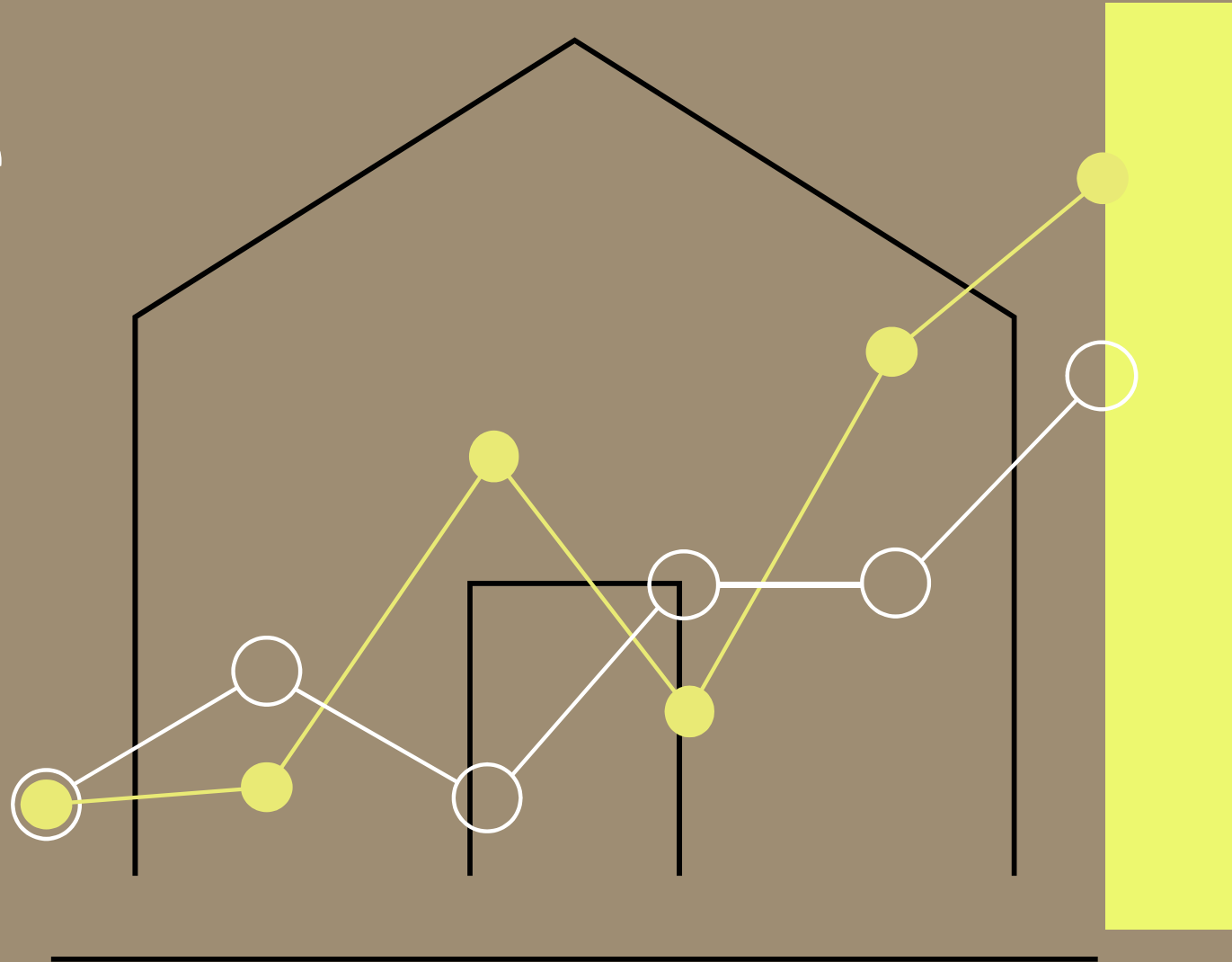


# RMBS Performance Watch: Australia

## Market Overview

Q2 2024

*This report does not constitute a rating action*



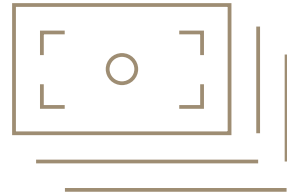
# Australian Macroeconomic Environment

# What To Look Out For



## New issuance is buoyant

Northern hemisphere  
Summer holidays have not deterred new issuance momentum with multiple deals still coming to market in the first half of the year, despite interest rate and geopolitical uncertainty.



