured through a combination of an upfront mortgage insurance premium (currently at 1.75 per cent of the base loan amount) and annual mutual mortgage insurance premiums. From January 2015, the annual premium for a 30-year loan term with LTV less than or equal to 95 per cent is 0.80 per cent.[3]

In *Canada*, the market is dominated by the public insurance company, the Canadian Mortgage and Housing Corporation (CMHC). All banks are required to have insurance for loans with LTV ratios above 80 per cent which leads to around three fifths of mortgage lending in Canada being covered by mortgage insurance (IMF, 2014). Of this, the CMHC has a market share of around three quarters. The government guarantees 100 per cent of

[3]See http://portal.hud.gov/hudportal/documents/huddoc?id=15-01ml.pdf

CMHC's obligations and also guarantees the obligations of private mortgage insurers to lenders in order to allow competition in the market. The CMHC mortgage loan insurance premium is calculated as a percentage of the loan and is based on the LTV. For loans with a LTV up to and including 90 per cent, the premium on the total loan is 2.5 per cent.[4] Insured mortgages are then used to provide capital market funding through the CMHC securitisation programmes. While MI is mandatory in Canada on high LTV loans, there is also an indirect incentive as insured mortgage loans have lower risk weights than uninsured loans. The Canadian authorities have the power to influence housing finance through the rules governing mortgage insurance. These rules were relaxed during the 2000s, which made high LTV (insured) mortgages more affordable and supported the strong growth in mortgage credit (IMF, 2014). These rules have been tightened in several rounds since 2008.

In *Hong Kong*, mortgage insurance is required on high LTV loans made by regulated deposit-taking institutions. The Hong Kong Mortgage Corporation (HKMC) allows banks to provide mortgage loans above the 70 per cent LTV limit to eligible mortgages (under a maximum property value and loan amount) of up to 90 per cent LTV.[5] The current cost of MI for a floating rate loan with LTV between 70 and 90 per cent and 30 year term would be 3.55 per cent of the original principal balance for a single premium payment or an annual premium of 1.65 per cent in the first year and 0.63 per cent thereafter.[6] The HKMC is fully owned by the government and funds itself through the issuance of debt securities and mortgage-backed securities. The HKMC had a delinquency ratio (over 90-day) of 0.006 per cent for the mortgage insurance portfolio at the end of 2013. Wong *et. al.* (2011) showed that MI can mitigate against the liquidity constraints generated by the LTV policy, which can be material, without undermining the effectiveness of the tool.

In the *UK*, the Government has made up to £12 billion of guarantees available to support high LTV mortgage lending as part of the Help to Buy scheme. This allows creditworthy households to buy a home with a deposit of as low as 5 per cent. The Government guarantee compensates lenders for a portion of their losses in the event of foreclosure. The Government charges a commercial fee for the provision of this guarantee and the guaranteed portion of the loan is treated as an exposure to the UK Government in the calculation of banks' capital requirements. The scheme is intended as a temporary measure and will run from 2 January 2014 for three years.[7] IMF (2014b) noted that Help to Buy has given lower income households access to mortgage credit, but that guaranteed mortgages so far have, on average, been few (relative to the volume of housing transactions) and small in value (relative to national averages), and that the programme should be regularly re-assessed.

In the *Netherlands*, borrowers taking out a mortgage can choose to take out a loan incorporating a national mortgage guarantee (NHG), if the loan and purchase price of the house are under a certain size and the borrower complies with certain debt-to-income ratios.[8] The Home-ownership Guarantee Fund (WEW) will pay out any remaining shortfall on a loan to the lender, following enforcement of the mortgage and sale of the property, if a NGH was taken out by the borrower. The shortfall covers outstanding principal, unpaid interest and repossession and other costs. For mortgages originated from 1 January 2014, the lender shares 10 per cent of any losses on the claimed amount under a NHG guarantee. If the borrower acted in good faith, the WEW will not pursue the borrower for the shortfall. Borrowers pay an up-front fee (1 per cent in January 2014) of the mortgage amount for the NHG. However, lenders offer a discount on the interest rate for NHG loans, which often leaves these loans cheaper than non-guaranteed loans. The regulatory capital requirements on these loans are zero.

Private mortgage insurers

Private mortgage insurers have been operating in the *US* since the 1950s. There are seven mortgage insurers currently active in the market.[9] According to the industry body for these insurers, private MI insured 11.3 per cent of total mort-

[4]See http://www.cmhc-schl.gc.ca
[5]See http://www.hkmc.com.hk/eng/pcrm/ourbusiness/mip.html
[6]See HKMC Mortgage Insurance Programme premium rate sheet
[7]See Help to Buy scheme rules Oct 2015
[8]See http://www.dutchsecuritisation.nl/nhg
[9]See http://www.usmi.org

gage originations in 2013. These insurers were hit badly by the financial crisis as they were directly exposed to losses once delinquencies and defaults started to increase and contingency reserves (reserves these insurers are required to maintain against catastrophic losses) were reduced to very low levels. One small insurer went into run-off mode in July 2008 and ceased issuing commitments for new business, two were placed under regulatory supervision, and the remaining insurers operated with heavy losses for several years. However, these continued to satisfy their claims paying obligations (Promontory, 2011). Improving profitability for these companies from declining delinquencies has led to ratings upgrades in recent years.

