Actuaries Institute.

Home Insurance Affordability and Home Loans at Risk

Report
August 2024

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About this Report

This Report was commissioned by the Actuaries Institute as part of its Public Policy and Thought Leadership program. Enquiries should be directed to the Institute's Public Policy Team at public_policy@actuaries.asn.au. This Report has been authored by Sharanjit Paddam FIA FIAA, Calise Liu FIAA CERA , Saroop Philip FIAA and Ruby Smith FIAA from Finity, and Sen Nagarajan FIAA.

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Executive Summary

Home insurance affordability pressures have continued to rise in the year to March 2024 for almost all Australian households, with increases in home insurance premiums continuing to outpace household income growth. These home insurance premium increases are primarily a consequence of increased reinsurance costs during 2023, driven by rising costs of perils. These impacts are consistent with our expectations that climate change will increase pressures on home insurance affordability. We continue to expect that home insurance premiums will rise unless significant and prompt action is taken to reduce greenhouse gas emissions, improve the resilience of existing homes, and improve buildings standards and land use and planning.

Home Insurance Affordability

As at March 2024, 15% of Australian households experienced home insurance affordability stress, up from 12% in March 2023 and 10% in March 2022, where affordability stress is defined as households facing insurance premiums that are more than four weeks of gross household income. This equates to 1.61 million Australian households facing home insurance affordability stress compared to 1.24 million a year ago – a growth of 30% in just one year.

However, it is important to note that insurance premiums for 85% of households represent less than four weeks of gross income, and insurance premiums represent 1.4 weeks of gross income for the median household. By these metrics, home insurance is affordable for most Australian households.

Home Insurance Premiums

The median increase in home insurance premiums over the year to March 2024 was 9%, and the mean increase was 13%. The increases were greater for the highest risk properties, with premiums increasing by more than 30% for the 5% of households paying the highest premiums.

7% of the increase at the median level and 10% increase at the mean level for home insurance premiums have been due to increases in other insurer costs, which includes insurer expenses, profit margins and the net cost of reinsurance. The large increases seen in reinsurance premiums and reinsurance retentions during 2023 would have contributed significantly to increases in other insurer costs.

Continuing increases in the cost of rebuilding a home have resulted in a 1% increase in median and 2% increase in mean home insurance premiums as at March 2024.

Home Loans at Risk

In this year's update we include an analysis of the potential implications of decreased home insurance affordability on the market for home loans. Insurance affordability pressure can signal home loan serviceability pressure, and under or non-insurance may impact future home loan security, credit quality and credit availability. We estimate that 5% of Australian households with home loans are experiencing extreme home insurance affordability pressures, and that these households have $57 billion in loan balances outstanding as at March 2024, representing 3% of all home loan assets.

The Institute encourages governments, insurers, lenders and investors to collaborate on developing climate adaptation frameworks and products to support households. Resilience loans to individual households with the financial means to undertake such lending provide a potential pathway to long-term security for those households, as well as for lenders, insurers, investors and government.

1. Introduction and Scope

This report provides an update on home insurance affordability in Australia in 2024, and follows two previous reports published by the Actuaries Institute titled *Home Insurance Affordability and Socioeconomic Equity in a Changing Climate* (the "2022 Report") (Paddam, Liu, & Philip, 2022), and *Home Insurance Affordability Update* (the "2023 Report") (Paddam, Liu, & Philip, 2023).

In this report we update the Australian Actuaries Home Insurance Affordability (AAHIA) Index, which is defined as the ratio of the:

- annual home insurance premium, to the
- annual household income gross of tax.

The AAHIA Index is expressed as the number of weeks of gross household income required to pay a home buildings and contents insurance premium. The higher the AAHIA Index, the less affordable the home insurance premium is. In this report, affordability-stressed households are defined as those for whom home insurance premium would cost more than four weeks of gross household income if a policy was taken out.

As in our previous reports, the AAHIA Index is calculated across every household in Australia, regardless of whether or not insurance is purchased, and assumes that the sum insured matches our estimate of the full rebuild cost of the property and replacement cost of contents. For rental or strata properties we have assumed that the cost of any home insurance premium paid for by the landlord or the strata are effectively passed onto the household occupying the property. The home insurance premium includes both buildings and contents cover and considers the perils risk specific to the house location, as well as the level of retail home insurance premiums across the Australian market available to that household at the time of our survey.

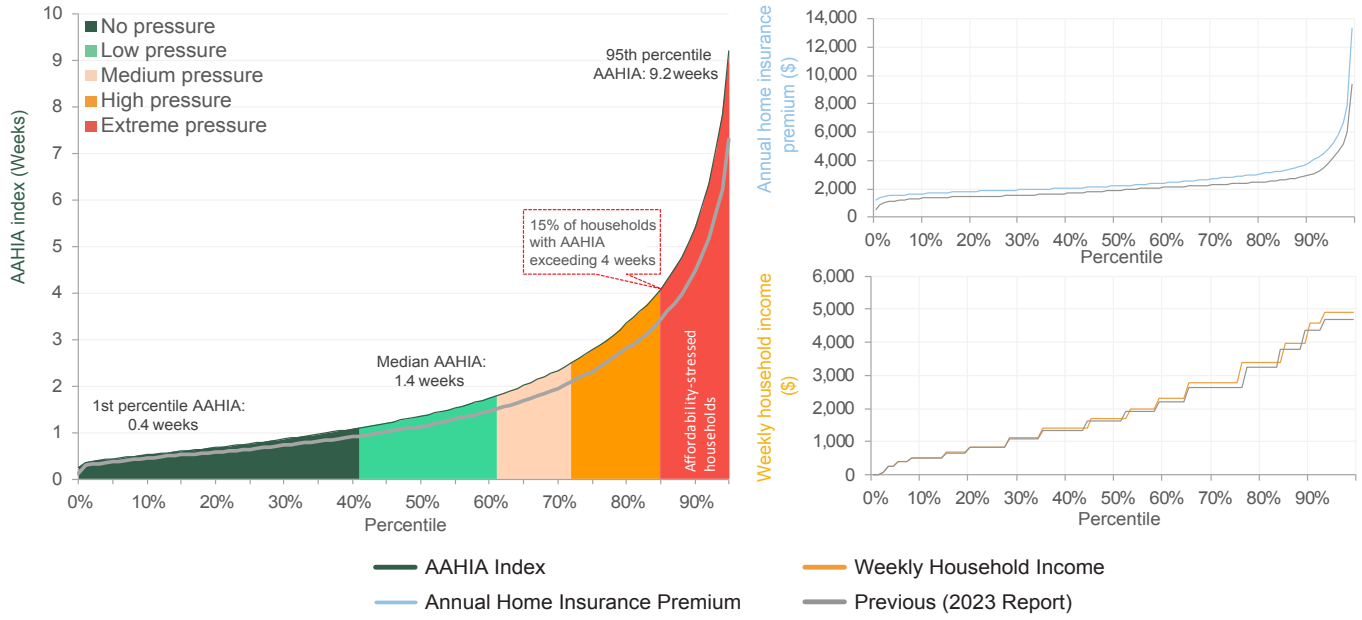
In this year's report we also examine the implications of home insurance affordability on home loans in Australia.

This report is a supplement to, and is intended to be read in conjunction with, the 2022 Report and the 2023 Report. Those reports provide a full description of the methods, assumptions, limitations and uncertainty in our results.

2. Australian Actuaries Home Insurance Affordability Index

Figure 2.1 shows how annual home insurance premium, annual household income and the AAHIA Index vary by percentile of Australian households, as well as a comparison with the 2023 AAHIA Index.

Figure 2.1 – Australian Actuaries Home Insurance Affordability Index by percentile[1]



The AAHIA Index varies from 0.4 weeks for households with the most affordable insurance to in excess of 9.2 weeks for the 5% of households with the least affordable insurance. The 2024 AAHIA is higher at every percentile compared to the 2023 Index, with the annual increases in home insurance premiums (driven by buildings cost inflation and reinsurance rate increases) continuing to outpace household income growth. In particular, the increases in home insurance premiums are greatest for the highest risk properties, increasing by more than 30% over the last year for the 5% of households with the highest premiums. The median AAHIA Index has increased from 1.1 weeks in the 2023 Report to 1.4 weeks in 2024. The increase at the 90th percentile is greater, from 4.4 weeks in 2023 to 5.4 weeks in 2024.

The proportion of households in Australia considered to be affordability-stressed (or experience "extreme affordability pressure" in Figure 2.1) increased from 12% in 2023 to 15% in 2024 – a growth of 30% in affected households in just one year. The mean AAHIA Index for households that are affordability-stressed is 9.6 weeks; this is seven times higher than the mean AAHIA Index of 1.4 weeks for households that are not affordability-stressed.

While no information is available on whether these affordability-stressed households purchase insurance, or purchase adequate levels of cover, they are at risk of being either uninsured or under-insured. The estimated home insurance premium for the 15% of Australian households that face extreme affordability stress is $7.4 billion, potentially signalling a significant protection gap for the market in the context of the total home buildings and content insurance market (including taxes) being $12.6 billion at June 2023 (APRA, 2023)[2].

Table 2.1 – Households by AAHIA Pressure Band

Pressure band	AAHIA (weeks)	Households (m)		% of households		Home insurance premium 2024		Sum insured 2024	
		2023	2024	2023	2024	Total ($b)	Average ($)	Total ($t)	Average ($000s)
No pressure	0 to 1.1	5.1	4.3	49%	41%	9.4	2,182	2.95	688
Low pressure	1.1 to 1.8	2.0	2.1	19%	20%	5.4	2,525	1.46	687
Medium pressure	1.8 to 2.5	0.9	1.1	9%	11%	3.1	2,739	0.78	686
High pressure	2.5 to 4	1.1	1.3	11%	13%	3.8	2,875	0.90	679
Extreme pressure	4+	1.2	1.6	12%	15%	7.4	4,613	1.14	707
Total		10.3	10.5	100%	100%	29.1	2,774	7.23	689

[1] AAHIA index chart only shown to the 95th percentile

[2] At the point of publishing this report, APRA has not released updated home insurance industry statistics since June 2023.

