

5. Mortgage Macroprudential Policies

Housing credit and price growth have picked up since the second half of 2020 in a range of advanced economies, including in Australia. The stronger growth, in an environment of prolonged low interest rates, has led to a build-up of systemic risks associated with high household indebtedness and, in some countries, concerns about the sustainability of housing market valuations (Graph 5.1). In response, there has been increased focus on mortgage macroprudential policies (MPPs) both internationally and in Australia. In early October, in response to risks associated with high and rising household indebtedness, the Australian Prudential Regulation Authority (APRA) increased the serviceability assessment rate it expects lenders to use to assess prospective borrowers, thereby reducing maximum loan sizes. This chapter discusses the international experience with MPPs and their use and likely efficacy in Australia.

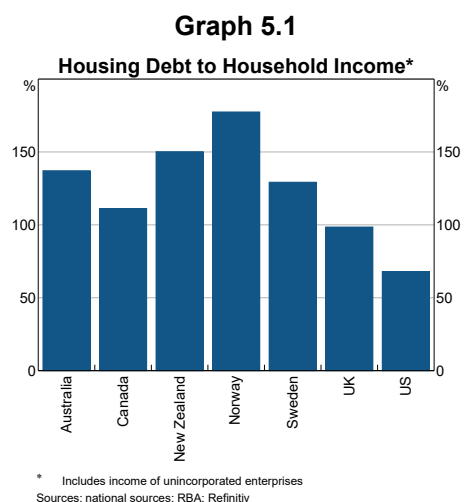
Mortgage MPPs aim to address systemic risks related to housing debt. These risks can threaten the stability of the financial system, as well as macroeconomic stability given the potential for highly indebted households to amplify economic shocks. Sound credit standards and microprudential policy measures that seek to manage risks to individual lenders are the first line of defence – but in some circumstances, there is a case to complement these with macroprudential measures.

In Australia, APRA is responsible for both microprudential and macroprudential policy. Its decisions about MPP are made in close consultation with the Council of Financial

Regulators (CFR), which is chaired by the Governor of the Reserve Bank. The CFR agencies have been paying particularly close attention to trends in household debt as loan commitments picked up sharply, as well as to developments in housing markets (see ‘Chapter 2: Household and Business Finances in Australia’). APRA has indicated it will publish later this year an information paper outlining its holistic framework for MPP, not just mortgage MPP. This paper will outline the objectives of MPP and how it can be implemented, including more formally as part of prudential standards.

The use of MPPs in advanced economies has increased

Since the global financial crisis, MPPs have grown in prominence. In part, this reflects the extended periods of low interest rates in a number of countries to stimulate economic



activity, which has boosted activity in housing markets and in some cases has been associated with excessive risk-taking. There are a range of MPP tools that have been used internationally to target different types of risks. The choice of tools depends on the structures of housing and lending markets, implementation costs, competition concerns and other distributional consequences for borrowers, as well as the policy tools the macroprudential authority has at its disposal.

The most frequently used measures include:

- Serviceability restrictions – these constrain lending to borrowers who would have limited income left after meeting basic living expenses and servicing their debt. Measures include interest rate buffers/floors and restrictions on debt-servicing costs relative to income.
- Debt-to-income (DTI) (or loan-to-income (LTI)) restrictions – these limit the maximum amount households can borrow relative to their incomes. For affected new borrowers, this would cap their debt-servicing costs for a given interest rate and ensure they have larger cash buffers when they take out their loan.
- Loan-to-valuation (LVR) restrictions – these limit the amount that can be borrowed relative to the value of the property, and constrain the supply of credit to borrowers with low equity and liquidity buffers. They can reduce the size of losses to lenders in the event of a mortgage default, and could also reduce the decline in household consumption when wealth falls (this decline can be magnified by leverage).

A range of other measures have been used less frequently, including amortisation-based tools and restrictions on the shares of specific types of loans. Amortisation restrictions typically require borrowers to pay off a minimum portion of the loan principal each year. These policies reduce

the chance of negative equity if prices fall and thereby reduce both the probability of default and loss given default. Restrictions on types of lending, such as interest-only (IO) lending, seek to reduce specific risks. Capital measures have also been used to address systemic risks. Such measures include the countercyclical capital buffer (CCyB) (which adjusts the capital buffer banks must hold to guard against systemic risk) and adjustments to risk weights to build lenders' resilience.