## Prepayment moderation

Prepayments are returning to long-term averages as refinancing competition eases and interest rates stabilize.



## Wage growth stabilizes

Despite increasing nominal wage growth, real wages are still being constrained by persistent inflation, with insurance and mortgage costs a major contributor to annual rises in household living costs.



## East vs West

Diverging property price dynamics will have downstream impacts on investor arrears as capital growth prospects shift across the country with house price growth in Perth outstripping the larger capital cities.

# S&P Global Ratings Economic Outlook: Australia

	2024f	2025f	Outlook	Effect on credit quality
<b>Real GDP forecast (% year over year)</b>	1.1	2.5	We forecast weaker economic growth in 2024 because of the lagged effects of monetary policy and global economic conditions. But the general resilience of the Australian economy underpins positive, albeit weaker, GDP growth.	<b>Negative.</b> Households continue to prioritize debt commitments over discretionary spending, putting a drag on economic growth.
<b>Unemployment rate (year average; %)</b>	4.2	4.4	We forecast unemployment will continue to rise, but levels should remain low by historical standards and below pre-pandemic levels.	<b>Negative.</b> Strong labor market conditions have kept defaults low, but rising unemployment will put pressure on debt serviceability for some borrowers.
<b>CPI (%)</b>	3.8	3.3	Whilst easing, inflation is likely to take some time to fall back within the 2%-3% target range in 2026.	<b>Negative.</b> Inflationary pressures erode real income. This affects lower-income households disproportionately. Inflation's stickiness will dampen household budgets.
<b>Policy rate, end of year (%)</b>	4.35	3.85	We expect the cash rate to remain at 4.35% in 2024 as inflationary pressures persist.	<b>Neutral.</b> Higher unemployment in the context of interest rates remaining higher for longer, will put pressure on arrears. Given that arrears are a lagging indicator, this will take time to flow through.

f--Forecast. CPI--Consumer price index. Source: S&P Global Ratings.

# Australian RMBS State Of Play

- Across the RMBS sector, strong new issuance activity continues to dilute the SPIN index, masking debt serviceability pressures.
- Low arrears continue to be underpinned by low unemployment, refinancing opportunities, and property price dynamics. Also, borrowers have been prudent in curtailing expenditures to service their debts.
- Mortgage arrears are one of the last places where financial pressure manifests. Homeowners, especially owner-occupiers, will prioritize most other expenditures to ensure mortgage repayments are paid on time. This cautionary behavior is helping to keep arrears low overall.
- Household incomes have been helped more recently by tax cuts and wage growth. Inflationary pressures persist though, particularly for non-discretionary items like insurance premiums, which increased by 14% year-on-year, according to the Australian Bureau of Statistics.
- The household savings ratio has fallen to 0.90% but the household share of redraws and offsets continues to grow as borrowers utilize these products to ease debt serviceability burdens.
- Redraw facilities enable borrowers to take repayment holidays if they are ahead on their home loan repayments; offsets reduce interest burdens. This flexibility can help borrowers better manage their cash flow in more stressful periods.
- While we expect unemployment to rise, it will likely remain below pre-pandemic levels. Property price growth also affords existing homeowners greater agency in self-managing their way out of any financial stress.
- Higher unemployment will flow through to higher arrears. But as long as unemployment remains low overall, we don't expect these arrears increases to be material.