2.1 Home Insurance Premiums

The home insurance premiums used in the construction of the AAHIA Index represent an estimate of home insurance premiums across Australia for the coming year. This differs from the actual premiums paid by customers for a range of reasons, including:

- The AAHIA Index assumes that all households purchase insurance that is adequate for a full rebuild if required. In reality, as demonstrated in the AAHIA Index, there are households where home insurance premiums are unaffordable – due to high exposure to perils, low income or both. Non-insurance is also driven by a lack of perceived value for money, with consumers unwilling to pay the level of insurance premium. Some households may also choose to exclude flood cover from their home insurance cover, in order to reduce their premium.
- Building cost inflation increased significantly over the year to March 2023, but has since ameliorated (CoreLogic, 2024). In order to reduce premiums, homeowners may have under-insured by purchasing policies with a sum insured which does not fully reflect increases in building costs (Settle & Ananyev, 2023).
- While we have calibrated the level of the premiums to the median market price in a market-representative portfolio of new business policies, the actual premiums paid by households will differ depending on coverage and provider choices made by the household. We discuss how the range of insurance premiums varies across the market in Section 2.3.

Table 2.2 shows our estimated components of home insurance premiums by state as at March 2024. Appendix A provides details of the methods and assumptions used.

Table 2.2 – Home insurance premiums by state ($)

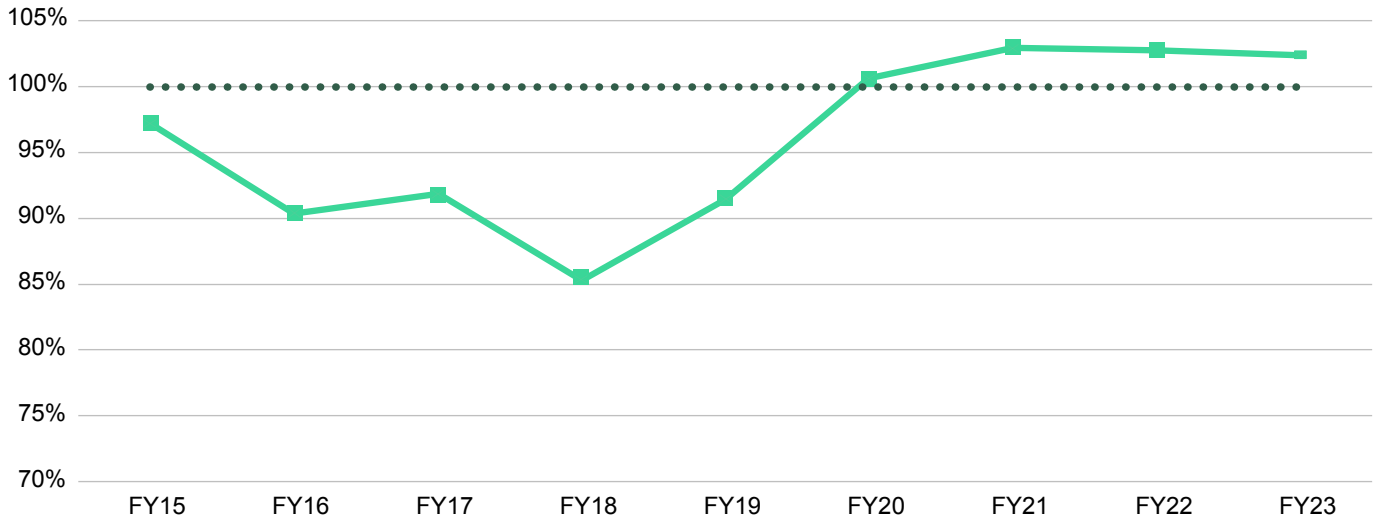
	Estimated mean by state								Australia	
	NSW	VIC	QLD	SA	ACT	NT	TAS	WA	Mean	Median
Storm	441	171	389	84	283	284	161	319	311	279
Riverine flood (non-cyclonic)	186	77	204	98	28	101	74	58	136	0
Cyclone	14	0	297	0	0	509	0	204	89	0
Earthquake	46	56	17	56	83	54	22	53	44	46
Bushfire	63	23	43	18	11	23	81	47	43	0
Non-peril losses	800	622	983	758	800	781	622	983	803	800
Other insurer cost components[1]	541	766	1,249	499	462	1,708	512	737	765	616
Stamp duty, levies and GST[2]	855	360	633	334	167	727	309	504	582	470
Total premium	**2,946**	**2,075**	**3,815**	**1,848**	**1,833**	**4,186**	**1,781**	**2,905**	**2,774**	**2,199**
Stamp Duty	*9%*	*10%*	*9%*	*11%*	*0%*	*10%*	*10%*	*10%*		
Emergency Services Levy	*17.5%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*		

[1] Insurer expenses, net cost of reinsurance, profit margin

[2] The Emergency Services Levy in NSW is passed onto the policyholder at the discretion of each insurer and we have assumed a 17.5% loading on NSW home insurance policies. We note that the NSW Government has proposed to replace this levy in future.

Figure 2.2 shows the combined operating ratio, which is the ratio of claims and expenses to premium, for the Australian home insurance market until 30 June 2023 (2024 figures not available as the Australian Prudential Regulation Authority (APRA) has paused publication). The higher than 100% ratio in FY21 to FY23 shows that insurers continue to make underwriting losses on home insurance policies across the market as a whole.

Figure 2.2 – Combined operating ratio for home insurance in Australia[3]



2.2 Household Income

Table 2.3 shows the average annual household income at March 2024 by state used in the calculation of the AAHIA Index as well as a comparison with the AAHIA Index in the 2023 Report.

Table 2.3 – Annual household income by state

	Mean Annual Household Income ($000s)								Australia	
	NSW	VIC	QLD	SA	ACT	NT	TAS	WA	Mean	Median
2023	108	103	102	90	134	131	84	112	105	84
2024	113	107	106	94	140	137	87	117	109	88
Change	5%	4%	4%	4%	4%	5%	4%	4%	4%	5%

The annual household income is based on the 2016 Census, using Finity's population dataset Defin'd and then inflated to March 2024 values.[4] Note that while the 2021 Census information is available, it is distorted by COVID-19 and government initiatives such as JobKeeper, and we therefore do not consider it representative of 2024 income distribution across Australia. The 2022 and 2023 reports provide details of the method, assumptions, limitations and uncertainty in our estimates of individual household income.

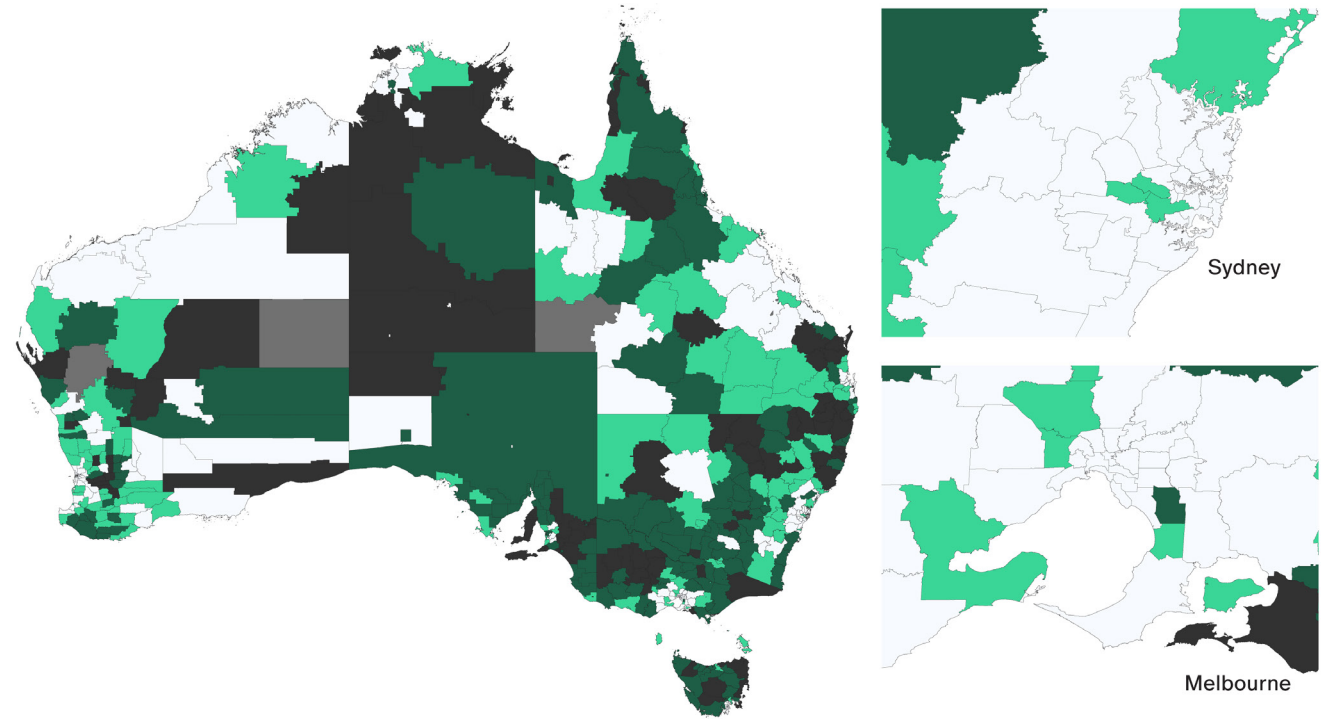
The assumed mean annual gross household income at 2024 is $109,000, which has increased by 4% from an average of $105,000 in the previous 2023 Report, while the median has increased by 5% from $84,000 to $88,000.