Serviceability restrictions typically work by adjusting requirements for the interest rates used by lenders to calculate maximum loan sizes. These requirements have typically been applied in a structural way to account for potential increases in interest rates and shocks to borrowers' income and expenses over the life of the loan, rather than being adjusted over time in response to changing systemic risk. In Canada, however, the regulator has recently tightened its interest rate requirements amid rising cyclical risks and announced it will review these requirements at least annually.

DTI restrictions (sometimes implemented as LTI restrictions due to data limitations over borrowers' full debt obligations) have been used in a number of countries (see Table 5.1).^[1] Authorities in the United Kingdom and Ireland have implemented restrictions on high LTI ratios for owner-occupiers. Restrictions on LTIs are less effective for investors who have more than one housing mortgage as they do not capture their full debt holdings; as such, both countries have separate measures that target investors more directly. The Reserve Bank of New Zealand will start a consultation soon on implementing DTI restrictions.

LVR restrictions have been used in a range of countries because they directly target specific risks, and are typically easy to implement and explain. As a result, LVR limits are currently in place in a number of countries, including New Zealand, Ireland, Norway and Sweden. In New

Zealand, LVR limits differ for investors and owner-occupiers, while Ireland and Israel have different LVR limits for first home buyers (FHBs).

Amortisation policies have been implemented in Sweden and Norway, reflecting long mortgage terms and historically low rates of amortisation. High-LVR borrowers in Canada are also subject to minimum amortisation policies.

Many countries have used a combination of MPP policies simultaneously, aiming to target multiple risks and/or limit the distributional consequences for any one group of borrowers or lenders. Some authorities have introduced exemptions to shield specific groups or minimise negative side effects (e.g. avoiding disincentives to invest in new housing supply). ‘Speed limits’ that allow for a certain proportion of the number or value of new loans to be exempt from a particular measure are common. These limits reduce the need for regulators to pre-specify exemptions from certain policies (such as excluding bridging loans from DTI restrictions), thereby facilitating simpler policy implementation. One downside to speed limits is that they can lead to riskier lending shifting between lenders and therefore little reduction in aggregate risk. For example, in the United Kingdom some lenders *increased* their high-LTI lending following the introduction of LTI limits – high-LTI borrowers sought loans from lenders that previously made few high-LTI loans and as a result had scope to increase this type of lending.^[2]

Most countries have adjusted policy settings over time as risks have evolved. Authorities in New Zealand, Norway and Israel eased (or temporarily removed) policies or speed limits in response to the COVID-19 pandemic, and the Canadian regulator postponed a planned tightening of its interest rate buffer. In contrast, authorities in the United Kingdom and Ireland did not adjust their LTI and LVR restrictions. This more structural approach reflects a view that these limits operate as a ‘ceiling’ to insure

against risks building during periods of rapid credit growth, meaning they are not thought to unduly constrain credit supply at other times.

Regulatory authorities typically review the effectiveness of MPPs regularly – these reviews suggest there has consistently been reductions in the types of lending that the MPP policies have targeted. In some cases, there has been ‘bunching’ of new loans just below relevant thresholds. Some policies have had greater impacts on certain regions (e.g. because of higher property values, faster credit growth or greater investor activity). Authorities in some countries have reported evidence of policies being circumvented to a minor extent, although this is not widespread.

MPP measures need to be tailored to the nature of risks

As presented in ‘Chapter 2: Household and Business Finances in Australia’, loan commitments data suggest that housing debt could be growing by around 10 per cent in six-month ended annualised terms by early next year from an already high level, increasing systemic risk. In response to risks associated with household indebtedness, in early October APRA increased the serviceability assessment rate it expects lenders to use to assess prospective borrowers. This section discusses this measure as well as several other tools that have the potential to address systemic risks by ensuring that new borrowers have sufficient liquidity and/or equity buffers. In addition, there are other targeted measures that could be used to address specific risks if they were to arise. For example, in 2014 and 2017, APRA introduced restrictions on loans to investors and on interest-only lending.