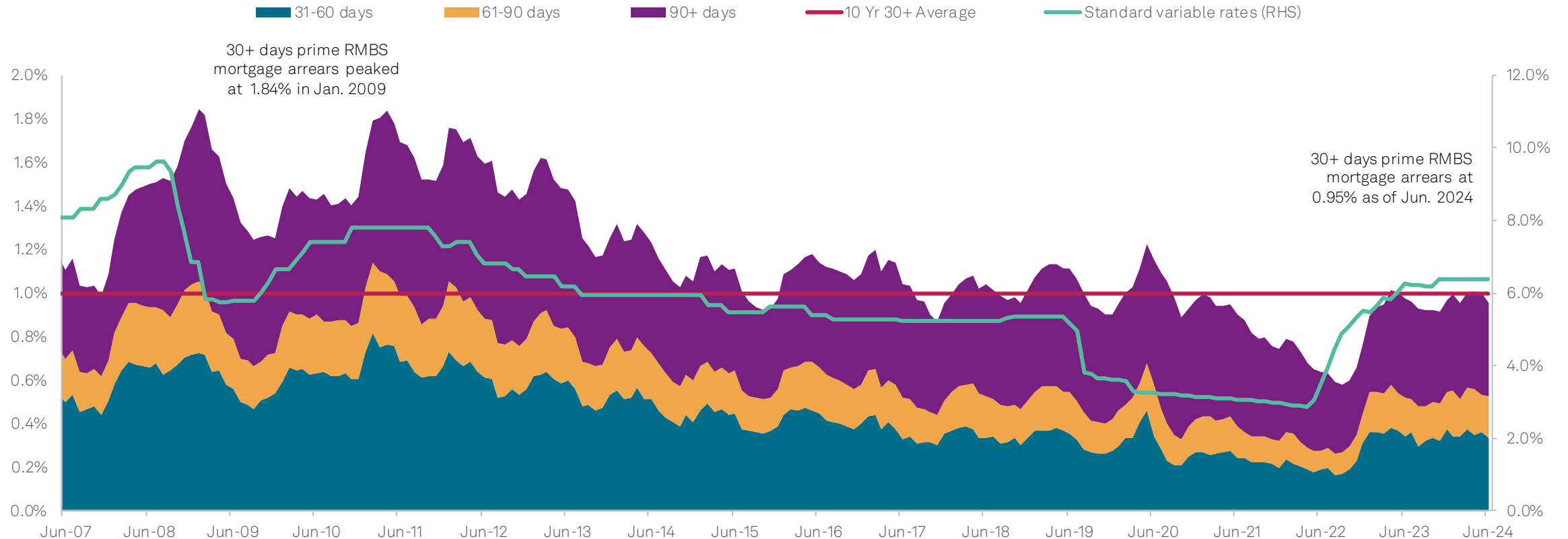
# Australian RMBS Performance

# Performance Observations: What To Expect

- **Prime arrears:** As of June 2024, prime RMBS arrears were 0.95%, down from 0.98% in Q1. Strong new issuance activity is diluting the SPIN, masking debt serviceability pressures. We expect upward pressure on arrears as the unemployment rate rises. Arrears increases are likely to be modest, though, because unemployment is forecast to remain low overall.
- **Nonconforming arrears:** Nonconforming arrears were 4.04% in Q2, up from 3.47% in Q1. Nonconforming arrears will continue to grow faster than prime arrears, given the sector's greater sensitivity to weaker economic conditions. Property price growth will help to minimize losses.
- **Investor versus owner-occupier prime arrears:** Investor arrears were at 0.79% in Q2 compared with 1.09% for owner-occupiers. While we expect both investor and owner-occupier arrears to increase, investor arrears increases are likely to be offset by higher rentals and rising property prices, to some extent.
- **Prepayment rates:** Prepayment rates rose in Q2 for prime but fell for nonconforming. We expect prepayment rates for prime to remain around long-term averages as competition eases and interest rates stabilize. Given nonconforming borrowers' larger loan sizes and higher leverage levels, this is likely to constrain refinancing prospects more for these borrowers, adding more downward pressure to prepayment rates for this sector.
- **Losses:** Exposure to loans with an LTV ratio greater than 80% is about 6% for the prime RMBS sector and 10% for the nonconforming RMBS sector. This modest exposure will minimize losses in the event of borrower default, particularly amid rising property prices.
- **Ratings outlook:** Broadly stable. Senior tranches are benefitting from the buildup of credit support, enhanced by strong prepayment rates. Structural features are also enhancing ratings stability in many transactions.