[3] Source (APRA, 2023)

[4] Indexation from the ABS Survey of Housing and Income from 2016 to 2020, after which the survey was discontinued, and the ABS Wage Price Index from 2020 to 2024.

Figure 2.3 shows the annual gross household income by Local Government Area.

Figure 2.3 – Average annual household income by LGA



Regional and remote areas, particularly areas in northern Australia, central Western Australia, inland NSW, inland Victoria and Tasmania have the lowest average gross household income. Comparatively, high levels of household income are typically concentrated in metropolitan areas; affluent areas such as the eastern suburbs and lower north shore of Sydney and inner-city Melbourne suburbs have some of the highest average income levels in the country.

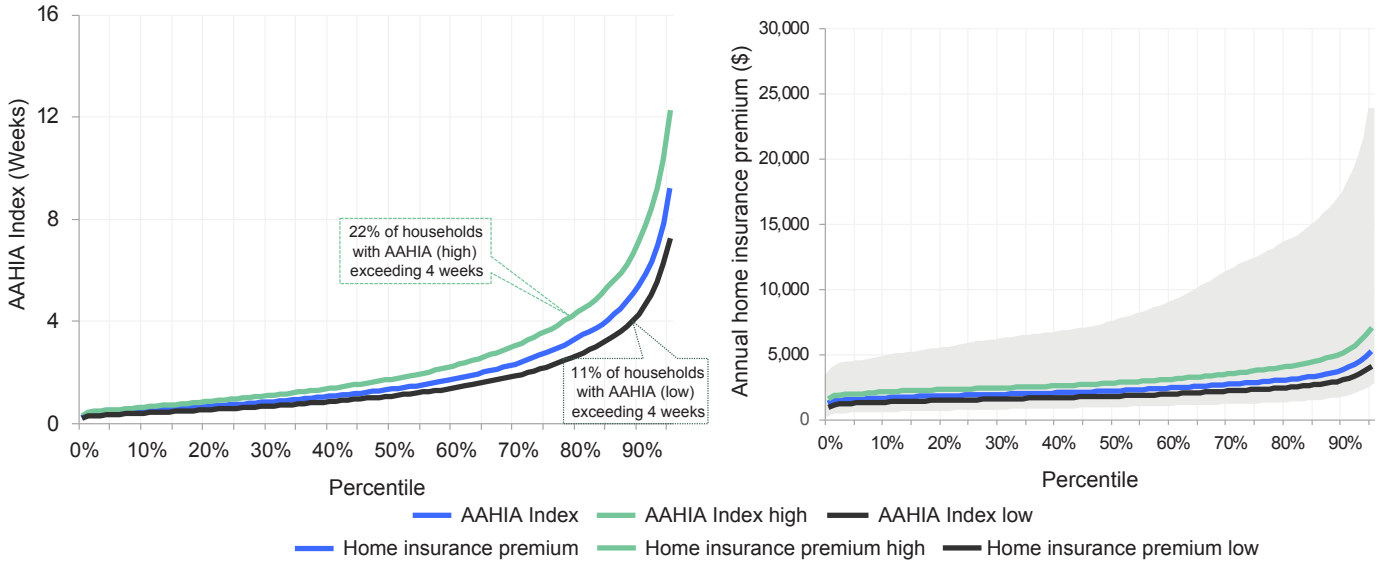
2.3 Potential Market Affordability Outcomes

The AAHIA Index is calibrated to the median premium offered by insurers to a market-representative portfolio of new business policies. However, home insurance premiums vary from insurer to insurer, which reflects a range of reasons, including:

- variations in views on the level of peril risk between insurers;
- variations in the product coverage offered, such as exclusions or limits between insurers;
- insurer strategy and pricing frameworks, e.g., for decisions around target markets and customer retention;
- managing concentration risk; and
- differing cost bases between insurers, e.g., expenses, reinsurance premiums and profit margins.

Figure 2.4 shows the range of affordability outcomes, based on the range of home insurance premiums offered across the market. For the same household and for the same product coverage, the figure compares what the AAHIA would be at the 75th percentile (high) and 25th percentile (low) of the premium offered, against the median premium that is used in the AAHIA Index.

Figure 2.4 – Potential AAHIA outcomes: AAHIA Index and low and high home insurance premiums[5]



The grey bands in Figure 2.4, representing the most expensive and cheapest premiums offered, also show that the range of premiums offered in the market varies significantly. The most expensive premiums offered are around four times higher than the median premium, and seven times higher than the cheapest premium. This gap increases for the most expensive policies. The cheapest premiums offered in the market can be around half the cost of the median premium.

As shown in Figure 2.4, if households purchased the 25th percentile premium policy offered, our estimate of affordability-stressed households in 2024 would reduce from 15% (assuming a median premium) to 11%. Conversely, if all households purchased the 75th percentile premium policy offered, we estimate 22% of households would be affordability-stressed.

These results show the sensitivity of our home insurance affordability results to consumer choices made within the home insurance market and the difficulty in estimating a single figure for home insurance premiums in the market.

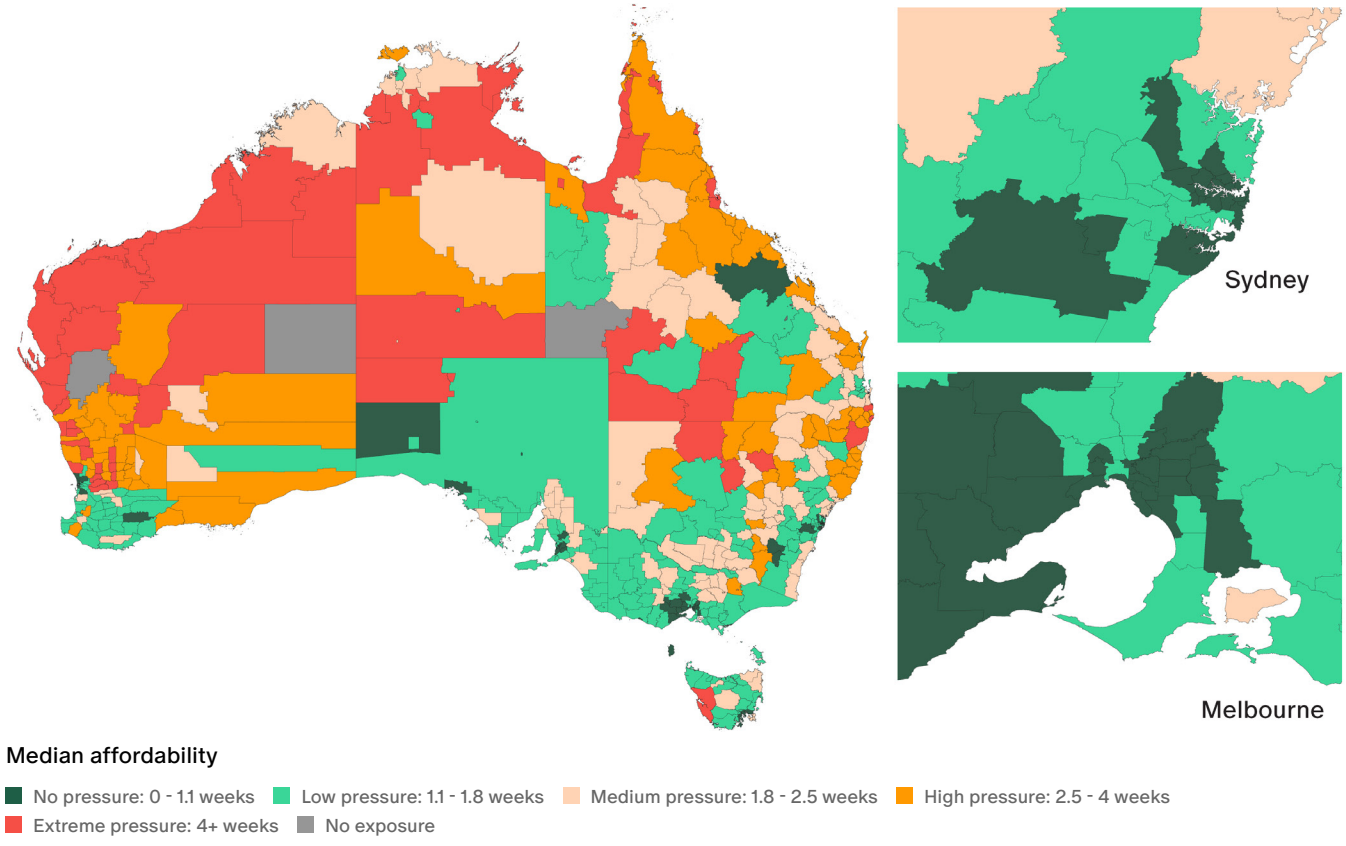
[5] Charts shown to the 95th percentile only

3. Distribution and Drivers of Home Insurance Affordability Pressures

3.1 Geographic Distribution of Home Insurance Affordability Pressure

Figure 3.1 shows the distribution of the median AAHIA Index by LGA, using the same definition of affordability pressure bands as shown in Table 2.1.