Serviceability-based measures

Serviceability-based MPP measures seek to constrain lending to borrowers who would have very little income left after meeting basic living

Table 5.1: Mortgage Macroprudential Policies in Selected Economies^(a)

Country	Measure	Date	Details
Canada ^(b)	Interest rate buffer	2018	2 percentage points above mortgage contract rate (or reference rate), subject to a floor of 5.25% ^(c)
Ireland	LTI limits	2015	3.5 for first home buyers (20% speed limit) 3.5 for other owner-occupiers (10% speed limit)
	LVR limits	2015	90% for first home buyers (5% speed limit) 80% for other owner-occupiers (20% speed limit) 70% for investors (10% speed limit)
Israel	LVR limits	2012	75% for first home buyers 70% for other owner-occupiers 50% for investors
	Debt payment to income limit	2013	50% for investors and owner-occupiers
New Zealand	LVR limits	2013	60% for investors (5% speed limit) 80% for owner-occupiers (20% speed limit) ^(d)
Norway ^(e)	Interest rate buffer	2015	5 percentage points above prevailing interest rate
	DTI limit	2017	5 for investors and owner-occupiers
	LVR limit	2015	60% for interest only loans 60% for secondary dwellings in Oslo 85% for other principal and interest loans
	Amortisation	2015	Annual repayments must not be less than 2.5% of the loan value or the payments that would be required on a 30-year annuity loan if the LVR is above 60%
Sweden	LVR limit	2010	85% for owner-occupiers and investors
	Amortisation	2016	Linked to a borrower's LVR and LTI ratio (e.g. borrowers with an LVR of 50–70% and an LTI less than 4.5 must amortise 1% of their loan)
United Kingdom ^(f)	LTI limit	2014	4.5 for owner-occupiers (15% speed limit)
	Interest rate buffer	2014	3 percentage points above the reversion rate for owner-occupiers

(a) Speed limits allow for a certain proportion of new loans to be exempt from a particular measure; excludes capital-based measures

(b) Mortgages with an LVR greater than 80% require mortgage insurance, which carry conditions including: maximum purchase prices; minimum deposits; debt servicing limits; and minimum credit scores

(c) This floor currently corresponds to a buffer of around 3 percentage points above the lowest available mortgage contract rates

(d) From 1 November 2021, the speed limit for owner-occupiers will be 10%

(e) At most 10% of mortgages may breach one or more of these rules; this limit is 8% for Oslo properties

(f) Expectations for minimum underwriting standards for investor loans are set out in a supervisory statement. These standards include a serviceability test and an interest coverage ratio test

Sources: National authorities; RBA

expenses and servicing their debt. This 'unspent' income is referred to as the 'net income surplus' (NIS). Survey data suggest that borrowers with a small NIS are more vulnerable to both falling behind on their loan payments and having lower liquidity buffers available to shield their

consumption in the event of an adverse shock to their income or expenses.

In Australia, lenders calculate the NIS by using information and various assumptions about borrowers' incomes, expenses and loan repayment costs, although there is considerable variation in how lenders treat some components

of these calculations.^[3] The interest rate used by banks to determine loan repayments in the NIS calculation comprises the higher of either a lender-determined ‘floor’ rate or the current interest rate on the loan plus a serviceability buffer prescribed by APRA. This serviceability assessment rate accounts for potential increases in interest rates and shocks to income and expenses over the life of the loan.

The two main ways a serviceability-based MPP measure could be implemented are:

- A minimum dollar amount for the NIS – to implement this would require a significant standardisation of the calculations currently used by individual lenders. It would also disproportionately affect low-income borrowers and owner-occupiers.
- An increase to the serviceability assessment rate that is already incorporated into the NIS calculation – this approach does not disproportionately affect the maximum borrowing capacity of low-income borrowers as it scales with higher debt (and so incomes). As it scales with total debt, it also better captures investors with multiple loans and little surplus income.

In 2019, APRA indicated it expected banks to use a serviceability buffer of (at least) 250 basis points. In early October 2021, to address rising systemic risks, APRA increased the buffer it expects banks to use to at least 300 basis points. This change reduces maximum loan sizes, thereby constraining the availability of credit to those borrowers that are seeking to borrow at, or very close to, their maximums.

The share of borrowers who take out a loan close to the maximum amount that lenders would be prepared to extend to them based on prudent lending standards can vary across lenders and over time, reflecting cyclical, risk and competition factors. A reduction in mortgage interest rates will increase the loan amount that a given borrower can service given their income

and expenses, so all else equal would reduce the share of borrowers near their maximum loan size. In contrast, rising housing prices could induce borrowers to take out larger loans relative to their incomes and expenses, and so increase the share of borrowers near their maximum loan size. The increased prevalence of offset accounts in recent years and a tendency for lenders to offer lower interest rates on larger loans, may have induced some borrowers to take out a larger loan but deposit a portion in their offset account. This would increase the share of borrowers with an initial loan amount near their maximum, although not after taking account of their offset (or redraw) facility.