Australia is an example of a country where the government-owned mortgage insurance company had a dominant market share, until 1997. At this point, the government decided that it was no longer necessary to play a direct role in MI and passed legislation to allow for the privatisation of this company, which was subsequently bought by Genworth. The IMF has suggested that Canada consider this route in order to reduce the risk to the balance sheet of the government from mortgage insurance (IMF, 2014). In Australia, the main companies active in the market are a (recently partially floated) Genworth subsidiary and a subsidiary of local insurer QBE, which is also due to be partially floated next year. Both of these are monoline insurers, i.e., where the mortgage insurance business is separate from all other insurance activities

In *Canada*, there are two privately owned mortgage insurers operating in the market, Genworth and Canada Guaranty, which have over 25 per cent market share between them (IMF, 2014).

4 Regulatory considerations for mortgage insurance

Prudential supervision of mortgage insurance companies

The Joint Forum of the Basel Committee undertook an assessment of MI in 2012 and published recommendations on the use of MI in August 2013. The recommendations were aimed at reducing the likelihood of MI stress and failure during tail events. The recommendations emphasise the need for strong prudential supervision of MI, including the need for mortgage insurers to be regulated and supervised separately by the local insurance supervisor. IMF (2014) highlights that the rules governing mortgage insurance, such as the maximum LTV ratio that triggers mandatory mortgage insurance and the maximum LTV ratio for government backed insured loans, are important macroprudential tools, particularly in the case of Canada where the government has strong control over the MI market.

When considering what a strong prudential structure for MI would look like, a number of questions arise. One of these is whether an insurer should be a monoline. The benefit of a monoline requirement is that it protects the remainder of the insurance sector from an adverse event in mortgage insurance. On the other hand, a monoline mortgage insurer and the mortgage originators have increased risk due to the lack of diversification. Another consideration is whether the interests of the insurer and lender are fully aligned. One way of aligning financial interests is partial risk retention, where the lender remains liable for some of the losses on a loan. A further consideration is whether mortgage insurers are regulated under the normal insurance prudential supervision or under specialised supervisory frameworks. In general, specialised rules are considered necessary given the risks involved in the MI product.

The regulation of mortgage insurance companies includes the setting of reserve requirements, which often sees higher capital required for higher LTV loans (Blood, 2009). In addition to capital reserves related to the risk exposure an institution holds, some countries also require 'contingency reserves'. This requires mortgage insurers to continually hold back a portion of earnings which are not released for several years, unless in a stress event. These contingency reserves allow insurers to build reserves during the normal part of the risk cycle to cover claims during peak years and act as a buffer against extreme losses. For example, in the US, supervisors require that contingency reserves be set up at mortgage insurers that prevent profits being declared as dividends for 10 years. Half of each premium dollar earned goes into the contingency reserve and these funds remain unavailable for a 10-year period unless losses in a calendar year exceed 35 per cent of earned premiums, depending upon the state. During the period 2007 to 2011 these reserves were then drawn down, leaving them at very low levels (Joint Forum, 2013).

Consumer protection supervision

MI products require special attention from a consumer protection perspective, since it is the lender who is insured but the borrower who usually pays for the insurance. This can lead to a conflict of interest which may not benefit the borrower. It is important to address this conflict of interest in the design of a MI scheme, which can include banning commission payments to a lender from a MI provider, and by stipulating that the cost of MI must be transparent and fully disclosed to the borrower. An additional check can be to allow the borrower to choose between MI providers. If MI is mandatory on all high LTV loans, borrowers will no longer have to pay a MI premium once the loan has amortised down to below the particular LTV threshold. In this case, it should be made clear to the borrower when the payments can stop.

In general, MI claims are triggered by a foreclosure and sale of a property which crystallises the loss to the bank and thus the claim on the mortgage insurer. In this event, the borrower is still fully liable for the full amount of the loss. As seen in the UK example in Section 2, it is also important to make clear to the borrower that it is the lender which is insured and that mortgage insurance does not necessarily result in debt forgiveness for a borrower.

5 Conclusion: Issues for consideration regarding MI for Ireland

The experience of other countries shows that MI can play a role in supporting a well-functioning mortgage market, for example by diversifying risks and bringing in new sources of capital. However, as highlighted in this note, there are additional factors that need to be taken into consideration in assessing the appropriateness of MI schemes for individual countries. From an Irish perspective, some of these factors are set out below.