# Strong New Issuance Activity Masks Debt Serviceability Pressures

Prime RMBS loans more than 30 days in arrears (%)



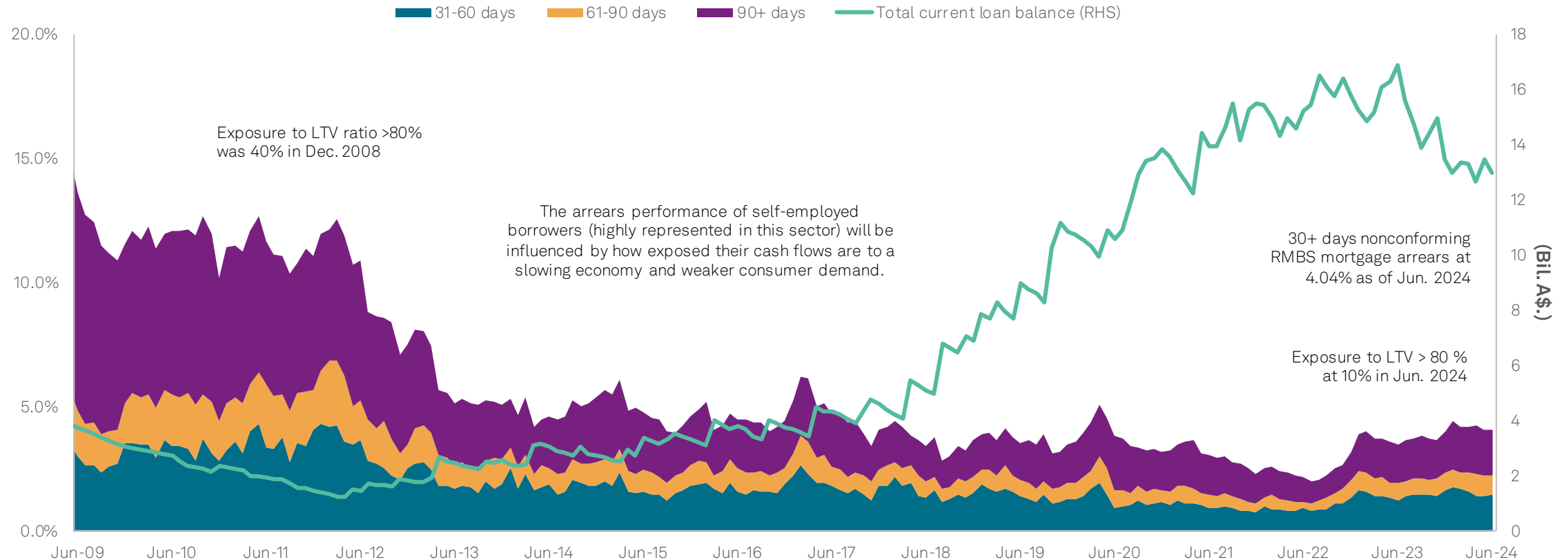
Prime data SPIN shown excludes noncapital market issuance transactions. Prime RMBS arrears exclude noncapital market issuance transactions. Standard variable rates are based on outstanding mortgages.

Sources: Reserve Bank of Australia. S&P Global Ratings.



