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# **Economic Value of Lenders Mortgage Insurance**

Discussion Paper 2010





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Genworth Financial (Australia) is a leading provider of Lenders Mortgage Insurance (LMI) and credit enhancement product solutions in Australia and New Zealand. Working with close to 200 lenders, our aim is to make homeownership more accessible to borrowers through the provision of LMI. The Genworth Financial name is associated with financial strength and integrity throughout the world. Together with our predecessor business, we have insured over AU\$300 billion of residential mortgages since 1965. For more information, visit genworth.com.au

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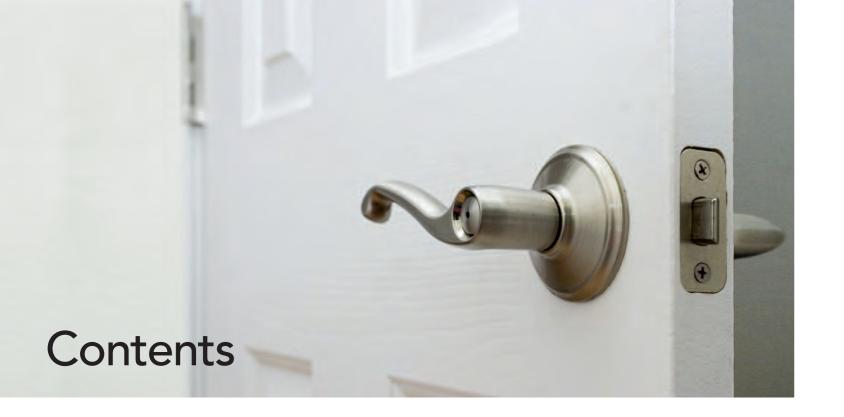
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| Executive Summaryii                                     | i |
|---|---|
| 1 Background1   |   |
| 1.1 What is LMI?2                                       | ) |
| 1.2 Benefits of LMI                                     | 3 |
| 1.3 Approach and scope of the analysis4                 | ļ |
| 2 Role and benefits of LMI                              | ) |
| 2.1 History of LMI in Australia6                        | ) |
| 2.2 Market discipline9                                  | ) |
| 2.3 Economic stability                                  | 0 |
| 2.4 Productive efficiency1                              | 1 |
| 2.5 Policy alignment                                    | 3 |
| 2.6 Structural advantage over alternatives1             | 6 |
| 3 Regulation and competition1                           | 7 |
| 3.1 Current arrangements around LMI in Australia1       | 8 |
| 3.2 Post-GFC implications for mortgage lending sectors1 | 9 |
| 3.3 The continued role for LMI in Australia2            | 1 |
| 4 Implications2   | 3 |
| 4.1 For lenders (risk and leverage)2                    | 3 |
| 4.2 For borrowers (price and equity)2                   | 3 |
| 4.3 For the economy (efficiency and stability)24        | 4 |
| 4.4 Conclusion24  | 4 |
| References 2  | 5 |

| Charts   |   |
|--|---|
| Chart 2.1  | Australian wholesale lenders  |
|  | share of housing market7  |
| Chart 2.2  | Banks' housing loan characteristics8  |
| Chart 2.3  | Genworth portfolio performance9   |
| Chart 2.4  | Genworth (US) MI premiums and losses10  |
| Chart 2.5  | Securitised home loans11  |
| Chart 2.6  | Genworth MI market, by lender13   |
| Chart 2.7  | Housing credit14  |
| Chart 2.8  | First home buyers15   |
| Chart 2.9  | Rent as a proportion of average earnings16  |
| Chart 3.1  | Residential securitisation (A\$ billion)22  |
|  |   |
| Figures  |   |
| <b>Figures</b><br>Figure 2.1                                     | The Canadian mortgage lending sector8   |
| _  |   |
| Figure 2.1   |   |
| Figure 2.1   |   |
| Figure 2.1 Figure 2.2 Glossary                                   | Housing accessibility15   |
| Figure 2.1 Figure 2.2 Glossary APRA                              | Housing accessibility15  Australian Prudential Regulation Authority   |
| Figure 2.1 Figure 2.2 Glossary APRA CRM                          | Housing accessibility15  Australian Prudential Regulation Authority  Credit risk mitigant   |
| Figure 2.1 Figure 2.2 Glossary APRA CRM GFC                      | Housing accessibility   |
| Figure 2.1 Figure 2.2 Glossary APRA CRM GFC HLIC                 | Housing accessibility   |
| Figure 2.1 Figure 2.2 Glossary APRA CRM GFC HLIC LGD             | Housing accessibility   |
| Figure 2.1 Figure 2.2 Glossary APRA CRM GFC HLIC LGD LMI         | Housing accessibility   |
| Figure 2.1 Figure 2.2 Glossary APRA CRM GFC HLIC LGD LMI LTV     | Housing accessibility   |
| Figure 2.1 Figure 2.2 Glossary APRA CRM GFC HLIC LGD LMI LTV LVR | Australian Prudential Regulation Authority Credit risk mitigant Global financial crisis Housing Loans Insurance Corporation Loss given default Lenders mortgage insurance Loan to value Loan to value ratio |



Lenders mortgage insurance (LMI) provides protection to financial institutions against losses arising from borrower default on high loan-to-value (HLTV) residential mortgages, typically for the life of the loan and on a non-cancellable basis.

LMI facilitates borrower access to such HLTV housing finance options while reinforcing prudent lending standards and supporting a more resilient and stable financial system (Genworth, 2010a). Governments and regulators in many developed markets have recognised the importance of mortgage insurance in managing risks throughout their financial systems, as demonstrated by actions by the United States, Canada and the United Kingdom. In addition, the Joint Forum¹ has supported the widespread use of LMI for high LVR loans in its deliberations on reforms to financial regulation in the wake of the global financial crisis (GFC).

LMI has made a valuable contribution to the Australian economy. Since its introduction in 1965, LMI has improved efficiency, equity and risk management in the Australian home lending market. LMI complements government policy to promote greater access to home ownership, competition between lenders and prudent financial practices such as the maintenance of robust lending standards. Each of these benefits is considered below.

However, the environment in which mortgage insurers (MIs) operate is undergoing pronounced change. The impact of the GFC on competition in lending and the related reform of financial regulation herald a changed financial landscape in Australia. MIs are anticipating and adapting to the challenges to their traditional business model in a time of heightened uncertainty. The outcome of this process will determine the extent to which MIs are able to continue to perform their important economic role in the future.

# LMI has provided

access to home ownership to a wider range of creditworthy borrowers

# LMI has played

a role in supporting prudent lending and competition between lenders

# Current value of LMI to the Australian economy

#### Home ownership

Australia's financial system has been transformed over the past 30 years through sweeping deregulation and the introduction of new communication technologies. The system has become more competitive and efficient.

In addition, and importantly for the understanding of the role of LMI, the system has become more equitable, with access to finance becoming available to a wider range of credit-worthy borrowers. No longer do borrowers have to have a well-established credit profile and a large deposit before they can contemplate applying for a mortgage. Beneficiaries from this improved access to finance include:

- many low to middle income households;
- relatively new entrants into the workforce with a stable relatively well paying job; and
- single people, especially women, who had previously faced additional hurdles accessing credit.

Financial deregulation led to new entrants into the financial system—including mortgage originators—and smaller financial institutions being better able to compete with the larger banks. In many instances, it was these institutions that developed new products and targeted new customers, thereby creating more equitable access throughout society to financial markets.

LMI has played a role in this transformation by both supporting prudent lending for high LVR mortgages and facilitating a more competitive landscape.

LMI was introduced in Australia by the Federal Government to increase home ownership. The government-owned Housing Loans Insurance Corporation (HLIC) was subsequently privatised and purchased by GE Mortgage Insurance (now Genworth Financial) in 1997. Privatisation of LMI achieves the same social outcomes as the original government scheme, but avoids the challenges involved when government needs to deliver a service throughout the community. Similarly, LMI improves the effectiveness of the various government policies to assist first-home buyers to enter the housing market.

# LMI

has a strong story in housing finance and financial markets

#### LMI

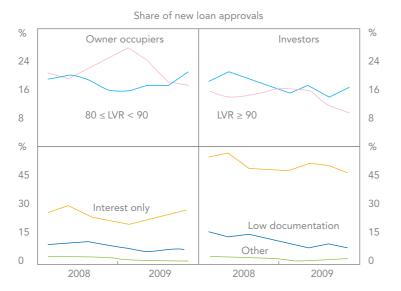
has contributed to home ownership, competition and financial system stability at NO cost to Government

It's important the role of LMI is preserved in the post-GFC framework

<sup>&</sup>lt;sup>1</sup> The Joint Forum was established under the aegis of the Basel Committee on Banking Supervision (BCBS), the International Organization of Securities Commissions (IOSCO) and the International Association of Insurance Supervisors (IAIS) to deal with issues common to the banking, securities and insurance sectors.