Borrowers with a low NIS tend to be higher risk, with both a higher incidence of self-reported financial stress and very low liquidity buffers (defined as the ratio of liquid assets, such as deposits, shares and bonds, to disposable income) (Graph 5.2). Estimates using biennial survey data from the ABS between 2003/04 and 2017/18 suggest that over half of ‘low NIS’ borrowers (those in the bottom quintile of the NIS distribution) with loans that were between one and three years old had liquidity buffers of less than one month’s worth of their disposable income. Alternative survey data for owner-occupiers indicate that borrowers with a low NIS have persistently lower liquidity buffers in the years after taking out their loan relative to those with a high NIS. Owner-occupier borrowers with a low NIS are also more likely to report experiencing difficulty meeting their mortgage repayments. This increased probability of financial stress persists for many years after loan origination.

An increase in the serviceability assessment rate reduces the maximum loan size for all borrowers. Based on current interest rates and assuming a 30-year loan term, a 50 basis point increase in the serviceability buffer will reduce maximum loan sizes for households with no other mortgage debt by around 5 per cent. For a

given income and initial net income surplus, the effect on borrowers with existing mortgage debts (such as investors) would be larger, as the increase in the serviceability assessment rate also applies to a borrower's existing debts. In practice, the effect of the change in the serviceability rate will also depend on whether some borrowers previously would have had their maximum loan size determined by an interest rate floor, rather than the sum of their loan interest rate and the serviceability buffer. If the loan interest rate plus the serviceability buffer is less than the lender's interest rate floor, then their maximum loan size will be determined using the interest rate floor. For these prospective borrowers, the increase in the interest rate used to determine their maximum loan size will be less than the change in the serviceability assessment rate. This will apply to borrowers who are eligible for relatively low interest rates, including some low-risk owner-occupiers with principal and interest loans.

The effect of the change in the serviceability assessment rate on individual borrowers will depend on how close their desired loan is to the maximum amount they could borrow. As

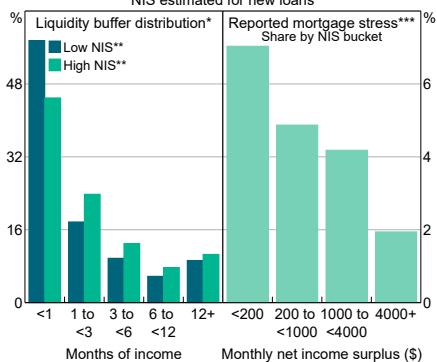
illustrated in the stylised example set out in Graph 5.3, households that choose to take out a loan that is well below their maximum (those on the right of the graph) will not be affected by a small change in the serviceability assessment rate. A much smaller share of borrowers will become (newly) constrained by the increase in the serviceability assessment rate. Their desired loan size will be only a few per cent larger than their new (lower) maximum loan amount and so most will likely take out this new, slightly lower maximum loan and make other adjustments to their finances. For other more constrained borrowers, including some who would have taken out their maximum loan even before the adjustment to the serviceability buffer, the reduction in the amount they can borrow will cause them to choose not to borrow at all at this time, say by delaying a property purchase. Estimates from survey data suggest that FHBs are more likely than other owner occupiers to take out a loan that is very close to their maximum. While this suggests that FHBs are more likely to be constrained than other owner-occupier borrowers, the overall share of FHBs that will be affected is estimated to be very small.

The overall direct reduction in the flow of new lending resulting from the change in the serviceability buffer will depend on how many potential borrowers take out a smaller loan and how many decide not to borrow at all. There can also be indirect effects on new lending – less competition for properties can reduce price pressures, which in turn can lower price expectations and so curtail prospective property purchasers' urgency to buy.

Debt-to-income measures

Restrictions on high-DTI lending can increase the cash buffers available to affected borrowers by restricting the amount of debt they are able to take on relative to their incomes. This can in

Graph 5.2
Risk Metrics for High and Low NIS Borrowers
 NIS estimated for new loans



* Ratio of liquid assets to disposable income; calculated for loans that are between one and three years old; includes owner-occupier and investor loans
 ** A low (high) NIS is in (not in) the bottom 20 per cent of the distribution of NISs for loans up to three years old (around \$270 per month in 2017/18 dollar terms)
 *** Owner-occupiers only; loans of all ages; mortgage stress reflects an inability to meet a housing loan repayment due to financial difficulties
 Sources: ABS HES and SIH; HILDA Survey Release 19.0; Melbourne Institute; RBA

turn reduce the effect that major shocks to their incomes would have on their consumption.