Figure 3.1 – Median AAHIA by LGA

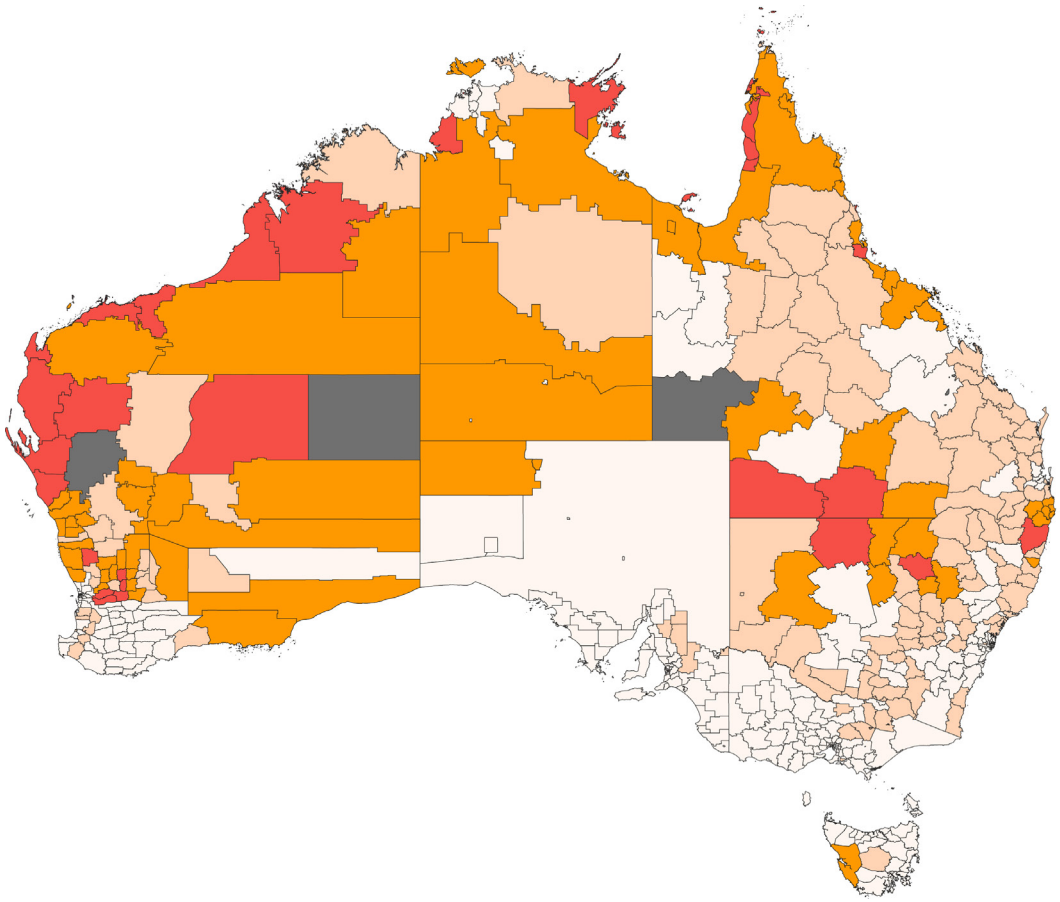


Affordability pressure is driven by the interaction between both home insurance premiums (typically from the underlying perils risk) and household income. We note the following results, which are similar to the 2023 Report:

- LGAs suffering extreme home insurance affordability pressures are concentrated in regional Western Australia, Northern Territory, southwest Queensland and the Northern Rivers region of New South Wales. In these areas, half the households face home insurance premiums that exceed a month's gross household income. The affordability pressures faced in these regions is typically driven by their high perils risk exposure, cyclone for northern Australia and flood for New South Wales.
- LGAs with medium affordability pressures are more spread across Australia – their affordability pressure is primarily driven by a combination of lower household incomes and higher flood risks.
- Metropolitan areas typically have lower perils risks and higher incomes. This means that the capital cities have lower affordability pressures on average. However, affordability pressure is still present within parts of the capital cities of Greater Sydney, Greater Melbourne and Greater Perth, particularly on the edges of the city extents.
- There are early indications that the introduction of the Cyclone Reinsurance Pool (CRP) has reduced affordability pressures faced by households in areas of extreme cyclone and cyclonic flood risk, such as Northern Queensland, Northern Territory and Western Australia, with the Australian Reinsurance Pool Corporation (ARPC) reporting that there have been significant reductions in the average premium for the highest risk bands (ARPC, 2024). However, we note that many insurers are transitioning towards fully adopting the CRP premiums, and it may take some time for the full effects of the CRP to be passed on to households in high cyclone risk areas (ACCC, 2023). The 2023 Report discusses the operation and potential impact of the CRP.

Figure 3.1 shows the median affordability pressure across each LGA in Australia. There are households in each LGA where the affordability pressure differs greatly from the median. Figure 3.2 shows the proportion of affordability-stressed households in each LGA and demonstrates that there are households facing affordability pressure in every LGA. Affordability pressures continue to be particularly concentrated in Northern Australia. In regions like North Western Australia, over 40% of households face home insurance affordability stress.

Figure 3.2 – Proportion of affordability-stressed households by LGA



Proportion of affordability-stressed households

0% - 20% 20% - 40% 40 - 60% 60 - 100% No exposure

3.2 Natural Peril Drivers of Affordability Pressure

Figure 3.3 shows how the 15% of affordability-stressed households across Australia vary by state. States facing the highest proportion of affordability stress are Queensland, Northern Territory and New South Wales.

Figure 3.3 – Proportion of households with affordability stress by state

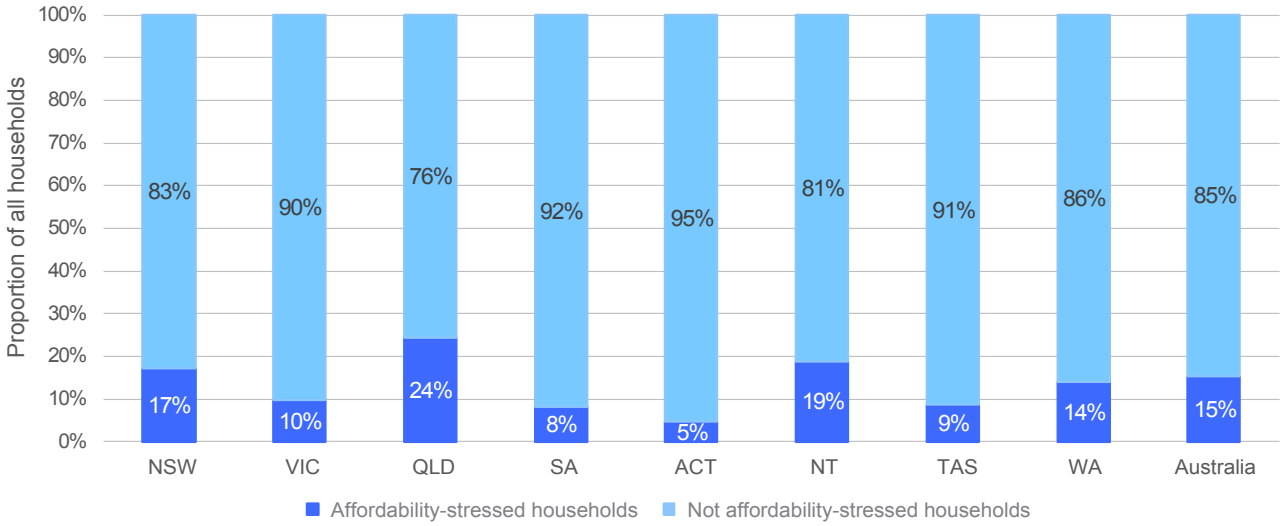
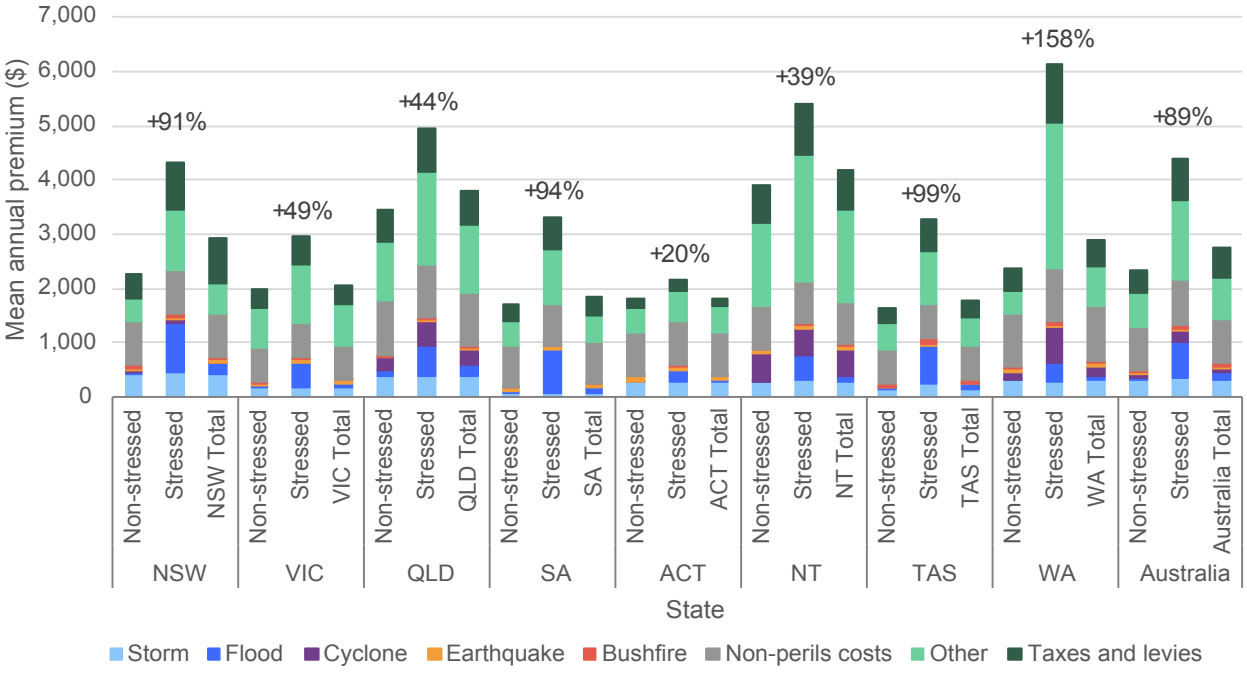


Figure 3.4 shows how the components of home insurance premiums vary by state between affordability-stressed and non-affordability-stressed households.