Chart i: Banks' housing loan characteristics

Source: APRA, RBA



LMI has expanded the pool of potential home-owners to include borrowers who are capable of servicing a mortgage, but do not meet the standard eligibility requirements. Without LMI, these home owners would have to postpone their purchase, or remain in rented accommodation. High LVR loans account for a substantial share of total new mortgages in Australia. For example, the top left panel in Chart 1 shows that in 2009 more than one-third of new loan approvals for owner-occupiers had an LVR greater than or equal to 80%, including 16% with an LVR greater than or equal to 90%.

Lenders use LMI because it is the insurance product that most accurately reflects their potential loss given default (LGD) and reduces the level of capital they need to carry to meet regulatory requirements. MIs have strong incentives to provide mortgage insurance widely and efficiently because it improves their capacity to manage their risk in a way that maximises their long-term profits. The Canadian mortgage lending sector has been one of the most efficient and least volatile of all advanced economies during the GFC, partly attributed by Bank of Canada Deputy Governor Murray to 'mortgage insurance and prudent underwriting standards' (Murray, 2010).

• ECONOMIC VALUE OF LMI • ACCES

#### Financial stability

The GFC has made improving financial system stability a major goal of governments around the world. LMI can contribute to improved risk management within individual financial institutions and across the system through:

- most importantly, providing extra scrutiny of lending practices and giving additional information to prudential supervisors;
- providing bank management with feedback on how their mortgage book is performing, including against their peers;
- pooling risk in a way that improves the alignment of information and incentives (i.e. keeping some 'skin in the game');
- effectively making system capital reserves for mortgage defaults more fungible, lowering the average cost of capital;
- exerting a countercyclical influence on the credit cycle, through capital and lending practices; and
- providing a capital buffer to shocks to the financial system and broader economy emanating from the housing sector.

LMI provides an

effective option for financial institutions to manage risks associated with their mortgage books

# "Supervisors

should consider how to use such coverage effectively in conjunction with LTV requirements to meet housing goals and needs"—Joint Forum, 2010

Diversification aids risk management and from the financial institution's perspective, LMI provides an effective option within its suite of measures that it will utilise to manage risk. Depending on the nature of the institution's overall balance sheet, LMI may be used to manage risks associated with varying levels of its mortgage books, with smaller institutions in Australia tending to rely more heavily on it.

The extent of the use of LMI is dependent on how the parameters in the capital regulations are set. Financial institutions have alternative options for managing risks including using products in capital markets—although some products, such as credit default swaps, proved to be less than effective during the GFC—and keeping the risk on their balance sheets. Each will have costs and advantages and, as evidenced by the record in Australia, prudential requirements that are consistent with the use of balance of risk management measures will tend to be optimal. The experience provides a solid base on which to develop regulatory responses to the GFC.

This value is widely recognised by the financial authorities, as illustrated by the Joint Forum stating:

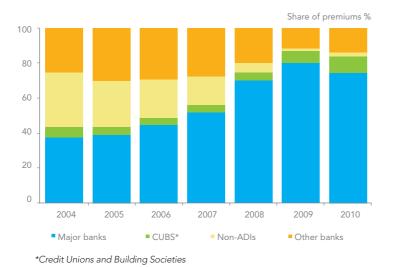
Mortgage insurance provides additional financing flexibility for lenders and consumers, and supervisors should consider how to use such coverage effectively in conjunction with LTV requirements to meet housing goals and needs in their respective markets. Supervisors should explore both public and private options (including creditworthiness and reserve requirements), and should take steps to require adequate mortgage insurance in instances of high LTV lending—e.g. greater than 80 % LTV—The Joint Forum, 2010:17).

# LMI

has a strong story in housing finance and financial markets has contributed to home ownership, competition and financial system

LMI

# Chart ii: Genworth MI market, by lender Source: Genworth



#### Competition

One of the biggest challenges for the Australian authorities coming out of the GFC is how to restore competition in the retail lending market. Many of the innovations in lending have been introduced by smaller lenders and subsequently adopted by the major banks. The existence of MIs in the Australian market has helped small lenders to enter the market and helped them access cost effective funding via securitisation, increasing competition and choice for borrowers.

'The increased pressure that the nonbanking sector places on banks led to the banks emulating many of the new products that were being offered. The Australian Banker's Association agree that foreign banks and the nonbanking sector forced the banks to 'accept reduced margins and to roll out new technology and new products, and to otherwise respond to competitive pressures' (House of Representatives Standing Committee on Economics, 2008:12).

Small lenders proliferate in the innovative, albeit sometimes riskier, part of the mortgage market and LMI allows them to manage these risks and lower their cost of capital to cost effective levels. Small institutions use LMI more than large banks because they have smaller balance sheets with which to self insure against default risk and access capital markets on less favourable terms. Credit rating agencies' support for prospective fund raising in capital markets is contingent on small lenders obtaining LMI. The presence of a viable and effective level of competition ensures consumers in metropolitan and regional areas have access to the widest range of products and levels of service.

Genworth provides around half of LMI in the Australian market, by gross premiums. Smaller lenders—especially non-major banks and non-ADIs—have always relied disproportionately heavily on LMI. Genworth's customer base shows the split between major banks, building societies and credit unions and non-ADIs (Chart ii). The dramatic shrinkage of the non-ADI share is noteworthy because this sector of the market has been a source of much innovation and competition in lending.



## MIs in the

Australian market have helped small lenders to enter the market, increasing the choice and competition for borrowers

# Changes to

regulatory capital proposed under Basel II do not appear to take into account the role of LMI in strengthening prudential supervision and systemic stability

# Future value of LMI to the Australian economy

The ability of MIs to continue making their valuable contribution to the Australian economy depends on financial institutions of varying scales and types continuing to use mortgage insurance as a risk and capital management tool for a material part of their books. The GFC has seen a sharp shift in the mortgage market to the major banks. While these banks have historically tended to have been less reliant on LMI than other parts of the markets, they are likely to continue to make use of LMI as long as regulatory arrangements remain supportive.

Critically, Australia does not have a government-backed alternative to the private MIs, presumably because the authorities consider the existing arrangements to be satisfactory and/or Governments prefer private capital to play this role, unlike in Canada and the US, where there is also a public MI function.

Governments and financial authorities are introducing wideranging reforms to financial regulations that may affect the provision of LMI in Australia. While the net impact of proposed reforms is being studied and taken into account by the authorities, the staggering of the introduction of the changes means the various costs and benefits may not be spread evenly. For example, proposed changes to capital reserve requirements for large banks may result in a substantial decrease in Australian lenders' use of LMI, contrary to the Joint Forum's recommendations.

The changes to regulatory capital proposed under Basel II do not appear to take into account the role of LMI in strengthening prudential supervision and systemic stability.

If the financial balance between LMI and its capital adequacy and risk management substitutes alters, such that lenders use less LMI (and only on the riskiest loans), hedging of lenders' risks may become less efficient. Scrutiny of the level of risk carried on loan books will fall. Risk-pooling benefits, including fungible capital, will be diminished. The alignment of information and incentives may become more skewed. Countercyclical properties of LMI will have a reduced impact. Financial system stability would not be improved.

At the same time, the Government and the ACCC are concerned about the increased concentration of the residential mortgage market coming out of the GFC. If MIs reduce their presence in the Australian market, or raise their prices, the cost of raising funds for small lenders could increase. It is likely that this would reduce further the level and range of financial products offered to households and small business. Moreover, households and small businesses' cost of borrowing may rise due to reduced competition. For some, their access to funds could be restricted, if lenders are given an incentive to reduce volumes of high LVR loans provided to viable borrowers.

LMI has served Australia well and equitably and global regulators recommend its use. Yet, changes in regulation and the marketplace threaten to adversely affect the way MI serves the market. The cost of changes to regulation that compromise the capacity of MIs to provide this service falls on home buyers, competition in lending and financial stability. Clearly, retaining the positive roles played by private MIs in Australia in risk and leverage, price and equity, efficiency and stability is preferable.

Access Economics



Lenders mortgage insurance
(LMI) plays an important role in the
Australian economy, extending beyond
the act of insuring mortgages.

For this reason, and in the face of potential regulatory change that could adversely affect the ability of the Australian LMI sector to serve the market, Genworth Financial has commissioned Access Economic to undertake a study into the current and future value of LMI in the Australian economy.

Coming out of the GFC, the Federal Government is concerned by the increased concentration in the residential mortgage market, as well potential risks and also in non-erosion of lending standards to underpin financial system stability. The trigger for this study is the potential recalibration of the existing financial regulatory system that may run counter to Government policies in housing, banking and financial stability. Depending upon the outcomes of this adjustment process, the incentives for lenders to pursue LMI over self-insurance and hedging in capital markets may skew, in which case there could be unintended adverse consequences for access to housing finance. This report explores how the role of LMI may evolve.