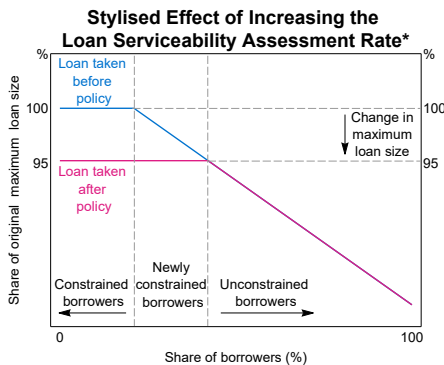
In Australia, a DTI measure rather than an LTI measure is feasible, as recently introduced comprehensive credit reporting provides visibility of prospective borrowers' overall indebtedness, including for investors with multiple housing loans.

APRA data indicate that restrictions on high-DTI lending would constrain a larger share of investors than owner-occupiers. Around one-third of investors took out a loan with a DTI ratio above six in the June quarter of 2021, compared to around 20 per cent of owner-occupier borrowers (Graph 5.4). Investors tend to be more highly indebted as many have loans for multiple properties (e.g. they may have both an owner-occupier and an investor loan, or multiple investment loans) and tax incentives discourage them from paying down the debt on their investor properties ahead of schedule.

Survey data from recent years indicate that owner-occupiers with higher DTI ratios are more likely to report financial stress than those with lower DTI ratios (Graph 5.5). However, borrowers with higher DTI ratios tend to have much higher liquidity buffers than borrowers with lower DTI ratios. This pattern is driven by investors with a DTI ratio above six, who are more likely to have

very high liquidity buffers than owner-occupiers with a DTI ratio above six. In addition, around 35 per cent of investors with high DTI ratios have incomes in the top 40 per cent of the income distribution for new borrowers, further reinforcing their ability to repay their loans. The reduction in interest rates in recent years has increased the ability of borrowers to take out high-DTI loans and indeed very recently there has been an increase in high-DTI lending. These more marginal high-DTI borrowers could be riskier.

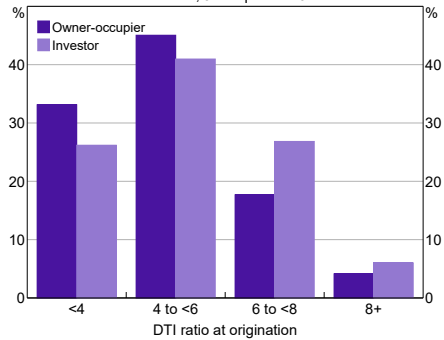
Graph 5.3



* Not drawn to scale; shows share of borrowers where the ratio of the loan amount to the maximum loan size is greater than or equal to that shown on the y-axis
Source: RBA

Graph 5.4

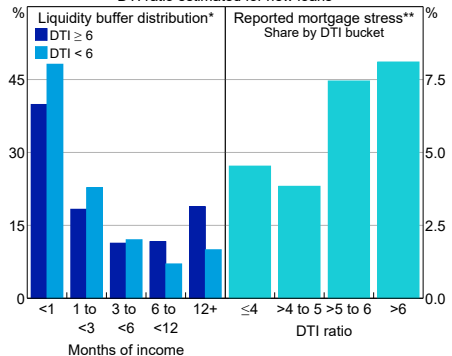
Distribution of Debt-to-income Ratios*
New loans, June quarter 2021



* For the largest ADI mortgage lenders; data provided on a 'best endeavours' basis
Sources: APRA; RBA

Graph 5.5

Risk Metrics for High and Low DTI Borrowers
DTI ratio estimated for new loans



* Ratio of liquid assets to disposable income; calculated for loans that are between one and three years old; includes owner-occupier and investor loans

** Owner-occupiers only; loans of all ages; mortgage stress reflects an inability to meet a housing loan repayment due to financial difficulties
Sources: ABS SIH; HILDA Survey Release 19.0; RBA

A DTI-based restriction can be effective in limiting the overall portfolio credit risk for a bank by constraining the share of lending to highly indebted borrowers. While serviceability measures contain the maximum risk for individual borrowers, DTI-based restrictions limit the overall portfolio credit risk that can build on a bank's balance sheet. The calibration of DTI-based restrictions would need to take into account the structure of lending and any other restrictions in place at that time. A DTI-based restriction can constrain the same risky borrowers as a serviceability-based restriction. Specifically, the vast majority of borrowers with a DTI ratio above six with less than one month's worth of liquidity buffers also have a low NIS (in the bottom 20 per cent of the distribution). However, limits on high-DTI lending, depending on their calibration, may also constrain some borrowers, particularly investors, who are well placed to service their debt. Combining DTI restrictions with LVR restrictions could help to avoid this problem by capturing riskier borrowers without constraining high DTI lending to borrowers who are much lower risk.