Figure 3.4 – Total home insurance premiums by state, split by affordability stress[6]



[6] See Appendix A for a description of components

On an Australia-wide basis, perils costs make up 30% of mean annual insurance premiums for affordability-stressed households, compared to only 21% of non-stressed households. For 32% of affordability-stressed households, over half of the premiums relate to perils costs, mostly from exposure to floods. Affordability-stressed households pay on average at least 40% more than non-affordability-stressed households in all states other than the ACT and NT; in Western Australia the premiums for stressed household are more than double.

The most significant driver of affordability stress is exposure to flood risk. Figure 3.4 shows that, at an Australia-wide level, flood premiums are 2% of premiums for non-stressed households but 15% of premiums for affordability-stressed households. At an Australia-wide level, the average flood premium paid by stressed households is nearly 16 times higher than that paid by non-stressed households (noting that flood risk only impacts around 7% of the Australian population).

The average cyclone premiums have reduced significantly following introduction of the CRP. This has resulted in the gap between stressed and non-stressed households in Queensland, Northern Territory and Western Australia reducing significantly[7]. We note, however, that the implementation of the CRP is still in progress and in practice these savings may take some time to emerge for customers (ACCC, 2023).

[7] The difference in mean annual premiums between stressed and non-stressed households reduced from 61% in 2023 to 42% in 2024 for Queensland, 79% to 53% for Northern Territory, and 136% to 69% in Western Australia.

4. Change in the Home Insurance Premiums

Changes to the home insurance premiums since the 2023 Report reflect changes in the market premiums, updates of actual sum insured indexation due to buildings cost inflation, as well as improvements in our methodology.

Table 4.1 shows that of the 16% increase in median (24% mean) home insurance premiums between the 2023 Report and the current Report, 7% (10%) is a rebasing of the 2023 estimate, with:

- 3% (4%) due to technical improvements in our methodology to assess market premiums as discussed below;
- 4% (6%) due to actual buildings cost inflation from March 2023 to September 2023 being higher than anticipated in our 2023 Report; and

9% (13%) is due to changes over the year to March 2024, with:

- 1% (2%) due to updated buildings cost inflation estimates for September 2023 to September 2024; and
- 7% (10%) due to increases in the allowance for expenses, net cost of reinsurance and insurer profit margins.

Table 4.1 – Changes in home insurance premiums since 2023

	Median		Mean	
	$	% change	$	% change
Home insurance premium (2023)	**$1,894**		**$2,234**	
Methodology change	$54	3%	$90	4%
Actual vs expected building costs inflation	$76	4%	$138	6%
Home insurance premium (2023 – rebased)	**$2,024**		**$2,462**	
Building costs inflation	$27	1%	$49	2%
Expenses, net cost of reinsurance and profit margins	$149	7%	$262	10%
Home insurance premium (2024)	**$2,199**		**$2,774**	

As discussed in the 2023 Report, changes at the mean level include the impact of changes at the highest levels of premium, and therefore are larger than changes at the median level.

4.1 Methodology Change

As described in Appendix A, in estimating the home insurance premium, we first estimate the perils and non-perils components, and then apply an adjustment for other insurer costs (expenses, net reinsurance costs and profit margins), and taxes and levies. In order to estimate the other insurer costs we calibrate to a median retail premium, based on 10,000 insurance quotes on a market-representative profile of the Australian home insurance market. In our 2023 Report these quotes were based on sums insureds from the market-representative portfolio, which likely included some underinsurance. In this update, we have instead based those quotes on our view of the appropriate sum insured for the property in order to ensure consistency with our assumptions of the impact of buildings cost inflation on sums insured. The overall impact of these changes was to increase the premiums by 3% at the median level, and 4% at the mean level.

4.2 Actual Versus Expected Buildings Cost Inflation

Annual premiums sold as at March will include an allowance for the impact of estimated buildings cost inflation on sums insured over the full year of the policy coverage. Therefore, on average, that allowance will reflect a view on annual building cost inflation to September. In our previous report, we assumed sum insured indexation of 14% over the year to September 2023, which reflected actual sum insured indexation in the six months to March 2023, plus a forecast of the additional indexation in the six months to September 2023. Actual indexation was higher than assumed, by 4% at the median level and 6% at the mean level.

The growth in building material and labour costs eased over the year to March 2024, following significant increases over the previous two years. The Cordell Construction Cost Index (CCCI) tracked an increase of 3% over the year to March 2024 (compared to 12% over the year to March 2023), with price changes normalising (CoreLogic, 2024); similarly the Australian Bureau of Statistics (ABS) Producer Price Index showed a 1% increase in inputs to house construction costs over the year to March 2024 (ABS, 2024). The 2024 AAHIA Index includes a median increase of 1% to the sum insured, assuming that building cost inflation remains broadly steady until September 2024.

4.3 Increase in Other Insurer Costs

Figure 4.1 shows the change in the median retail premiums in the year to March 2024, including by state and territory. Overall, the increase in retail premiums in the year to March 2024 was 7% at a median level, and 10% at a mean level. We observe that the low premium rate increase in Queensland and the reduction in premium rate in the Northern Territory may be due to savings from the CRP, although we note that the pool is still being implemented by some insurers and it is too early to draw definitive conclusions (ACCC, 2023).

We expect that the overall increases in the retail premiums relate primarily to the net cost of reinsurance, noting that 2023 saw continued increases in property reinsurance premium rates and increased retentions. While reinsurance premium rates began to level out for 1 January 2024 renewals, given the delays in updating pricing, the premium rates at March 2024 would still reflect market movements in 2023.

Figure 4.1 – Change in median retail premiums at March 2024

5. Home Loans at Risk Due to Affordability Pressures

It is standard practice in the Australian markets for lenders to require borrowers to maintain a buildings insurance policy during the term of the home loan. Where borrowers are unable to afford insurance, they may be unable to secure a loan to fund the purchase of their chosen property. This issue is most likely to arise when loans are originated or refinanced, as lenders' processes typically check for insurance at these points.

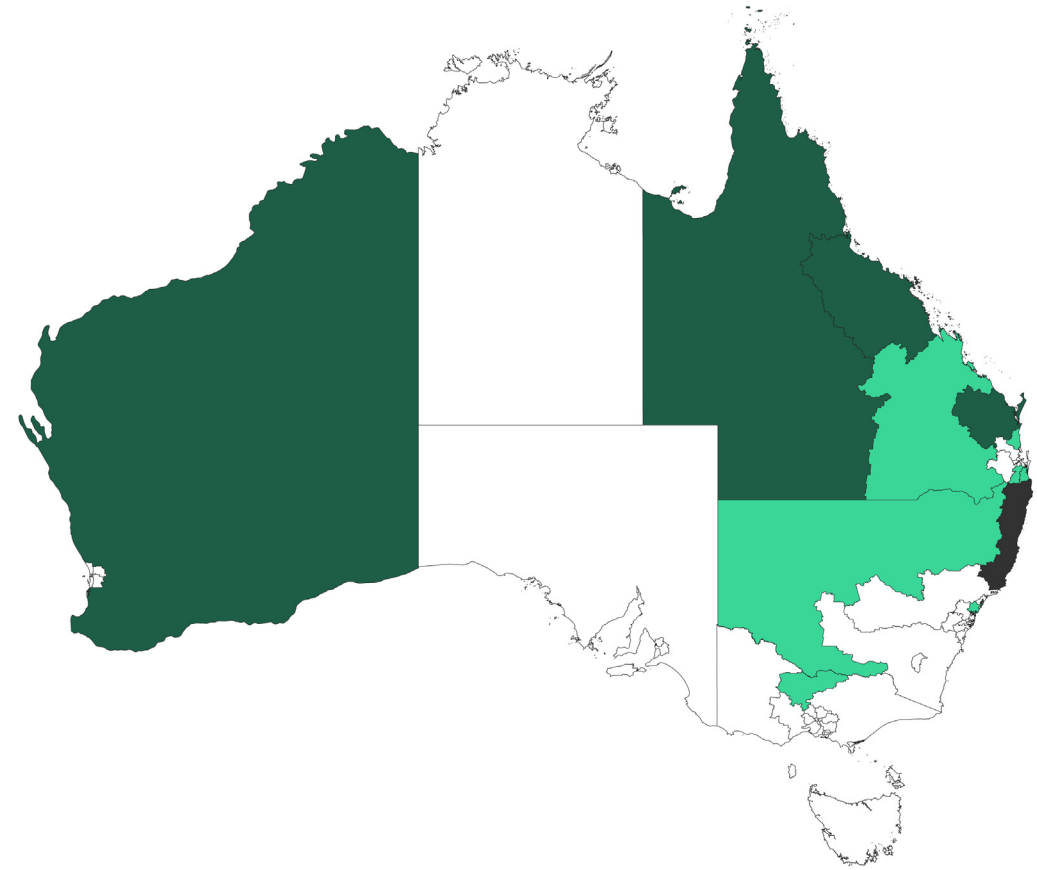
As shown in Table 5.1, we estimate that 5% of households in Australia with home loans are experiencing extreme home insurance affordability pressures, and that these households have $57 billion in loan balances outstanding as at March 2024 ("home loans at risk"), representing 3% of all home loan assets. Some of these properties also act as security for SME commercial loans, which have not been included in our analysis.