# Regulatory changes

that reduce incentives for lenders to use mortgage insurance may have unintended adverse consequences for access to housing finance

## LMI is a credit

risk mitigant that protects a mortgage lender against borrower default

## 1.1 What is LMI?

LMI is a credit risk mitigant (CRM) that protects a mortgage lender against borrower default. It is in practice insurance to cover the gap if the proceeds generated through foreclosure on a defaulted residential property are insufficient to meet a borrower's outstanding obligation—otherwise known as 'loss given default' (LGD) or 'first loss cover'. LMI is typically applied to high LVR loans (over 80%), as the expected LGD for such loans is considerably higher.

In its application, LMI has two primary implications for the lender:

- 1. a reduction in the capital requirements that would normally be associated with the level of risk on a lender's books; and
- 2. a transfer of the risk of borrower default from the lender to a third party.

LMI is therefore an instrument providing the primary benefit of capital relief to lenders.

LMI began in the United States in the 1930s, as a government policy to promote home ownership (Allen and Chan, 2000). It was later introduced into Australia in 1965, again as a government policy initiative designed to increase home ownership (Allen Consulting, 2005). LMI in Australia was at this time provided by the government-owned Housing Loans Insurance Corporation, which was subsequently privatised and purchased by GE Mortgage Insurance (now Genworth Financial) in 1997.

The Australian LMI market was worth \$896 million in gross premiums in the 12 months to June 2009 (APRA, 2009).

#### LMI

has a strong story in housing finance and financial markets has contributed to home ownership, competition and financial system stability at NO cost to Government

LMI

It's important the role of LMI is preserved in the post-GFC framework



1 • ECONOMIC VALUE OF LMI • ACCESS ECONOMICS ECONOMICS



In Australia,

LMI plays an important role...

...for borrowers,

lenders and the economy

## 1.2 Benefits of LMI

LMI plays an important role in the Australian economy, extending beyond the act of insuring mortgages. This role includes providing the following series of direct and indirect benefits, at the individual, industry and economy-wide levels:

#### For borrowers:

- utility—an increase in lenders (as enabled by LMI) naturally promotes competition and innovation, and as a result, more choice in lending products and services for borrowers; and
- equity—LMI extends lending to those borrowers who are typically excluded altogether and brings forward access to lending for those borrowers who do not have a sufficient deposit at the time of loan application.

#### For lenders:

- leverage—securitisation (as enabled by LMI, to obtain necessary credit ratings) allows lenders to transfer credit risk to a third-party and earn a return. At the same time, it thereby frees-up lender capital for another series of borrowers; and
- risk—increased scrutiny is placed on banks through the systemic process that LMI initiates with the lender concerning credit policy and lending processes and active risk management is improved by augmenting information provided to bank management with audit reports from MIs. As a result, exposure to individual default and the probability of bank default is
- market size—LMI has provided banks with a bigger market to lend to by increasing the size of the pool of potential home buyers.

#### For the economy:

- stability—the risk pooling effect of LMI implies the risk of overexposure for any single financial intermediary is greatly reduced.
   LMI also carries natural counter-cyclical properties that serve to offset the pro-cyclical tendencies of the lending market and the economy more broadly;
- balance—between efficiency and sufficiency where higher risk lending occurs, given lenders are only required to hold capital in reserve to support the regulatory determined average level of default risk in the economy, but only because the LMI safety net exists for those situations where the economy-wide average level is less than the actual/expected level of default for any single lender/borrower;
- efficiency—information and incentives align to produce economic efficiency gains, given MIs have the balanced incentives of growing the size of the market and prudently managing the level of default risk, and MIs' scale and scope means information asymmetries are minimised enabling trade to occur in a more efficient manner;
- competition—LMI lowers capital barriers to entry and therefore allows a greater range of lenders into the market, ensuring greater levels of competition and innovation (in price and service);
- avoided public cost—as governments consider equitable access to home ownership a policy priority, LMI limits government financial outlay by transferring (a proportion of) risk and funding to the private sector; and

 policy tensions—there is a tension between policies that seek to extend home ownership to a greater portion of the population (i.e. to riskier borrowers) and policies that aim to increase the soundness of the financial sector (i.e. to reduce the level of risk). LMI helps policy makers to reconcile conflicting policy goals.

LMI enables the majority of these benefits through the information and incentives its risk management/business model is based on.

# 1.3 Approach and scope of the analysis

By way of overview, insights are drawn from reports and data held (and publically available) by APRA and RBA. This is complemented by evidence from industry professionals and analysis provided by Genworth Financial.

This analysis proceeds as follows:

- Chapter 2: An explanation of the full-extent of LMI's economic role in Australia;
- Chapter 3: Insights into the existing regulatory structure and anticipated key regulatory adjustments expected to impact the LMI sector in Australia; and
- Chapter 4: Potential changes to LMI and flow-on to the Australian economy.

Any issues that remain unsolved will be flagged for further consideration.

LMI

has a strong story in housing finance and financial markets LMI

has contributed to home ownership, competition and financial system stability at NO cost to Government

It's important the role of LMI is preserved in the post-GFC framework



The role and value of LMI extends economy-wide, as an accumulation of the functions it performs for mortgage lenders and the financial sector more broadly, Australian borrowers (particularly in the riskier lending segments) and the Australian Government.

As outlined below, these direct and indirect benefits of LMI can be described in terms of:

- historically in Australia (supporting mortgage lending developments);
- market discipline in mortgage lending;
- · promoting economic stability;
- productive efficiency gains;
- policy alignment (in competition and equity); and
- structural advantages over alternative risk transfer and capital adequacy approaches.

This chapter proceeds with a more detailed consideration of each of these factors.

LMI
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## In 1965, the

Government established the Housing Loans Insurance Corporation (the first LMI in Australia) with the objective of increasing home ownership

## The nature of LMI's

benefits have expanded from a largely social focus to incorporate significant cost-efficiency gains

# 2.1 History of LMI in Australia

LMI has supported the development of a more equitable and efficient Australian mortgage lending industry since its inception in 1965. Broadly, LMI:

- began as a home ownership equity initiative to expand the range of Australian borrowers;
- provided capital support to enable the growth of building societies in the lead up to Australian financial market deregulation in the 1980s;
- extended that support to the banking sector as financial deregulation released the constraints on a bank's ability to lend to low-deposit borrowers; and
- supported the development of a private securitisation market in the 1990s, increasing the level of competition in mortgage lending to the benefit of all borrowers.

The following elaborates on the context and developmental impact of the introduction of LMI in Australia, and how the nature of its benefits transitioned from a largely social focus to later incorporate significant cost-efficiency gains.

#### 1950 to 1965

Homeownership was becoming an increasingly central political and social theme just prior to the introduction of LMI, compounding through the 1950s and into the 1960s. Indeed attaining ownership through access to mortgage lending became a central tenant of mainstream Australia (Genworth, 2007). In response to this political pressure, the Government commenced its program of socially-driven mortgage lending.

In the 1950s, the Government was reliant on the War Services Home program and Commonwealth-State Housing Agreements to induce sufficient levels of home ownership. However, this came at

significant cost to Commonwealth finances, with these programs financing 37% of all residential mortgage originations by 1962 (Genworth, 2007).

At this time, the Government was also socially reliant upon the ceiling on interest rates that savings banks could charge on mortgage loans. However, the unintended consequence of this regulation was that the simultaneous cap on interest that could be paid on deposits limited the volume of deposits made. This in-turn forced a rationing of bank credit, according to a series of restrictive timing and loan value constraints that ultimately favoured only lower risk borrowers—a situation which led to great dissatisfaction amongst the adversely affected public.

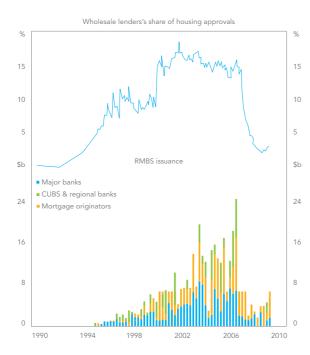
LMI was established in Australia in 1965 by the Federal Government—in the form of the government-underwritten Housing Loans Insurance Corporation (HLIC). The HLIC had the primary policy objective of increasing home ownership—through greater capture of low-deposit borrowers—in an efficient and effective manner. A supplementary aim was to leverage additional capital into the mortgage lending sector through enhanced creditworthiness of intermediaries (namely building societies) and the development of a secondary market for mortgage loans (Genworth, 2007).

#### 1965 to 1980

In light of its policy goals, the Government was successful in its design and implementation of LMI. The implementation of LMI correlated with the great expansion of building societies and a notable reduction in the rationing of credit. Furthermore strong competition in mortgage origination between savings banks and buildings societies ensued into the 1970s, with building societies the greatest customer of the HLIC at this time.

Chart 2.1: Australian wholesale lenders share of housing market

Source: RBA



However, the other factor correlating with the rapid expansion of the largely unregulated building societies was the heavy-handed approach to banking regulation. At this time, controls were placed on (Debelle, 2010):

- interest rates banks could charge on loans and pay on deposits;
- the quality of loans banks could make and who they could lend to: and
- loan segment coverage across trading banks, savings banks and finance companies.