Loan-to-valuation measures

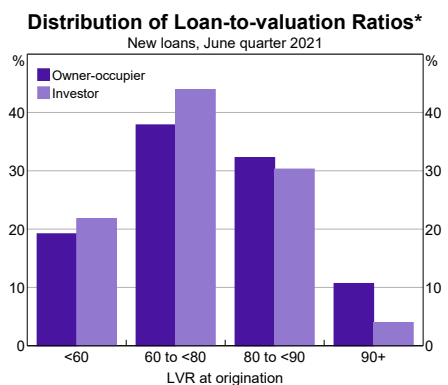
Restrictions on high-LVR lending can limit the supply of credit to borrowers with low initial equity buffers. This not only reduces the size of losses to lenders in the event of default, but could also reduce the decline in consumption when wealth falls (as this decline can be magnified by leverage). Borrowers with higher LVRs at origination tend to have lower liquidity buffers, and so are less able to absorb adverse income or expense shocks. Research by the Bank has shown that Australian households with negative equity who are in arrears are more likely to end up in foreclosure (presumably because they can't repay their loan in full by selling the property).^[4] For a given rate of amortisation and housing price growth, loans

with higher initial LVRs are more likely to be in negative equity.

APRA data indicate that high-LVR loans are more common among owner-occupiers than investors. This is because FHBs, who tend to have less equity, are more likely to be owner-occupiers than investors, and because investors tend to choose a purchase price and loan size to avoid costs such as mortgage insurance. In the June quarter of 2021, around 10 per cent of new owner-occupier loans had an LVR at origination above 90 per cent, compared to only 4 per cent of investor loans (Graph 5.6).

Limits on high-LVR lending are likely to be relatively effective at reducing lending to higher-risk borrowers, without unduly restricting the supply of credit to borrowers who are genuinely less risky. Survey data suggest that around half of new borrowers with LVRs above 90 per cent have less than one month's worth of liquidity buffers, while fewer than 5 per cent have buffers in excess of one year (Graph 5.7). There is also evidence that high-LVR borrowers continue to have noticeably lower liquidity buffers many years after they take out their mortgages. Owner-occupiers with LVRs above 90 per cent are also more likely to report experiencing mortgage stress than those with lower LVRs.

Graph 5.6



* For the largest ADI mortgage lenders; data provided on a 'best endeavours' basis
Sources: APRA; RBA

FHBs tend to take out loans with high LVRs, as accumulating a deposit is often their main barrier of entry into the housing market. In the June quarter of 2021, over a quarter of loans to FHBs were originated with an LVR greater than 90 per cent, compared to around 10 per cent for other owner-occupier loans (Graph 5.8). Because of concerns about the impact of LVR restrictions on FHBs, both Ireland and Israel apply higher LVR limits to FHB loans. An alternative approach could be to impose a higher LVR limit for FHBs but combine that with a DTI restriction or (NIS-based) serviceability measure to ensure that FHBs are not financially overstretched.

Restrictions on specific types of loans

Another class of MPPs are directed at loans that are judged to make a greater contribution to systemic risk given their terms or loan type, rather than being aimed at reducing lending to borrowers who are individually risky.

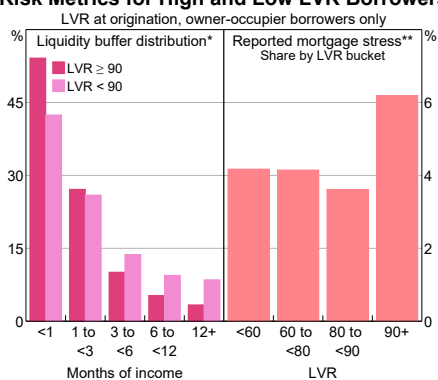
Australia's previous experience with restrictions on the growth of lending to investors and on the share of new lending on interest-only (IO) terms are examples of this type of policy. When these measures were announced, investor and IO lending made up around 40 and 45 per cent

of new lending, respectively (Graph 5.9). Investor and IO loans historically have not had higher default rates than owner-occupier or principal and interest loans in Australia, although this may reflect the absence of a large downturn in available Australian data. Nevertheless, in 2014 and 2017 these types of lending were judged to be contributing to unsustainable debt trends and thereby increasing the economy's sensitivity to macroeconomic shocks.