Table 5.1 – Households with home loans by home insurance affordability band

	Households			Loan balance		Sum insured		Premium	
Pressure band	(m)	%	Total ($b)	%	Average ($000s)	Total ($t)	Average ($000s)	Total ($b)	Average ($)
No pressure	2.37	63%	1,737	77%	733	1.29	546	4.13	1,741
Low pressure	0.72	19%	316	14%	439	0.41	566	1.59	2,218
Medium pressure	0.26	7%	93	4%	354	0.15	566	0.67	2,560
High pressure	0.21	6%	65	3%	303	0.12	562	0.61	2,846
Extreme pressure	0.18	5%	57	3%	309	0.10	570	0.96	5,216
Total	3.75	100%	2,267	100%	605	2.07	553	7.96	2,124

Impacts from these home loans at risk will vary from lender to lender, especially for smaller and mid-sized lenders that have regional concentrations of properties. Figure 5.1 shows the proportion of home loan balances at risk in each region. This proportion varies between 0% to 16%, depending on the region, with 3% as the national average.

Figure 5.1 – Proportion of home loans at risk



Proportion of home loans at risk

12% - 16% 8% - 12% 4% - 8% 0% - 4%

If there are property price decreases, which is beyond the scope of analysis in this report, this could lead to further financial stresses on customers due to negative equity, and increased provisions or losses for lenders.

Where lenders do not enforce insurance requirements or otherwise accept these assets as loan securities without insurance, they will be exposed to credit losses from perils. The amount of these losses will depend on the level of security provided by the property value, which as we noted may also fall. That is also outside the scope of the analysis in this report.

Below we discuss implications for lenders, their customers, lenders mortgage insurance (LMI) providers, regulators, and state governments. We also highlight potential opportunities for lenders to assist customers with home insurance affordability issues through resilience lending.

Appendix B provides details of our methods, assumptions and limitations of our approach in estimating home loans at risk.

5.1 Implications for Lenders and Their Customers

5.1.1 Insurance Requirements for Home Loans

Lenders in Australia generally require borrowers to have home buildings insurance as part of their lending terms. Indeed, for the value of the collateral provided by the property to be recognised, APRA APS 220 requires that the properties "are appropriately insured at the time of origination and that this insurance is maintained under the contractual terms of the exposure". This is intended to transfer any perils risk to the insurer, leaving the lender with only credit risks (and risks that are not covered by home insurance, such as coastal hazards).

Lenders typically verify this insurance is in place as part of the loan origination process but, in general, lenders do not verify insurance on an ongoing basis. For many lenders, the administrative costs of such an annual exercise has historically outweighed potential benefits, especially as loan-to-value ratios are generally expected to decrease over the life of a loan. Borrowers also re-finance their home loans on a regular basis, with the average behavioural term of a loan typically being around five years, resulting in checks on insurance at refinancing or sale to another customer. Further, historical practice reflected wider affordability of insurance and more stable home insurance premiums from year to year due to subdued inflation. However, as illustrated in this report, for a growing proportion of households, insurance is becoming less affordable and, assuming that home loan customers will continue to purchase insurance, may no longer be appropriate.

Larger lenders, who have voluntarily undertaken climate physical risk assessments and disclosed this information, are likely to have assessed their exposure to this risk of non-insurance. For example, the Commonwealth Bank of Australia's Climate Report in 2023 (CBA, 2023) revealed approximately 32,000 properties, with mortgages worth $11 billion, have been assessed as having a high risk of exposure to cyclones, while 39,000 properties ($17 billion) are at risk of floods and 4,000 ($2 billion) at risk of bushfire. Overall, 4.6% of the bank's home loan portfolio has been classified as high risk to one or more perils.

5.1.2 Capacity and Capability Building

Some lenders are unlikely to be aware of the scale of the problem, because they do not have estimates of home insurance premiums for their customers and do not routinely require customers to provide evidence of ongoing insurance cover. Under-insurance may also be an issue, as lenders generally allow customers to choose the sum insured for their properties. Some lenders also do not specify the type of coverage that must be purchased, so customers may opt out of flood cover as it is not specified by the lender. As noted in APRA's Climate Vulnerability Assessment of Australia's five largest banks in 2022 (APRA, 2022), all lenders will need to develop additional capability to understand and assess these risks. Lenders will also need to consider how to integrate broader climate risk considerations within their risk management framework (Paddam, Smith, Nagarajan, & Evans, 2024).

5.1.3 Supporting Customers

Even if lenders do verify home buildings insurance on an ongoing basis, it is still unlikely that they would foreclose on customers who have not purchased insurance, even if it is breach of lending conditions. In such circumstances, we understand that many lenders would treat such customers under their vulnerable customer frameworks.

Additionally, lenders may provide resilience loans to such customers, subject to meeting lending criteria, where the loan would be used to undertake retrofitting or other works to reduce the vulnerability of the property to perils – for example, through raising floor heights to protect from flood, or improved roofing for protection from storms and cyclones. Resilience lending can help customers by reducing the financial impact of perils thereby providing a pathway to affordable insurance, and to continue to meet lender requirements for home owners to purchase insurance. Improvements to resilience will also improve protection of households from injury, death or trauma from natural disasters. For lenders it can reduce risk, ensure compliance with APRA requirements, and provide additional revenue streams. Such lending could also be aggregated by lenders and securitised through climate adaptation bonds, for which there is a potential demand from investors looking for opportunities to invest in sustainable finance (IGCC, 2023).

The Actuaries Institute therefore strongly encourages the inclusion of climate resilience and adaptation measures within the initial Australian sustainable finance taxonomy (ASFI, 2024) as a matter of priority.

The Resilient Building Council's (RBC) rating system which has been supported by the Federal Government's Hazards Insurance Partnership is an example of how resilience lending could be implemented. The RBC provides a free self-assessment app that assesses risk of perils to consumers based on data provided by the consumer. The system not only provides a current rating but recommends actions to improve the property's rating. Where such actions involve building work, the RBC can provide a certification of the rating, which can be part of the use of proceeds of any bond. Recently, Suncorp and NRMA announced that they will recognise RBC-certified ratings in home insurance premium pricing. NAB also announced a pilot program for discounted interest rates on resilience lending (RBC, 2024). For some homeowners with properties exposed to perils, this represents a potential pathway to resolving these issues.

5.1.4 Disclosure Requirements

Under mandatory climate disclosure legislation before Australia's Parliament, lenders and other Australian corporates will need to disclose climate-related risks and opportunities in an annual sustainability report. The specific requirements will be set out in the Australian Sustainability Reporting Standards (ASRS), which are expected to be finalised by the Australian Accounting Standards Board (AASB) in the coming months. Under the draft ASRS disclosure requirements and legislation, larger lenders will likely need to quantify assets at risk to climate by 30 June 2029. As noted above, many larger lenders are already disclosing such information, and in particular, the loan exposure at risk to climate change, which would include loans with property securities that do not or are unlikely to have insurance. The ASRS are likely to force lenders to disclose the extent of their exposure to properties without insurance, as part of their assets vulnerable to climate-related physical risks, and to disclose what actions they are taking to manage this risk, including the continued effectiveness of insurance requirements.

5.2 Implications for Lenders Mortgage Insurance

LMI protects the lender from credit losses; if a customer defaults on their home loan and the sale of the property raises insufficient funds to cover the outstanding loan, the LMI provider will provide the difference. Typically, lenders require customers to purchase LMI cover where the deposit is less than 20% of the property price. Importantly, LMI cover protects the lender, and not the borrower, with LMI providers then able to recover any losses from the borrower.

In circumstances where the borrower does not purchase home insurance, and the property is subject to a peril event, the value of the uninsured property could fall to, or close to, the land value. Financial stress on the borrower may lead to a default on the loan, resulting in losses for the lender. In such circumstances, it is unlikely that LMI would cover such losses as most LMI policies require the property security to be restored to an acceptable condition by the lender in the event that the property suffers damage beyond normal wear and tear.

While LMI insurers are therefore likely to be protected from this issue (and consequently providing no protection to lenders), they are indirectly exposed to increased losses should there be falling house prices in an area triggered by lenders refusing to lend on properties with unaffordable insurance.

5.3 Implications for Regulators

Australian financial regulators have recognised the issue of home insurance affordability in Australia and the systemic impacts it may bring:

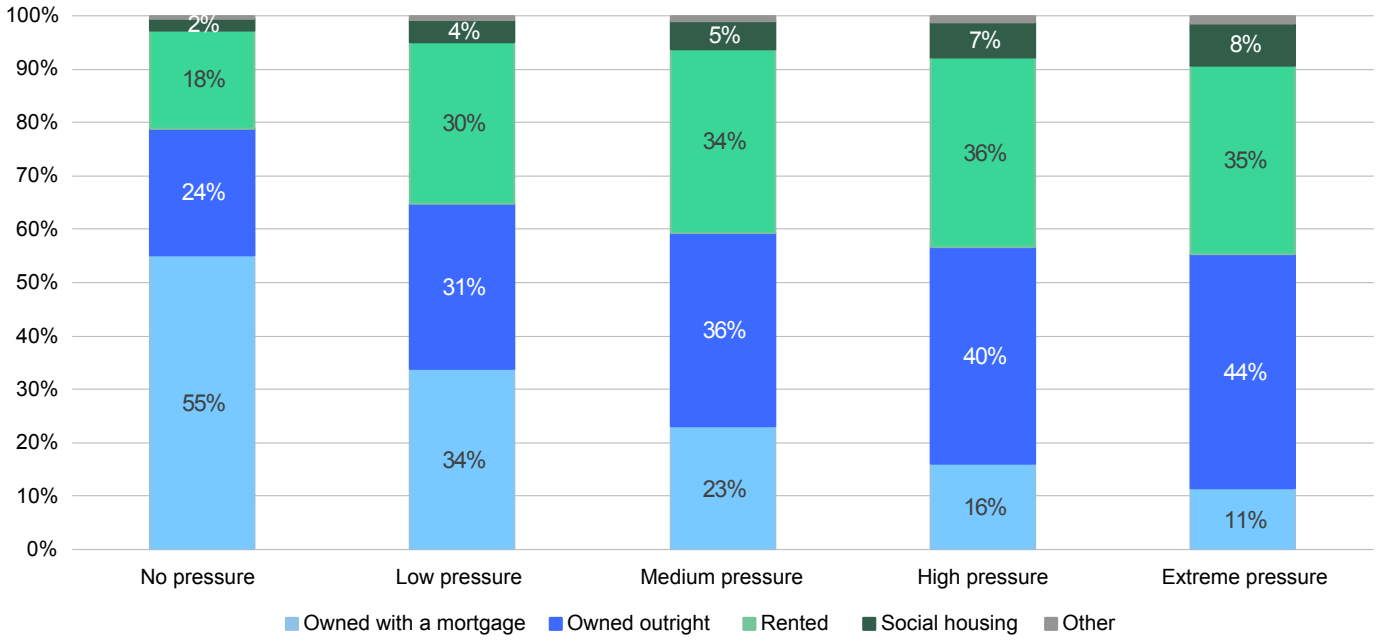
- The Reserve Bank of Australia (RBA) acknowledged in its Financial Stability Review in October 2023 that if insurance coverage declines due to affordability pressures, future risk events would lead to larger downstream impacts on household and business finances, and therefore consumption and business activity (RBA, 2023). The RBA also recognised that lenders are likely to reduce their lending where insurance coverage is not obtained by borrowers.
- APRA, having already completed a Climate Vulnerability Assessment with the major banks (APRA, 2022), has begun a corresponding exercise with insurers, with the main priority to assess the potential impacts of climate change on home insurance affordability (APRA, 2023).