Each of these controls was effectively an imposed cost disadvantage compared to the unregulated financial sector.

#### 1980 to 1993

These market structures were set to change in the 1980s with the onset of Australia's financial deregulation agenda. The restrictive limitations on loan values and allocation of bank deposits (the 'prescribed assets ratio') that were holding back competition from savings banks in the high LVR segment were dropped. Furthermore, the distinction between savings banks and trading banks was removed. As a result, a number of building societies and credit unions converted to banks—thereby allowing them to expand their capital base (Debelle, 2010)—and the incentive for banks to lend to the low-deposit segment was introduced.

Indeed by the end of the 1980s, building societies' share of mortgage originations had halved from the peaks of 40-50% reached in the 1970s (Genworth, 2007). Furthermore, as at 1993, Australian banks had surpassed building societies as HLIC's biggest customer. During this time LMI had seamlessly made the transition from a service offering to the emerging building societies, to a

service offering to the traditionally disinterested (credit rationed) retail banks, and to the benefit of low-deposit borrowers whose ability to access the mortgage market was uninterrupted.

#### 1993 to 2007

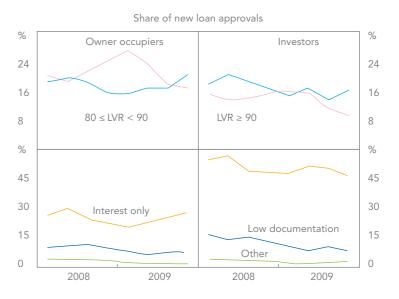
By 1994, given the dominance of banks in Australian mortgage lending and in the context of a strong recovery from the earlier recession, mortgage rate to short-term bank rate spreads peaked at about 430 basis points (Debelle, 2010). This (in-part) created an opportunity for the establishment of non-bank 'wholesale' mortgage lenders. With an ability to offer standard lending rates 1–1.5% below that charged by the incumbents, and offering an array of new mortgage products—including, home equity loans, interest only loans and low documentation loans—these new entrants accounted for around 8% of all mortgage originations by 1996.

The ability of wholesale lenders to enter and compete in mortgage lending can also be attributed to the development of a private residential mortgage backed securities (RMBS) market. Where previously state government-backed securitised products had tried and failed (at significant cost to government), the opportunities for private-labelled products had emerged. This aligned with the removal of the last major barrier to private securitisation, when in 1995 the Reserve Bank of Australia removed its requirement that all securitised products held by a bank attract a capital at risk weighting of 100% (Genworth, 2007).

Wholesale mortgage lenders then provided the demand impetus to meet this eased supply constraint. Securitisation provided a source of funds to these non-deposit taking intermediaries, and did so in a cost-efficient manner. Regional banks, credit unions and building societies all made significant use of this low cost funding

Chart 2.2: Banks' housing loan characteristics

Source: RBA, 2010



source—major banks also began issuing RMBS as a means to diversify their funding base (Debelle, 2010). The competitive pressure securitisation created saw the mortgage rate to short-term bank rate spread reduce to approximately 175 basis points by 1997.

In addition to interest spreads and regulatory change, this competitive development was also supported by LMI. The credit enhancement LMI provided to securitisation was a critical element in obtaining investor acceptance of RMBS. Reflecting this, HLIC was achieving record levels of business at this time (Genworth, 2007). From that point through to the onset of the GFC, the market for RMBS increased rapidly (Chart 2.1)—with the LMI sector following suit.

#### 2007 onwards

This period saw large banks utilise LMI more than ever and ensured banks stayed lending to 95% LVR, albeit more carefully which also helped ensure financial system stability. The imposed disciplines of LMI can be attributed to some of the credit for Australia's financial sector stability and performance in the lead up to and during the recent global financial crisis. MIs avoidance of the emerging nonconforming segment and natural counter-cyclical properties—as means by which to maintain the resilience of the financial sector—provided a valuable balance to the incentives for growth.

In sum, as a key historical development in Australian mortgage lending, LMI has provided wider access to credit and promoted greater financial innovation, to the benefit of all Australian borrowers. High LVR loans account for a substantial share of total new mortgages in Australia. For example, the top left panel in Chart 2.2 shows that in 2009 more than one-third of new loan approvals for owner-occupiers had an LVR greater than or equal to

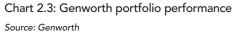
80%, including 16% with an LVR greater than or equal to 90%. Furthermore, its financial stability promoting functional parameters have made LMI a beneficial economic intervention, in complement to its social roles. Reinforcing this view, LMI is presently a feature in the housing finance sectors of around 30 nations (Genworth, 2010a), a notable example of which is Canada (see Figure 2.1).

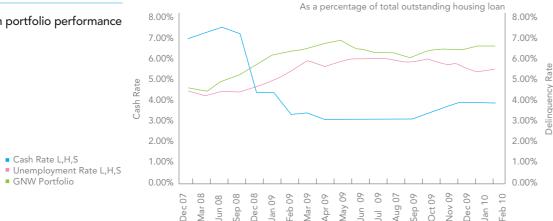
Figure 2.1: The Canadian mortgage lending sector

The Canadian mortgage lending sector has proven to be one of the most efficient and least volatile of all industrialised nations, and despite the proximity/ties to the US market (Wachter, 2010). This, as stated by John Murray (Murray, 2010), Deputy Governor of the Bank of Canada, is a reflection of Canada's:

- prudent lending practises;
- strong housing sector;
- lesser reliance on wholesale financing and securitisation; and
- LMI and associated prudent underwriting standards.

In Canada, the Canadian Mortgage Bond Program is an effective model. Indeed, the Canadian Government mandates LMI for all high LTV loans and provides a government-backed guarantee on these policies in the case of a catastrophic credit event. As a result, the Canadian mortgage lending sector has seen continuous improvement in underwriting standards and price reductions for high risk borrowers.





# 2.2 Market discipline

LMI has helped facilitate access to mortgages to a wider range of borrowers, without compromising credit discipline.

Cash Rate L,H,S

**Increased scrutiny** is placed on banks through the systemic process that LMI initiates with the lender. LMI adds an additional layer of due diligence for those loans being insured, through the loan level insurance evaluation that is performed. This is beyond the level of scrutiny and audit routines that the Australian Prudential Regulation Authority (APRA) performs—which is generally restricted to the loan 'pool' level—and is ultimately cross-checked by APRA when the mortgage insurers themselves are audited for adequacy and prudency. APRA is understood to request that lenders provide them with copies of all LMI audit reports. In a sense therefore, this is also a market feedback function that can provide early warning to regulators of declining quality in lending standards.

More broadly, LMI is incentivised to enhance scrutiny at various points in the risk management process, including through:

- the agreed/acceptable credit parameters and loan underwriting criteria, including debt-to-income ratios, borrower qualification standards across loan products, and data to be collected and reported;
- efforts to develop and maintain reliable property valuation process and credit reporting; and
- the requirement for ongoing and comprehensive reporting of loan performance—informing capital reserve calculations and providing early warning of any emerging default trends.

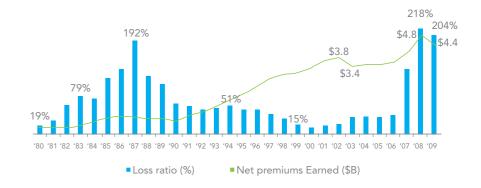
LMI therefore reinforces operational disciplines at both origination and during the life of the loan. MIs also have their own capital on the line throughout the duration of the insured loan.

As a result of MI scrutiny, more 'bad loans' are likely to be weeded out, reducing the average probability of individual borrower default. At the same time, exposure to individual default and therefore the probability of bank default is reduced. The transfer of the remaining risk in the case of securitisation further supports this finding (as discussed further below). In effect, LMI provides systematic improvement and complementary audit measures to those existing, ensuring more consistent and robust underwriting standards.

The above chart shows the performance of Genworth's portfolio in Australia during the GFC. The delinquency rate rose modestly, in line with the increase in the unemployment rate, as occurs during every economic cycle.

Notably, the MI business models withstood the GFC; in Australia and even at the epicentre of the shocks in the US, mortgage insurers did not fail and continued to write premiums and meet claims payments throughout<sup>2</sup>

Chart 2.4: Genworth (US) MI premiums and losses Source: Genworth



# 2.3 Economic stability

LMI promotes stability in the Australian financial system through the risk-pooling its structure enables and the counter-cyclical forces its implementation provides. All individuals in the Australian economy benefit from a diversification of risk and reduced severity in the business cycle.

A pooling effect is enabled by LMI. The pooling effect includes the diversification of default risk across:

- geography;
- lenders:
- time: and
- loan product.

The key implication of this is the risk of over-exposure for any single financial intermediary is greatly reduced. The safety net can therefore perform its role—insurers will have the capacity to honour all claims in a credit event.