Analysis by the Bank previously concluded that the investor and IO lending restrictions were effective at slowing growth in both forms of lending.^[5] However, they did not slow aggregate housing credit growth, reflecting some substitution towards non-constrained types of lending. APRA announced the removal of these limits in 2018 when the risks associated with these types of lending were judged to have subsided (in large part because other lending standards and practices had by this stage also improved). The share of new lending on IO terms has remained below 20 per cent since late 2017, compared to a peak of 55 per cent in 2015. Investor loan commitments have picked up since the beginning of the year, but investor credit growth remains much slower than growth in owner-occupier credit.

Graph 5.7

Risk Metrics for High and Low LVR Borrowers



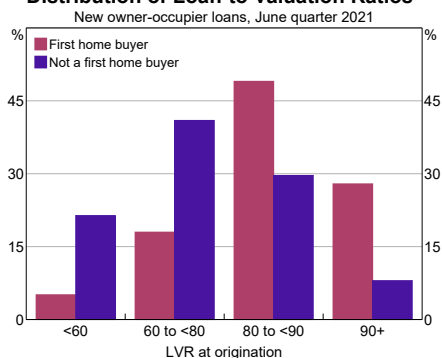
* Ratio of liquid assets to disposable income; calculated for loans that are between one and three years old

** Loans of all ages; mortgage stress reflects an inability to meet a housing loan repayment due to financial difficulties

Sources: HILDA Survey Release 19.0; RBA

Graph 5.8

Distribution of Loan-to-valuation Ratios*



* For the largest ADI mortgage lenders; data provided on a 'best endeavours' basis

Sources: APRA; RBA

The impact of MPP measures can differ across individual lenders ...

MPP measures have often been implemented by constraining the amount of specific types of lending by individual lenders. However, this can present two related challenges. First, such rules can limit the effectiveness of MPP (and potentially even increase systemic risk) if they cause riskier borrowing to shift between lenders (including to less-regulated lenders). Second, certain types of MPP can potentially entrench lending market shares and diminish competition.

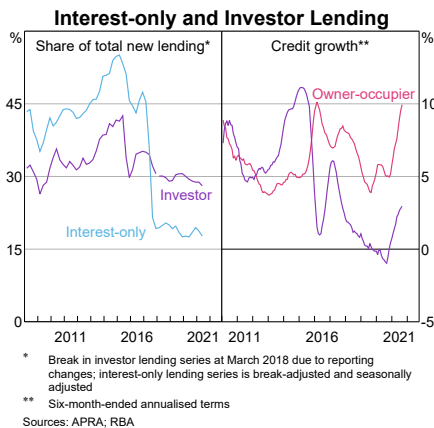
Because lenders have different risk profiles and customer bases, the targeted types of lending will account for different shares of each institution's lending. As a result, thresholds that are applied at the lender level create scope for lending and risk to shift within the financial system. Specifically, the share of the targeted type of lending would be expected to decline for lenders that were above the imposed threshold at the time it was implemented but could *increase* at other lenders as those riskier borrowers seek out loans from unconstrained lenders, as has occurred in some other countries. Risky lending could also shift to non-bank lenders that are not prudentially regulated. The scope for this to increase systemic risk in

Australia is limited, however, as APRA's reserve powers would allow it to regulate the lending activities of non-bank lenders if they were to become large enough to pose material risks to the financial system.

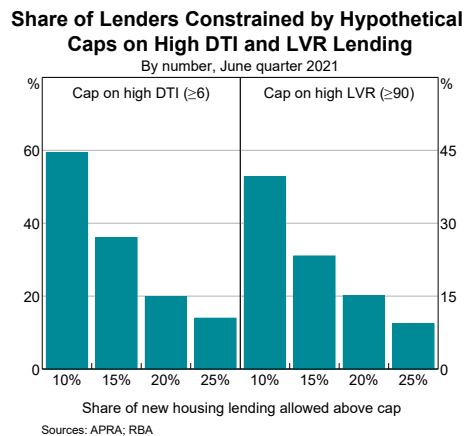
The differences in lenders' shares of high-DTI and high-LVR lending can be demonstrated with APRA data. For example, in the June quarter of 2021, loans with a DTI above six accounted for at least 10 per cent of mortgage lending at 60 per cent of lenders, and at least 20 per cent of mortgage lending at 20 per cent of lenders (Graph 5.10). This highlights the uneven impact across lenders if DTI restrictions that limited the share of lending that could occur above a given threshold were imposed. Similarly, loans with an LVR above 90 per cent accounted for at least 10 per cent of mortgage lending at 40 per cent of lenders, and at least 20 per cent of mortgage lending at 15 per cent of lenders.