Home insurance affordability pressures may lead to systemic impact on both the home loan market and SME commercial lending market. Regulators will need to closely monitor this, including collecting and assessing data, as well as understanding how the risk will increase with future climate change. Further, APRA may need to consider monitoring how lenders are meeting the insurance requirements for acceptability of collateral under APS 220.

5.4 Implications for Governments

The rise in households experiencing extreme home insurance affordability pressure also poses problems for state governments and other owners of social housing. Figure 5.2 shows how the proportion of social housing increases as affordability pressures rise. Additionally, the extreme pressure band contains the highest proportion of households who own their house outright, which is likely to include retirees or those approaching retirement with limited sources to fund increased home insurance premiums. As noted in our previous reports, state governments may need to invest in the quality of social housing and its resilience to perils (ACOSS, 2024), either directly through resilience programs for individual homes, or through infrastructure measures such as levees that can protect multiple homes.

Figure 5.2 – Housing tenure by home insurance affordability pressure



State governments could raise funds for such resilience works through climate adaptation bonds or other sustainable finance instruments, similar to the opportunity presented to lenders through climate adaptation bonds for resilience lending. While the Australian Government Green Bond Framework contains a commitment to supporting climate change adaptation projects (AOFM, 2023), it does not include such resilience lending within its indicative eligible expenditures. At a state level, there are currently no sustainable finance frameworks that would directly support resilience lending.

The Institute encourages all levels of government to consider these options to enable the flow of private finance into the finance sector in order to support resilience loans by lenders to individual households with the financial means to undertake such borrowing. Resilience measures can reduce risk which, all else being equal, enable premium reductions and thereby improve insurance affordability. This in turn will ensure that lenders can continue to accept residential properties as loan securities. Overall this will allow lenders to support their customers in reducing risk, to reduce climate risk for the lender, and to increase lending volumes. As illustrated in Figure 5.3, resilience lending provides a potential pathway to long-term security for Australian households, lenders, insurers, investors and government.

Figure 5.3 – Resilience lending

	Collaboration towards common goals of risk reduction Empower households with risk information and resilience options				
	Households	Banks	Insurers	Investors	Government
Benefits	• Safer homes • Affordable insurance • Ongoing finance	• Reduced risk • Increased lending volumes • Potentially lower cost of funding	• Ongoing revenue • Reduced claims	• Investment in climate resilience and adaptation	• Reduced disaster costs • Focus on lower income communities • Focus on community level resilience measures
Actions	• Undertake resilience improvements • Utilise resilience lending products	• Offer resilience loans • Securitise resilience lending into Mortgage Backed Securities	• Recognise reduced risk that is certified with reduced insurance premiums	• Invest in securitised certified resilience lending	• Climate adaptation taxonomies and other supporting regulation
	Common resilience rating framework and certification process – e.g., Resilient Building Council ratings				

6. Climate Outlook

In our 2022 Report, we noted that the Intergovernmental Panel on Climate Change (IPCC) in the Sixth Assessment Report (IPCC, 2021), stated that "it is indisputable that human activities are causing climate change. Human influence is making extreme climate events, including heatwaves, heavy rainfall, and droughts, more frequent and severe" (IAA Climate Risk Task Force and IPCC WGI Technical Support Unit, 2022).

6.1 Australian Experience

The Australian Actuaries Climate Index, which aggregates extreme rainfall, high temperature and sea levels, continues to show a long-term increasing trend in the frequency of extreme-weather, as shown in Figure 6.1.

Figure 6.1 – Australian Actuaries Climate Index[8]

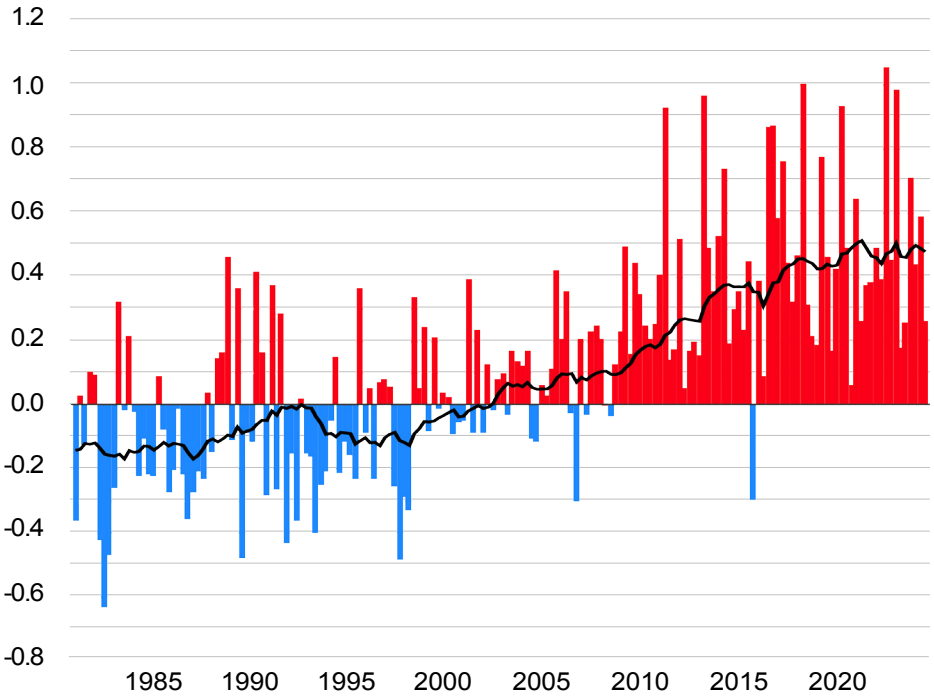
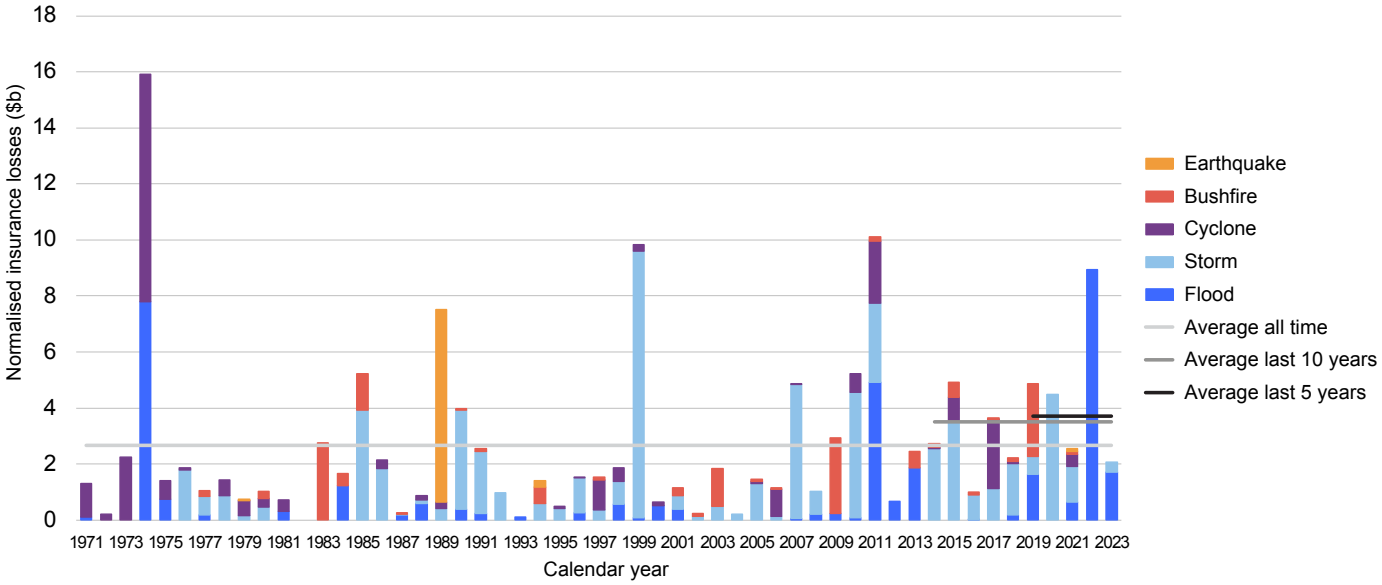


Figure 6.2 shows that Australian insurance losses have continued to increase over recent years compared to long-run historical averages, approximately adjusted to reflect housing stock growth and historical inflation.