To expand, mortgage default losses rarely occur uniformly across national economies. There are almost always geographic regions or individual lenders that are disproportionately affected (Genworth, 2010a), where the variance is a reflection of local economic conditions at the time and varying loan origination and servicing capabilities. Therefore, where risk can be pooled market-wide, individual losses are absorbed within the distribution of all risk held, thereby providing added levels of financial system stability.

In further support of this stability function, LMI carries natural counter-cyclical properties that strengthen the financial system's resilience to economic downturns and limit the build-up of credit risk. This includes:

- · Firstly, LMI enables the continued accessibility and affordability of lending to high LVR borrowers during economic downturns, given the safety-net 'contingency capital' it provides<sup>3</sup>. Conversely at the peak of the cycle, the due diligence performed as part of LMI agreements will discourage imprudent lending—that is, to the more speculative investors/borrowers<sup>4</sup>.
- Secondly, mortgage insurance companies continue to face strong reserve requirements that are additive to basic insurance capital standards (Genworth, 2010b). A counter-cyclical system of reserves building, or dynamic provisioning—with the greatest additions made in the periods of most intense loan origination—along with a 'contingency reserve' of 50% of premium revenue for a period of 10 years, support capital sufficiency in credit events (Chart 2.4).
- Third, MIs have no incentive to under-price risk, and therefore borrowers are less inclined to overpay for assets (due to cheap finance) and are more constrained in what they can borrow therefore reducing price pressures in supply constrained property markets<sup>5</sup>.

These properties therefore serve to offset the pro-cyclical tendencies of the lending market and the economy more broadly. The implication of this is a smoothed economical cycle, with the benefits of reduced interventions and therefore cost to government and likelihood of market distortions.

In summary, reduced risk amongst (effective) insurers, along with the counter-cyclical properties of lending tied to LMI, provides for a more stable and resilient financial system.

9 • FCONOMIC VALUE OF LML • ACCESS ECONOMICS FCONOMIC VALUE OF LMI • ACCESS FCONOMICS • 10

<sup>&</sup>lt;sup>2</sup> In the US, since 2008 MIs have paid out over US\$11.2 billion in claims to investors and banks. The downturn is the most severe experienced, but all US MIs have continued to write new business, except for Triad Guaranty Insurance Corporate which is in voluntary run-off and continues to meet existing claims. MIs have raised substantial amounts of new capital and the industry has ample regulatory capital (Genworth, 2010b).

<sup>&</sup>lt;sup>3</sup> This may not hold true, or hold true to a lesser extent, where the availability of capital is impacted in a downturn and/or other factors that would inhibit further lending occur.

<sup>&</sup>lt;sup>4</sup> The pressure to erode lending standards is greatest at the top of the cycle.

<sup>&</sup>lt;sup>5</sup> A decline in risk premiums is typically observed at times of credit-induced asset price bubbles (Wachter, 2010).

Chart 2.5: Securitised home loans Source: RBA



# 2.4 Productive efficiency

Productive efficiency is optimised where an allocation of inputs is such that the only way to increase output of one commodity is to reduce output of another. This means the value of the economy's production/productive capacity is maximised—a primary goal of economic policy. Here, LMI promotes productive efficiency through the transfer of credit risk from lenders to insurers and investors, subject to the constraint of ensuring sufficient capital holdings.

Securitisation enables lenders to transfer credit risk to a third-party and earn a return. At the same time, it thereby frees-up lender capital to another series of borrowers, as part of an on-going cycle where the lender is continually taking a margin on each round of lending. In essence, this is a multiplier effect that promotes growth in mortgage lending. As a financial investment and leverage tool, securitisation has quickly become an essential component of housing finance (Chart 2.5).

However, a sufficiently high product credit rating is necessary to sell Residential Mortgage Backed Securities (RMBS). The rating is issued by an independent credit rating agency and will depend upon the riskiness of the pool of mortgages being securitised, which is a function of the age of loans and type of loans and the proportion of the pool that is high LVR and uninsured. LMI therefore enables securitisation through the credit risk mitigation (third-party capital) it provides, which in-turn reduces the risk-based premium that must be provided to the RMBS investor.<sup>6</sup>

To summarise the economic benefit of securitisation with LMI—a lending institution can generate greater productive value for a set volume of capital, and without diminishing credit quality.

Insurance markets exist to allow risk to be transferred to those most willing to hold it, and therefore those who need to be compensated least. Namely, this will be those parties who seek to hold an entire (normal) distribution of risk, and can therefore reliably price a risk-transfer service at a rate sufficient to ensure a positive economic return. Given sufficient scale and scope, insurers are arguably the most accurate at assessing and pricing risk<sup>7</sup>. It is also argued that insurers are more forward looking in their risk assessment—given their 'through-the-cycle' business model and regulatory requirements—and that third-party capital at risk provides similar incentive in the system to ensure prudent mortgage underwriting as if the lender itself had capital at risk.

In comparison, many lending institutions are said to lack multi-cycle residential loan data, most particularly on those highest risk segments. This is also particularly relevant to those relatively new entrants to the mortgage market and/or smaller less traditional lenders. This inadvertently limits their ability to validate any risk formulas they apply to their lending portfolios, and can consequently lead to an under-pricing of risk. Beyond matters of competency, it is also the case that incentives exist for lenders to under-price risk where origination fees and market share are paramount, and originator capital at risk is low or nil (Wachter, 2010).

Therefore, where MIs hold the risk, information and incentives align:

 MIs have the balanced incentives of growing the size of the market and prudently managing the level of default risk (Wachter, 2010); and

# LMI promotes

efficiency through transferring credit risk from lenders to insurers and investors, subject to capital adequacy

#### Mls' scale and

scope allows them to 'specialise' in the service of assessing and managing HLTV risk

 MIs' scale and scope allows them to 'specialise' in the service of assessing and managing HLTV risk. This implies information asymmetries are minimised and therefore trade is enabled to occur in a more efficient manner.

Investors recognise these structural differences between banks and insurers and price risk accordingly—that is, insurance capital will typically be cheaper than banking capital for a given level of risk. Insurers are able to capitalise on this difference in the cost of capital (imperfect arbitrage), and thereby bridge capital and insurance markets. As a result, a productive efficiency gain is realised, and further unexploited surplus in the economy is captured through the extension of the mortgage market to higher risk segments. Insurance capital can be lower as a result of benefits of diversification.

Following from this, at the same time as LMI drives productive efficiency, LMI supports balance between efficiency and sufficiency. That is, lenders are only required to hold capital in reserve to support the regulatory determined average level of default risk in the economy, but only because a safety net exists for those situations where the economy-wide average level is less than the actual/expected level of default for any single lender. The benefits of this are:

 If all lenders were required to hold reserves to support the greatest potential level of default in the economy, this would be for the average lender and therefore the financial sector onaverage, inefficient.  Conversely, setting the capital adequacy ratio at the economywide average level of loss (without LMI cover) leaves the possibility of lender default and financial system instability, should actual borrower default losses (real risk) exceed expected losses (average risk) for a particular lender(s).

Given LMI is a 'first loss cover', LMI provides the financial sector a safety net (contingent capital). This overcomes the shortcomings of the 'siloed'/non-fungible<sup>8</sup> nature of lender capital in times of default (Genworth, 2010a). The difference in the capitalisation required is an efficiency gain, in that the capital is then free to be put to its most productive use (from both the lenders' and the borrowers' perspectives). Pooled capital is able to be allocated as and where losses occur.

As an outcome of these productive efficiency roles and benefits, LMI is likely to promote greater levels of value-add in the Australian economy, without compromising economic stability. This is because by definition, improved productive efficiency implies improved values of production and at the same time as production values are improving incentives exist for capital sufficiency to be maintained. Improved efficiency is a welfare enhancing outcome, which can be shared across all parties connected to a transaction—in this case, borrowers, lenders and insurers.

<sup>&</sup>lt;sup>6</sup> Note that some securitisation does occur without LMI; however the shortcomings of this—such as the level of subordination it requires—limit its appeal to investors.

<sup>&</sup>lt;sup>7</sup> MIs accumulate (over time and markets) extensive loan level data from which robust economic and behavioral models of mortgage default can be constructed.

<sup>&</sup>lt;sup>8</sup> The capital excess to one lender's requirements cannot be used to pay claims to another lender's higher than average delinquencies.

Chart 2.6: Genworth MI market, by lender Source: Genworth



\*Credit Unions and Building Societies

# 2.5 Policy alignment

The economic underpinnings of LMI support various current Government political agendas, particularly in the areas of competition, allocative efficiency and equity, and at the same time reduce Government financial outlays to the benefit of all other areas for intervention.