Measures that impose constraints at the institution level can also diminish competition in the lending market by constraining the growth of some lenders' loan books.^[6] However, it is worth noting that competition and financial stability objectives can at times conflict with each other – for example, in circumstances where strong competition results in weaker lending standards. Under these circumstances,

Graph 5.9



Graph 5.10



the benefits of supporting financial stability with MPPs could outweigh the costs to competition (particularly if these costs are temporary) but a careful assessment of this trade-off would be appropriate.

... and policy design and calibration matter

Both the domestic and international experiences suggest that MPPs have mostly been effective at addressing the specific risks they were set up to target. MPPs work by restricting the availability and/or raising the price of credit to specific borrowers; as such, their design and calibration matter for their efficacy and efficiency. MPPs are typically designed to reduce the supply of credit to those borrowers who are contributing most to the identified systemic risk, without excessively constraining other borrowers or activity in the housing market. In many instances, this suggests MPPs should target new borrowers. Policies that affect the cost of borrowing for existing borrowers can impede the transmission of monetary policy, while policies that limit borrowers' ability to refinance existing debt can hamper competition.

APRA increased the serviceability assessment rate by 50 basis points in early October 2021. This is an appropriate response to target the extent and type of systemic risks that have been building. The direct effect on the flow of new credit is likely to be moderate – but by ensuring borrowers have larger buffers between their income and mortgage and other expenses, it will ensure greater resilience of new borrowers, thereby reducing systemic risk.

The maximum impact of this policy change could take several months to be realised. It may take some lenders several weeks to adjust to the new settings, and some households will have already planned or committed to purchase based on previous lending policies. Indirect effects may take even longer than the direct effects, although changes in potential buyers' expectations could bring forward the impact of the policy change.

Over time, if the extent of systemic risk changes, then the MPP settings may need to be adjusted, as has frequently been the case internationally. The nature of risks at that time would determine what types of MPPs might be best suited to the situation.

Endnotes

- [1] See Bank of England (2016), 'The Financial Policy Committee's Powers over Housing Policy Instruments', Draft Policy Statement, November. Available at <<https://www.bankofengland.co.uk/-/media/boe/files/statement/2016/the-financial-policy-committee-powers-over-housing-policy-instruments.pdf>>; Central Bank of Ireland (2015), 'Feedback Statement on CP87: Macro-prudential Policy for Residential Mortgage Lending', January. Available at <<https://www.centralbank.ie/docs/default-source/publications/consultation-papers/cp87/cp87-feedback-statement.pdf?sfvrsn=4>>.
- [2] See Belgibayeva A (2020), 'Changes in the Mortgage Market Post 4.5 Limit on Loan to Income Ratios', Financial Conduct Authority Occasional Paper 53, February. Available at <<https://www.fca.org.uk/publication/occasional-papers/occasional-paper-53.pdf>>.
- [3] APRA provides guidance, but is not prescriptive, on the measurement of various parameters that enter lenders' serviceability assessments. See RBA (2018), 'Box B: The Impact of Lending Standards on Loan Sizes', *Financial Stability Review*, October
- [4] See Bergmann M (2020), 'The Determinants of Mortgage Defaults in Australia – Evidence for the Double-trigger Hypothesis', RBA Research Discussion Paper No 2020-03, March.
- [5] For further information on the impacts of these measures, see Garvin N, A Kearney and C Rosé (2021), 'Macroprudential Limits on Mortgage Products: The Australian Experience', Research Discussion Paper No 2021-07, July; RBA (2018), 'Chapter 5: Assessing the Effects of Housing Lending Policy Measures', *Financial Stability Review*, October.
- [6] The investor and IO limits previously imposed in Australia were criticised by both the Productivity

Commission and the ACCC for reducing the degree of price competition in the mortgage lending market; however, RBA analysis found evidence of only a short-term decline in competition for IO loans and no evidence of a statistically significant effect on

competition for investor loans. See Garvin N, A Kearney and C Rosé (2021), 'Macroprudential Limits on Mortgage Products: The Australian Experience', Research Discussion Paper No 2021-07, July.