Figure 6.2 – Normalised historical insurance losses in Australia[9]



[8] Composite index all Australia, available at https://www.actuaries.asn.au/microsites/climate-index

[9] Inflated to current values and allowing for exposure growth at 2% per annum. Source: Finity analysis of Insurance Council of Australia data.

6.2 Future Scenarios

In our 2022 Report, we also performed a climate scenario analysis consistent with the recommendations of the Climate Measurement Standards Initiative (ESCC, 2020), which indicated that under a range of future emissions scenarios, home insurance premiums were expected to increase at the overall level across Australia, with higher emissions resulting in greater pressure on home insurance affordability. We noted that for some areas and for some perils there may be reduced costs of perils under some scenarios.

We also noted that the impact of climate change would be three times worse for affordability-stressed households compared to non-affordability-stressed households. While we have not repeated that analysis in this report, we would expect similar impacts from climate change on home insurance affordability if we had done so. In 2022, we recommended a range of measures to address this issue, including investment in resilience measures for individual homes, investment in infrastructure projects to protect communities, improved building standards, and better land use and planning.

The Insurance Council of Australia's Climate Change Roadmap (ICA, 2023) provides similar recommendations, stating that: "For insurers to continue to provide insurance coverage at affordable pricing, action is required to strengthen the resilience of our homes, businesses, and communities, shift our approach to what we build and where we build it and see Australia's economy transition to net zero."

6.3 Global Reinsurance Market

As noted in our 2023 Report, Australian insurers reinsure perils costs into the global reinsurance market, and 2023 saw reinsurers increasing reinsurance rates, which contributed significantly to home insurance premium increases in Australia.

In 2023, reinsurers failed to earn their cost of capital five years out of the previous six, primarily due to increasing global losses from climate-related events. Swiss Re expects global costs of perils to continue to increase by 5 – 7 % p.a. over the long term, driven by increased growth in areas of higher perils risk including flood plains and coastlines, and increasing severe weather and other events. Swiss Re calls for urgent action, including both adaptation measures, such as building codes and land use and planning, as well as mitigation measures to reduce greenhouse gas emissions (Swiss Re, 2024).

Appendices – Methods, Assumptions and Limitations

A Home Insurance Premiums

Component	Data sources	Method
Sum insured	*Rebuild*[1]	Use Rebuild to estimate the sums insured across Australia at an address level. Use CRESTA zone assumptions for strata properties.
Perils components		
Storm rate	*Finperils*[2]	Description of models provided in 2022 Report.
Non-cyclonic riverine flood rate	*Finperils*	Rates are applied to sum insured to give peril cost components.
Earthquake rate	*Finperils*	
Bushfire rate	*Finperils*	
Cyclone (including cyclonic flood) rate	ARPC rates	Assumed full adoption of ARPC's CRP rates.
Other insurer cost components		
Non-peril losses	*Finesse*[3]	Estimated at a state level based on market home insurance premiums for properties with limited exposure to perils.
Expenses, profit margin and net cost of reinsurance	*Finesse*	Calibrated gap between the median premium before taxes and levies offered in a region compared to sum of above components.
Taxes and levies		
Stamp Duty and GST	Statutory	We have assumed a 17.5% emergency services levy charged to all NSW policyholders, though we note that the NSW Government has indicated that it wishes to remove this levy in future.
Emergency Services Levy	Estimate	

[1] *Rebuild* is Finity's sum insured calculator, based on selected property charactertistics

[2] *Finperils* is Finity's suite of models for perils losses

[3] *Finesse* is Finity's competitor monitoring tool which surveys a range of actual insurer prices for a market representative batch of new insurance policies

The 2022 Report and 2023 Report provide further details on the methods, assumptions and important limitations of the analysis of home insurance affordability and uncertainty in the results.

B Home Loans at Risk

B.1 Overview

In order to apply our insights on home insurance affordability to home loans, we needed to estimate the home loan associated with each individual property in Australia, as this data is not publicly available. The ABS provides information on lending across the whole Australian market, but this data does not provide an insight into how those loans are distributed geographically, which is critical to understand the intersection with home insurance affordability. Our approach therefore seeks to make use of data at the finest available geographic resolution in order to allocate lending to individual households.

The loan balance outstanding for every household in Australia was calculated using three variables:

- Home loan repayments
- Interest rates
- Loan term outstanding

Home loan repayments were estimated for each household using a generalised linear model (GLM) that fitted monthly home loan repayments ranges from ABS household census data from 2016 (noting that, as for household income, the 2021 census contains distortions due to COVID-19). The rankings from this model were applied to the actual distribution of home loan repayments. Regional average interest rates and remaining loan terms were calculated based on the ABS's Household Expenditure Survey in 2016. With these three factors, the loan balance outstanding for all households was estimated as at 2016. Loan balances were then calibrated to March 2024 ABS figures of total loan balances on a state by state basis.

Our model therefore assumes the distribution of home loans across households within each state remains the same as in 2016, but with the overall lending for that state reflecting the market as at March 2024. We acknowledge there have been a number of structural changes in the home lending market since 2016 which limit the reliability of this approach. Key structural changes include:

- APRA has strengthened serviceability assessments at origination, which may have removed some customers on lower incomes from the market.
- The COVID-19 pandemic resulted in an increase in working from home arrangements, with some migration out of capital cities to regional areas. Since the end of the COVID-19 restrictions there has been some reversal in this trend.
- Macroprudential controls were introduced and then removed by APRA, which may have affected investor loan distributions between households.
- Responsible lending obligations for lenders have changed since 2016, which may have had structural impacts on lending distributions.

Other limitations in our approach to estimating loan balances at the household level include:

- We used a relatively small dataset to derive interest rates and term outstanding (ABS Household Expenditure Survey (HES)). After accounting for data issues, modelling is based on 2,183 households.
- The household mortgage repayment data is provided in bands. The mid-point of the band has been adopted as the estimate of the household mortgage repayment.
- Term outstanding is calculated as an average within a region (greater capital city area or rest of state for each state and territory). This is assuming that terms remaining are consistent within each region, but in reality terms can vary significantly between households. Further granularity to the terms were not possible due to the lack of data available.
- Term outstanding is based on the principal outstanding in the HES survey, which is at a point in time. If extra repayments are included in the principal component of repayments, the method will underestimate the loan term outstanding. Similarly, if the principal balance includes prepayment and offset balances which reduce the scheduled loan balance, then this approach will tend to underestimate the loan term remaining.
- Loan balance modelling is based on owner-occupier loans only. Confidentialised Unit Record File (CURF) data only has mortgage repayments for owner-occupied loans. Calibration is conducted to estimated total balance as at March 2024 which includes investor loans but we note that the terms, interest rates and mortgage repayments could have different distributional characteristics to owner-occupier loans. Further implicit in this calibration is the assumption that investor loans are geographically exposed similarly to owner-occupier loans. This could overestimate loan balances for households with extreme affordability pressure, as households with lower incomes are less likely to own investment properties.
- The proportion of loan balance remaining used for determining total loan balance outstanding by state from ABS loan origination data is based on the amortisation profile of loans, including a prepayment rate for net prepayments, refinancing and discharge of loans. A duration-based average prepayment rate curve is used, but in reality the prepayment rate may vary over time, by type of loan, location, etc.
- Household mortgage repayments and therefore loan balances have been matched with individual addresses which have an estimated AAHIA index, which is also based on sampling. Results relating to the total loan balance outstanding amongst affordability-stressed households could vary with the matching process.

B.2 Loan Balance Outstanding Derivation at 2016

The loan balance for each household at 2016 is calculated using the formula:

$$Loan\ balance_a = R_a \times \frac{1 - \left(1 + \frac{i_a}{12}\right)^{-t_a \times 12}}{i_a \div 12}$$

Where R_a, i_a and t_a are the home loan monthly repayment, annual interest rate and term remaining respectively for household a.

B.3 Data Used

Variable	Model	Data source and resolution	Data resolution
Monthly home loan repayment	GLM estimating repayments for individual households	1% Basic Confidentialised Unit Record File from 2016 ABS census containing home loan repayments Defin'd data 2016	55 Geographic Regions Statistical Area 1, imputed to individual households
Average annual interest rate on home loans Average term remaining on home loans	Averages by states split by capital city and rest of state	ABS Household Expenditure Survey 2015-16, containing home loan interest payments as well as loan principal outstanding	States split by capital city and rest of state

B.4 Mortgage Repayment Derivation

A GLM was fitted to model monthly home loan repayments on owner-occupier loans from the ABS CURF household data.

The predictors used by the GLM are:

- 55 custom geographic regions
- number of bedrooms
- total family income
- household composition

From these predictors, certain geographic areas were found to be the most predictive for higher mortgage repayments. A high number of bedrooms and higher incomes were also found to correlate with higher repayments, which aligned with expectation. Conversely, the most predictive variable for lower mortgage repayments was a household composition of "lone person" or "group household", as well as certain geographic areas.

B.5 Calibration

Loan balances as at March 2024 were estimated by applying state level adjustment factors to the loan balances using ABS statistics on new loan commitments as at March 2024. The total loan balance (including both investor and owner-occupier loans) as at March 2024 that we calibrated to is below:

	NSW	VIC	QLD	SA	WA	TAS	NT	ACT	Total
Owner-occupied ($ b)	526	462	275	88	150	22	7	36	1,565
Investor ($ b)	285	193	121	31	47	7	3	15	702
Total ($ b)	810	655	396	120	196	29	10	50	2,267

We cross-checked these balances with APRA data on total loans outstanding (new loan commitments and existing balances) and found close agreement.

We also reconciled our estimates of households with mortgages with RBA data on lending by income level and by state in 2018, shown in Table E.7 of the RBA's Statistical Tables.

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