Competition in Australian mortgage lending is indirectly improved by the existence of LMI, in that LMI lowers the capital barrier to market entry. That is, by providing a means to transfer loan book risk and therefore lowering lender reserve requirements (and capital charges), and by enabling RMBS through the improved creditrating of insured high LVR and low-doc loans, LMI frees-up lender capital for further lending. This reduced-barrier for entry is critical to any smaller and/or non-traditional lender, seeking to establish in the Australian market.

Genworth provides around half of LMI in the Australian market, by gross premiums. Smaller lenders—especially non-major banks and non-ADIs—have always relied disproportionately heavily on LMI, as shown by the breakdown of Genworth's customer base (Chart 2.6). For example, smaller lenders have accounted for 20-30% of Genworth's business in recent years, but accounted for around 10–20% of housing credit (Chart 2.7).

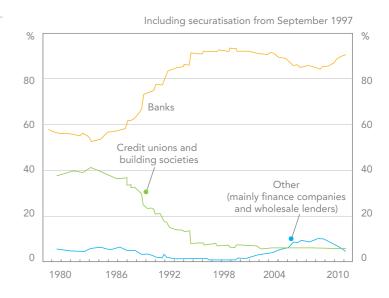
The government seeks to promote competition in any sector, due to the gains to the consumer (allocative efficiency) and production (productive efficiency) alike. This is particularly relevant to the mortgage lending sector where it can be clearly seen (Chart 2.7) that market advantages are derived from size and penetration. Small institutions need to use LMI more than large banks because they

have smaller balance sheets with which to self insure against default risk and access capital markets on less favourable terms. Small institutions are also more geographically concentrated and therefore more susceptible to regional downturns.

In economic theory, the most socially desirable outcome occurs where each member of society is equally satisfied with the bundle of goods and services they consume, and therefore the only way to make one consumer better off is to make another worse off. One of the conditions in achieving this social optimum is allocative efficiency, which is in the context of Mls' role in mortgage lending, improved by greater access to debt for those borrowers, such as first-time buyers who do not have access to a large deposit, and through improved choice (in terms of price and level of service) for all borrowers.

LMI is about housing affordability in a prudent setting—it brings forward access to lending for those borrowers who do not have a sufficient deposit at the time of loan application. This is a more socially efficient outcome where those borrowers who fall within these categories of exclusion and delay have the same (or more) inherent ability to meet the ongoing obligation as the average borrower. Consider for example:

- a recent PhD graduate, commencing a career on an above average income, but with a lack of saving after years of studying full-time;
- a first home buyer with a successful career and ability to service a debt but difficulty in achieving a significant deposit due to rental costs; and



 a home buyer whose income was significantly reduced by unpaid maternity leave but who has re-entered the workforce and meets the suitability requirements of a loan and has the capacity to repay the loan but only has a 15% deposit.

Allocative efficiency can therefore be directly improved where LMI overcomes these particular upfront loan qualification requirements, for these particular equal or lower risk borrowers.

LMI also improves allocative efficiency indirectly, through the increased number of lenders it encourages into the mortgage market. An increase in service providers naturally promotes competition and innovation, and as a result, more choice in lending products and options for borrowers. Those borrowers more affected by price and less affected by service and add-ons can consider the new cost-effective product offerings. At the same time, those who value service add-ons at a rate greater than the additional interest or fee they incur, retain this option.

As the introduction of these competing offerings will make no borrowers worse-off, and enable some borrowers to be more satisfied with what they consume, this is by definition an allocative efficiency gain.

Apart from increased efficiencies, LMI also promotes equity considerations, which get to the primary motivation for the Government establishing LMI in the first place. At the same time as inequality in access to mortgage lending for particular borrowers exists, the 'wealth effect' economic benefit of home ownership

(amongst other social outcomes) is what makes exclusion from the market an inequitable outcome. Over time, a wealth gap develops between existing homeowners (who are gaining additional wealth and borrowing capacity) and those who are yet to purchase their first home (and who find themselves further beyond reach). The opportunity cost of delayed/denied home ownership hereby validates the need for the equity function LMI performs.

Having said this, governments face financial outlay in the pursuit of almost any social objective. As such, the cost-effectiveness of an intervention is often considered amongst the key parameters in policy determination. LMI, which began its life as a government supported policy (in the form of the HLIC), has since been privatised and therefore achieves the same level of social outcomes with the cost and other challenges of delivery transferred to the private sector. There is no cost to Government or taxpayers with a private model. Presuming the extension of the mortgage lending segment to those high LVR loans, particularly the first home buyer segment of the market is still a social priority for the Australian Government (see below); LMI represents an avoided cost for the public sector.

<sup>9</sup> Economists refer to this condition as Pareto efficiency.

LMI
has a strong story in housing finance and financial markets

has contributed to home ownership, competition and financial system stability at NO cost to Government

It's important the role of LMI is preserved in the post-GFC framework

Chart 2.7: Housing credit Source: RBA

Chart 2.8: First home buyers

Source: ABS cat. no. 5609



Figure 2.2: Housing accessibility

# of Owners occ Loans

# First Home Buyers % First Home Buyers

In Australia at present, the demand for housing is growing at a rate greater than supply, and as such, the price of housing is increasing as the market attempts to ration the existing resource/allocation across the population cohort looking to buy.

Moreover, while HLTV borrowers capable of meeting repayments remain in the rental market, they bid up the price of scarce rental accommodation. Rental costs are proportionally higher than at any time in the last 15 years (Chart 2.9). Higher rental costs reduce the capacity for potential home-buyers to save for a deposit on a home.

As a result, the government is facing pressure to intervene in the market and provide a means of facilitating borrower access, particularly for those first home buyers who lack the wealth to leverage in the way that existing home owners do.

Indeed, this issue is gaining such prominence that it has been raised as an item on the agenda for the Council of Australian Governments. In their latest meeting in April of this year, the state and territory governments of Australia agreed to improve their understanding of demand-side pressures and identify supply-side constraints in their respective jurisdictions, with a view towards removing any government impediments to affordability and supply. The continued social priority of improving housing accessibility /affordability is hereby established.

High LVR loans are estimated to account for 25% of all loans originated in the Australian mortgage lending sector (Genworth, 2010a). The additional cost to government of an alternative intervention to promote the continuation of this lending segment —should a privatised LMI industry not be able to meet demand would be at the cost of alternative public policy priorities, or would mean the reduction in the Government's ability to achieve this social outcome. Either way, the transference of cost back onto public finances would be to the detriment of lenders, borrowers and the Australian economy.

LMI

has contributed to home

ownership, competition

and financial system

stability at NO cost

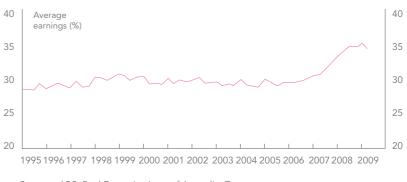
to Government

# LMI

has a strong story in housing finance and financial markets

> It's important the role of LMI is preserved in the post-GFC framework

Chart 2.9: Rent as a proportion of average earnings Source: Kennedy, 2010



Sources: ABS, Real Estate Institute of Australia, Treasury

# 2.6 Structural advantage over alternatives

The alternative means by which a lender can limit risk and ensure capital adequacy include:

- self insurance:
- credit default swaps (CDS):
- bond insurance: and
- reduced lending to particular segments.

In light of these alternatives, a consideration of the structural advantages of LMI is appropriate.

**Self insurance** is a premium in the form of a fee or higher interest margin to carry additional risk. Self insurance is in effect taking the risk that the borrower will not default or the total defaults will not materially weaken the lender's financial position. In effect, this is a less viable option for smaller lenders, given higher risk premiums they have to pay to obtain funding.

Credit default swaps (CDS) are not insurance policies but rather uncapitalised credit derivatives. Their features/characteristics imply they should not be considered legitimate CRM in all circumstances. That is, the lack of regulatory requirement for issuers of CDS to hold capital to honour the obligation implies they are inherently riskier than LMI. Indeed, market participants are required to capitalise the commitment, which is therefore reliant upon the market mechanism/price to determine the level of protection at time of settlement. As a traded instrument, they carry the added consequence of increasing market volatility (speculation and arbitrage).

MI pricing may be adjusted as delinquencies rise, but is relatively stable over the cycle compared to CDS. The extent of the losses sustained by institutions exposed to CDS and the breakdown of CDS markets during the GFC clearly demonstrated the risks of using these derivatives.

Bond insurance on structured mortgage finance products is underwritten at the pool-level, utilising rating agency statements and economic assumptions. As such, the underwriting overlooks traditional risk-assessment criteria such as income verification, asset valuation and credit history. This failure to independently assess the creditworthiness of the underlying loans in the pool casts doubt over the effectiveness of this method of pricing and providing for risk. Indeed mortgage insurers argue this approach is less accurate at predicting both the probability of default and the loss-givendefault of a pool of loans (Genworth, 2010a).

Reduced lending, in particular to those segments typically considered to be of greater risk, is to the detriment of all parties concerned. It implies the exclusion from or delay to homeownership for those high LVR, mostly first home borrowers. It also implies direct reductions in lender loan books and therefore reduced values of production from the sector.