Macro-prudential perspective: The use of MI was discussed in CP87 in the context of the introduction of LTV caps in the Irish market. Limits on LTV and LTI ratios on Irish lending are being introduced in order to increase the resilience of banks and households to shocks in the property market, and to dampen the pro-cyclicality of property lending. From a macro-prudential perspective, mortgage insurance does not remove the risk of a systemic crisis, but shifts this risk from the lenders to the insurers. If this risk is concentrated in a small number of mortgage insurers, or in a State-owned insurer, this could increase the systemic problems in the underlying market (Joint Forum, 2013). This is particularly the case where the insurers are domestic, and the risk and accompanying liability remains within the State.

Micro-prudential perspective: It is important that any mandatory introduction of MI would be accompanied by a robust prudential framework for the supervision of these companies. This would involve the development of a specialised micro-prudential framework, which would take some time to put in place and would have to consistent with the new Europe-wide Solvency II framework.

Consumer protection perspective: There is scope for consumer protection issues to arise from the conflict of interest which is embedded in the payment structure of MI products. This is particularly the case in a concentrated mortgage market with limited competition among originators. Measures such as ensuring that the pricing of MI is clear and transparent and requiring that borrowers can choose which mortgage insurer provides the cover have been used in other countries to reduce the consumer protection risk. In considering the form of a MI market in Ireland, it would be important to address these incentives. Under most mortgage insurance policies, a claim is not payable until after the borrower has defaulted on their mortgage and the property has been foreclosed and sold. This feature of MI would need to be adapted to reflect the nature of the Irish market in this respect.

In addition to the direct consumer protection concerns, there is also an issue around the cost of MI. It is difficult to estimate the likely cost of MI in Ireland, given the lack of scale in the market and the costs of the recent crisis. The cost of MI would also depend on the product offered, and what was being insured. If the cost of such insurance was to be very large, it would likely be capitalised onto the mortgage principal and would increase household indebtedness. This could act counter to the objective of the macro-prudential measures. Genworth (2014) estimate that if all mortgages to first time buyers over 80 per cent LTV are required to have mortgage insurance in place in Ireland, the gross premium a lender would need to pay for mortgage insurance would range between 0.5 per cent and 2.5 per cent of the loan amount (depending on the type of cover, depth of cover and LTV of the loan). However, as noted in Section 3, the experience of other countries suggests that the cost of MI can be significantly higher. It is difficult to calculate the overall cost of mortgage insurance to a borrower, given the various trade-offs involved.

References

[1] Boléat, M. (1996), "The Mortgage Indemnity Insurance Market in the United Kingdom", Housing Finance International, Vol. XI, No. 1.

[2] Blood, R. (2009), "Regulation of Mortgage Default Insurance: Principles and Issues," Housing Finance International, March, pp. 20 - 29.

[3] CBI (2014), "Macro-prudential policy for residential mortgage lending", Consultation Paper CP87, Central Bank of Ireland.

[4] CBI (2015a), "Feedback Statement on CP87: Macro-prudential policy for residential mortgage lending", Central Bank of Ireland.

[5] CBI (2015b), "Information Note: Restrictions on residential mortgage lending", Central Bank of Ireland.

[6] Genworth (2014), "Macro-prudential policy for residential mortgage lending (CP87) Response from Genworth".

[7] IMF (2014), With Great Power Comes Great Responsibility: Macroprudential Tools at Work in Canada, May.

[8] IMF (2014b), "2014 Article IV Consultation", IMF Country Report No. 14/233, July.

[9] Joint Forum (2013), "Mortgage insurance: market structure, underwriting cycle and policy implications", Joint Forum of the Basel Committee on Banking Supervision, August 2013.

[10] Promontory (2011), "The Role of Private Mortgage Insurance in the U.S. Housing Finance System", January.

[11] Wong, E., T. Fong, K. Li and H. Choi (2011), Loan-To-Value Ratio as a Macro-Prudential Tool Hong Kongs Experience and Cross-Country Evidence, Hong Kong Monetary Authority Working Paper No.01/2011.

Table 1: Features of MI across various countries (Joint Forum, 2013)

Country	Origin	Coverage	Monoline only?	Required?	Capital Relief?	Premia
Australia[3]	1965	100%	Yes	No	30% RW reduction	0.8% to 3.2% upfront
Canada	1954	100%	Yes	LTV > 80% for <C$1m	0% to 5% RW	1.75% to 2.9% upfront
France[1]	1993	100%	No	No	Rating dependent	
Germany		10% - 25%	No	No	Rating dependent	
Hong Kong[1]	1999	10% - 25%	Yes	Yes (LTV > 70%)	No	
Netherlands[1]	1957	100%	No	No	0% RW	0.7% upfront
UK	1980s	<20%	No	No[2]	Rating dependent	
US	1956	20% - 30%	Yes	LTV > 80%	50% RW	

1. Public-private
2. In the UK, signposted, in guidance, as a potential credit risk mitigant for some smaller building societies
3. In Australia capital relief is not provided for banks using the Internal Ratings-Based Approach (IRB)

Source: Joint Forum, 2013