The broader benefits from each of these alternatives are less than LMI provides, which is a reflection of the differing intent of these instruments.

15 • ECONOMIC VALUE OF LML • ACCESS ECONOMICS FCONOMIC VALUE OF LMI • ACCESS FCONOMICS • 16



In the simplest sense, the level of capital a lender chooses to hold is determined by the following three factors:10

- regulatory requirements;
- internal risk management systems; and
- imposition of ratings agencies.

LMI

has a strong story in

through the imposition of ratings agencies. LMI can therefore be considered to play a quasi-regulatory role, as both a safety net and an economic efficiency (value-add) promoting device.

In light of MIs' quasi-regulatory role and having regard to the market discipline role they play and the structure of the financial regulatory system, a motivation for this report is potential recalibration of the existing financial regulatory approach of bank and insurance mortgage capital regulators. Depending upon the outcomes of this adjustment process, the incentives for lenders to obtain LMI on a broad cross section of high LVR loans may skew.

Discussion of the potential for regulatory change is here contextualised by an outline of current regulatory arrangements in Australia, and findings from the major inquiries and reviews post-GFC. The chapter concludes with a discussion of the continued role for LMI in Australia, in light of the new regulatory goals.

LMI influences the Australian mortgage lending sector primarily through the regulatory requirements function, and indirectly

#### • assess the vulnerabilities affecting the financial system;

- promote cooperation and information sharing among authorities responsible for financial stability

The FSB therefore sets operational requirements for the global financial and insurance market, to ensure the health and stability of the global financial system.

Australian borrowers, lenders and the economy alike, through its quasi-regulatory status. In its function, LMI provides a countercyclical capital buffer and more stringent loan assessment, consistent with the regulatory goal of promoting a more resilient

# Regulatory

incentives/requirements provide for the externalities that have made LMI a beneficial service for the financial system

# 3.1 Current arrangements around LMI in Australia

In Australia, the mortgage lending and insurance market is regulated and enforced by the Australian Prudential Regulation Authority (APRA). In effect, APRA is the implementation and enforcement agency for the policy directives established by the Financial Stability Board (FSB)—the primary international body of Group of Twenty nations and international financial organisations, with the mandate to:

LMI provides a

counter-cyclical capital buffer

and more stringent loan assessment, consistent with

promoting a more resilient

the regulatory goal of

banking sector

- identify and oversee action to address them; and

Since its inception, LMI has leveraged positive outcomes for

banking sector. In addition to this, standardised Authorised Deposit-taking Institutions (ADIs) in Australia qualify for a concessional risk weight on standard loans with a LVR above 80%, provided the loan is fully secured by a registered mortgage over a residential property and the mortgage's value is insured through an APRA registered LMI provider. These regulatory incentives/requirements ultimately provide for the externalities that have made LMI a beneficial service to those beyond just the immediate parties involved in its transaction.

However, as discussed earlier, from the lenders' (and APRA's) perspective there are alternative means to LMI by which risk and capital adequacy can be managed. The approach the lender ultimately pursues is a reflection of both the financial incentives (for which an equation sets the trade-off between alternatives) and the regulatory structure in offering lower regulatory capital for insuring high LVR loans.

The current arrangements demonstrate how LMI's interaction with existing regulatory requirements provides flexibility for lenders in how risk and capital adequacy is managed, to their benefit and others.

framework

LMI

has contributed to home ownership, competition

and financial system

17 • FCONOMIC VALUE OF LML • ACCESS ECONOMICS ECONOMIC VALUE OF LMI • ACCESS ECONOMICS • 18

housing finance and stability at NO cost financial markets to Government It's important the role of LMI is preserved in the post-GFC

<sup>10</sup> Note the latter two factors are economic considerations; the first is legal. At this stage, economic considerations are less likely to change than regulatory. Also note that these may not align and that one is likely to be more binding than another.



#### The Joint Forum

has promoted an increased role for LMI

# Global supervisors

stress the importance of prudently underwritten mortgage and origination standards

# 3.2 Post-GFC implications for mortgage lending sectors

As the global economic downturn eases, regulators are increasingly reflecting on the circumstances that led to the onset of this trend in the first place, with a particular focus on the mortgage origination process across jurisdictions and the importance of 'skin in the game'. Early conclusions being reached include the need for continuous improvement (as opposed to recently observed erosion) in the standards of mortgage underwriting, as well as the need for greater safeguards in the system against financial boom and bust cycles (that is, counter-cyclical measures).

#### Focus of the reviews

As part of a review of mortgage origination in the lead-up to the GFC, the Joint Forum concluded that many mortgage loan originators were under-capitalised and lacked adequate regulatory oversight (The Joint Forum, 2010). Disparate supervision led to inferior mortgage underwriting and fraud, which transpired into unprecedented mortgage defaults. Indeed, the level of default during the GFC, in markets such as the US, was at such a level that it has undermined the credibility of capital adequacy standards as the key instrument of regulatory control (Genworth, 2010a). The natural inference from this finding is that minimum capital requirements alone are not enough to ensure the stability of lending markets.

It is therefore apparent that global regulatory change is in the pipeline and ultimately will be implemented in the Australian financial system. The Basel Committee on Banking Supervision's recent consultative paper Strengthening the Resilience of the Banking Sector highlights a series of key issues for global consideration, which include:

- Adoption of leverage ratios as a gross exposure backstop, in place of risk-based ratios. The leverage ratio is thereby likely to become the binding constraint on the amount of lending a deposit-taking institution can do for a given level of capital, taking over from the existing risk-adjusted standards. This might imply lenders are able to hold riskier assets without penalty, so long as leverage does not exceed the mandated maximum.
- The inclusion/retainment of lender capital at risk in securitised products. The belief being material risk-retention will prevent deterioration in underwriting standards and reduce debtbubbles caused by off-balance sheet lending. A consequence of this would be a reduction in the lending multiplier-effect, with loan originators required to hold more capital against securitised mortgages.

In light of this, amended capital requirements (with a focus on building counter-cyclical resilience) are likely to be considered as a key measure for improving the quality of mortgage underwriting. Of relevance to MIs from this proposed intervention is the potential for a material reduction in the capital incentive to insure high LTV loans. Should leverage become a greater issue in financial regulation than the current focus on inherent risk, the role for LMI is naturally reduced. It must remain the case that lenders are incentivised to pay insurers more than the insurers' cost of equity /debt for the service of risk reduction, and for a sufficient volume of loans. If not, the LMI model will be undermined, as will the direct and indirect benefits that it provides to the broader economy.

#### Support for LMI

The key recommendations from the Joint Forum's review and assessment of the most appropriate means to 'close the gaps' in regulatory supervision—so far as promoting an increased role for LMI is concerned—are as outlined below (Genworth, 2010a):

- Recommendation No. 7—A requirement that regulators adopt minimum underwriting standards that focus on an accurate assessment of a borrower's ability to repay their loan obligation;
- Recommendation No. 8—Mandating that all mortgage originators be subject to consistent underwriting standards and oversight, as well as effective enforcement mechanisms; and
- Recommendation No. 9—Stipulating that national policymakers should establish appropriate public disclosure of market-wide mortgage underwriting practises.

In light of these recommendations and the full range of primary and ancillary functions LMI is incentivised to perform—supervisory oversight, market feedback and discipline—direct support for LMI has been an additional outcome of the Joint Forum's review:

Mortgage insurance provides additional financing flexibility for lenders and consumers, and supervisors should consider how to use such coverage effectively in conjunction with LTV requirements to meet housing goals and needs in their respective markets (The Joint Forum, 2010:17).

Interpreting this further, LMI is recognised by the Joint Forum for its ability to capture systemic risks in mortgage lending and thereby strengthen the financial system, in a flexible manner.

Once again, this comes back to an inherent ability to ensure prudently underwritten mortgages and origination standards, without compromising the ability to lend where these prudency conditions are met:

Indeed, by focusing on prudent underwriting, supervisors can help institutions and markets avoid the broad-based issues and disruptions experienced in recent years and potentially help restore securitisation/structured finance markets (The Joint Forum, 2010:15).

Acknowledging a ballooning securitisation market is an undesirable outcome for the stability and integrity of the financial system, a robust and appropriately sized securitisation market is desirable.

## LMI

has a strong story in housing finance and financial markets

> It's important the role of LMI is preserved in the post-GFC framework

#### LMI

has contributed to home ownership, competition and financial system stability at NO cost to Government

## Recent US

legislation recognises LMI as a factor that is proven to reduce the risk of default on high LTV loans

#### The GFC caused

small lenders to lose market share; LMI supports competition in lending

# 3.3 The continued role for LMI in Australia

Deregulation and financial innovation—as supported by LMI—have greatly increased access to and competition in household finance. In the face of regulatory change to ensure more 'skin in the game', LMI continues to provide the opportunity for higher levels of contingent capital, without compromising (and possibly further enhancing) the competitive landscape and the level of lending. Indeed, mandating LMI on high LVR loans<sup>11</sup> would in-effect align with those new outcomes international regulators are now seeking —that is, material risk retention to ensure the incentive for prudent underwriting—and would do so without compromising Australia's healthy and vital securitisation sector, nor Government finances.

#### LMI and proposed risk retention requirements

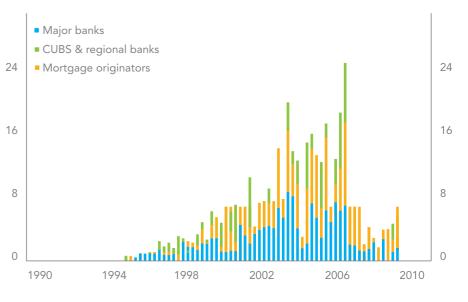
Recognising that the recent abuses of the mortgage origination process were the greatest where originators had no or little 'skin in the game', regulators see material risk retention as a key disincentive to future reductions in the prudency of mortgage lending. However, a consequence of this will be the reduced leverage /increased capital charges mortgage originators face, which can have detrimental impacts in tight capital markets. The option of having third-party capital in a first-loss position, and the associated benefit of achieving the ultimate policy aim—incentives for prudent origination—without the need to ration credit, provides a valuable alternative here.

Furthermore, as discussed earlier in this report, the counter-cyclical system of reserves building—with the greatest additions made in the periods of most intense loan origination—along with a 'contingency reserve', support capital sufficiency in credit events. The implication of which is that this third party capital is accumulated in order to be sufficient even under catastrophic risk scenarios. Indeed the credit risk transfer standards LMI achieves meet those recently propagated by the Joint Forum (Genworth, 2010a). Indeed the Joint Forum recommendations for supervisors and regulators to incentivise the use of mortgage insurance for HLTV loans are part of the Dodd-Frank Wall Street Reform and Consumer Protection Act, recently signed into law in the US.

The Act recognises "five factors that have been proven to lower the risk of default for use in defining the term Qualified Residential Mortgages":

- 1. Documentation and verification of ability to pay the mortgage;
- 2. Ratio of mortgage payments to monthly income, and other ratios that help determine the ability of the borrower to repay;
- 3. Underwriting standards and loan features to prevent payment shock;
- 4. For loans with a combined loan to value ratio of greater than 80% coverage by mortgage insurance at origination; and

Chart 3.1: Residential securitisation (A\$ billion)
Source: RBA



 Restrictions on prohibitions on balloon repayments, negative amortization, prepayment penalties, and other dangerous loan features.

The significant development outlined above is that in the US, the epicentre of the GFC, there is a recognition that MI provides a safeguard at the point of origination and encourages sound underwriting and responsible lending principles.

The Joint Forum's view that supervisors consider that 80% LTV mortgages should have mortgage insurance underlying the loan would help protect the banking system from mortgage risk. It would also assist segments of the housing market, such as first home buyers, to access the market if the loan is suitable.

# Reiterating the role of LMI in supporting competition in lending

Small banks and non-bank financial institutions (NBFIs) need to have access to funds at economic rates to compete with the major banks. LMI cover allows them to access capital markets at prices at which they can compete with major banks. In turn,

The increased pressure that the non banking sector places on banks led to the banks emulating many of the new products that were being offered. The Australian Banker's Association agree that foreign banks and the non banking sector forced the banks to 'accept reduced margins and to roll out new technology and new products, and to otherwise respond to competitive pressures' (House of Representatives Standing Committee on Economics, 2008:12).

Moreover, with MIs insuring credit risk, credit quality was not compromised during the GFC and overall default rates since the start of the GFC were not out of line with historical norms.

Prior to the GFC, a small ADI typically relied on a roughly even split between deposits and securitisation to raise funds, while non-ADIs depended entirely on securitisation (Davies, 2009). However, during the GFC the securitisation market dried up despite the local housing market showing itself to be sound. Accordingly, this disproportionately affected those smaller and non-ADI lenders that have been important sources of innovation and competition in the home lending sector.

# LMI has a strong story in housing finance and financial markets has contributed to home ownership, competition and financial system stability at NO cost to Government It's important the role of LMI is preserved in the post-GFC framework

<sup>&</sup>lt;sup>11</sup> As has occurred in Canada.



## In Australia, LMI

has supported Government policy and delivered gains in efficiency and equity in access to home ownership, competition in lending and financial stability

# Regulators and

policymakers need to consider the broader beneficial effects of LMI when contemplating changing financial regulation

# 4 Implications

The integrity of an insurance pool relies on the balance between premium revenues and claims payed.

Should the LMI sector be facing a skewed distribution of risk—as lenders bring more good/low risk in-house (adverse selection)—holding premiums constant <sup>12</sup>, claims payed will be on-average greater than premiums charged, and MIs will face default risk.

Critically, unlike financial systems in other nations such as the United States and Canada, the Australian system does not provide a government-backed alternative to the private LMI sector—a deliberate policy choice of successive Australian governments. The implication of which is, ultimately in the long term, should the sector no longer become profitable, the option of LMI may no longer be available to lenders and borrowers. However before this, in the short term, MIs may have to keep raising premiums which would make HLTV lending less available and affordable.

Given the potential adjustments to capital requirements as part of global financial regulatory reform, and therefore potential adjustments to capital incentives for lenders to continue to utilise LMI in Australian mortgage lending, the following implications are expected to be realised at the corresponding levels.

# 4.1 For lenders risk and leverage

As the financial balance between LMI and its closest capital adequacy and risk management substitutes alters, key implications will be felt in:

- 1. The level of risk carried on loan books due to reduced scrutiny.
- 2. Reduced securitisation will translate to reduced lending.

The rigour and discipline LMI introduces into the mortgage lending sector more than counters any additional risk of lending to higher LVR borrowers.

# 4.2 For borrowers price and equity

Flowing downstream from the implications at the lender level, borrowers (consumers) potentially face a divergence in equity /utility, through price and supply impacts:

- Higher cost of borrowing and reduced choice in mortgage product, due to reduced competition in the mortgage lending market—as non-banks are forced to exit the market due to reduced ability to securitise loans and thus raise capital—and potentially inefficient risk pricing<sup>13</sup>.
- 2. Reduced capacity to borrow as lenders reduce volumes of high LVR loans held in an effort to balance risk/return and meet capital reserve requirement.

LMI reduces the chance of intergenerational inequality developing in home ownership.

At the economy-wide level, economic efficiency (value-add) and stability throughout the business cycle may be compromised by:

- 1. Lowered risk-pooling benefits (including lost fungible capital);
- 2. Information asymmetries returning at the cost of economic efficiency;
- 3. Incentives skewing (with potential impacts to capital sufficiency);
- 4. Competition between lenders reduced, at the cost to economic efficiency;
- 5. Reduced counter-cyclical benefits of insurance; and
- 6. Added cost to public sector finances (at the cost of policy initiatives).

# 4.4 Conclusion

Extending home ownership has long been an underpinning of government housing policy in Australia. LMI has helped to achieve this desired social outcome by expanding the pool of potential home-owners to include suitable borrowers who otherwise would have to postpone their purchase, or remain in rented accommodation.

Competition in lending and financial stability are also established policy goals, with substantial emphasis on regulating to improve on market outcomes. Again, LMI has made a contribution towards attaining policy goals that is recognised globally, including by the Joint Forum. The changes to regulatory capital proposed under Basel II do not appear to take into account the role of LMI in strengthening prudential supervision and systemic stability.

The resilience of the MI business model during the GFC and the widespread use of LMI under the current regulations indicate that MIs do not need special support or incentives. However, changes to regulations that have the potential to reduce the incentives for lenders to use LMI will alter the balance of risk throughout the broader economy. The continued strong role of LMI in the future is integral to a successful mortgage market in Australia. Its strength would underpin a robust housing market and help guard against a US-style sub-prime crisis.

That LMI is a private model in the financial system that does not impose upon government budgets and contributes to and achieves housing affordability, housing accessibility, risk management, market discipline and provides capital buffers is a strong story and tradition that should be recognised by governments.

Regulators and policymakers need to take into account the broader beneficial effects of LMI on economic efficiency and financial stability in their deliberations over changes to prudential regulations so as to safeguard a strong continued LMI function in the Australian market.

Access Economics: 2010

<sup>4.3</sup> For the economy— efficiency and stability

 $<sup>^{12}</sup>$  Which they would need to do to ensure the ratchet effect of higher premiums and further adverse selection does not occur.

<sup>13</sup> Should lenders be presented with more incentives to hold greater levels of default risk in-house, it's most likely they will themselves directly charge borrowers for the increased risk they hold, through an upfront and/or interest rate premium. Under the presumption that lenders are less effective at predicting and therefore pricing risk than insurers (holding profit margin constant), some low risk borrowers may face a less desirable offering in the situation where risk is on-average underpriced.

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