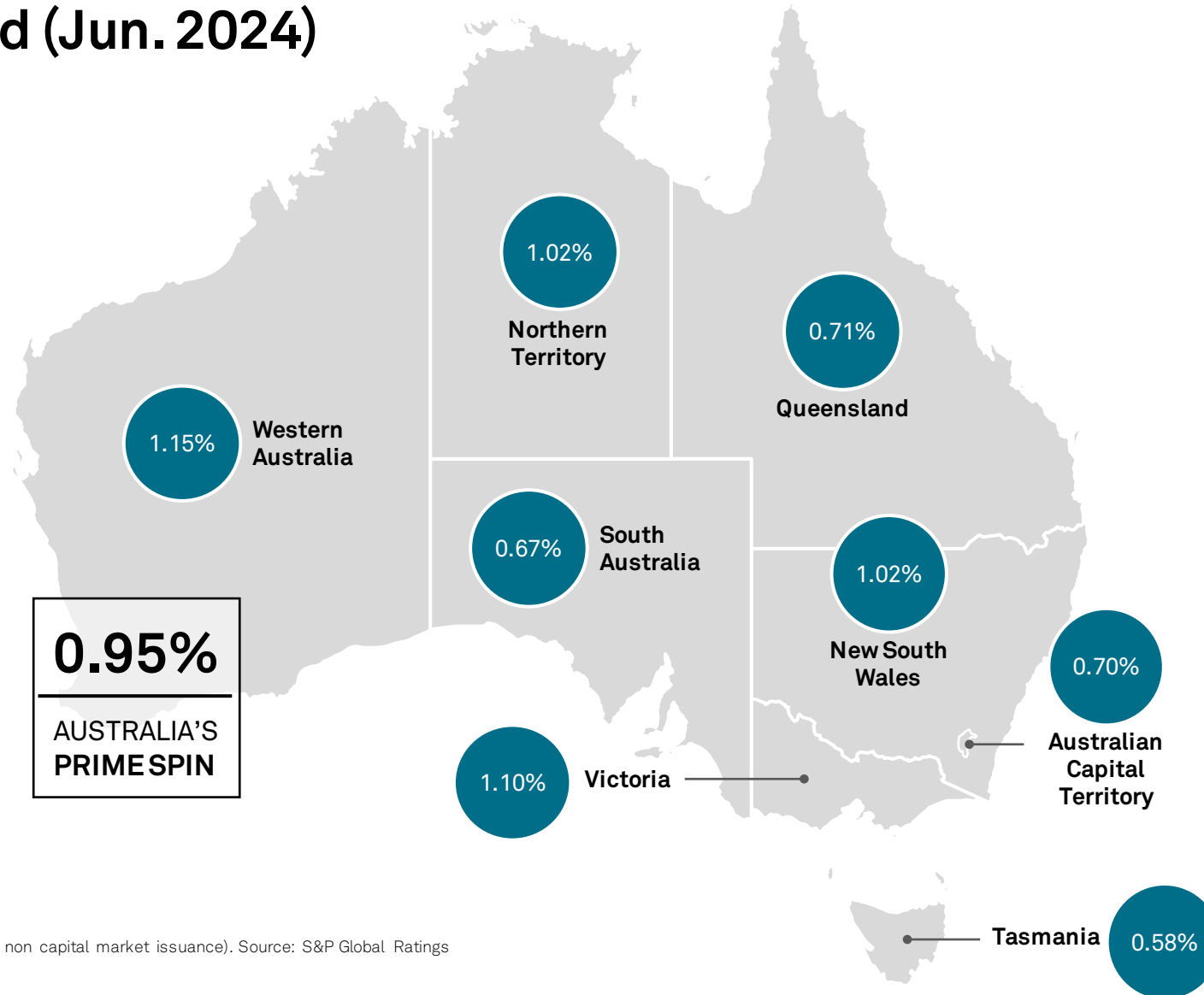
# Nonconforming Arrears Should Rise As Prepayments Decline

Nonconforming RMBS loans more than 30 days in arrears



LTV--Loan to value ratio. Bil.--Billion. A\$--Australian dollar. Source: S&P Global Ratings.

# State Arrears Trend (Jun. 2024)

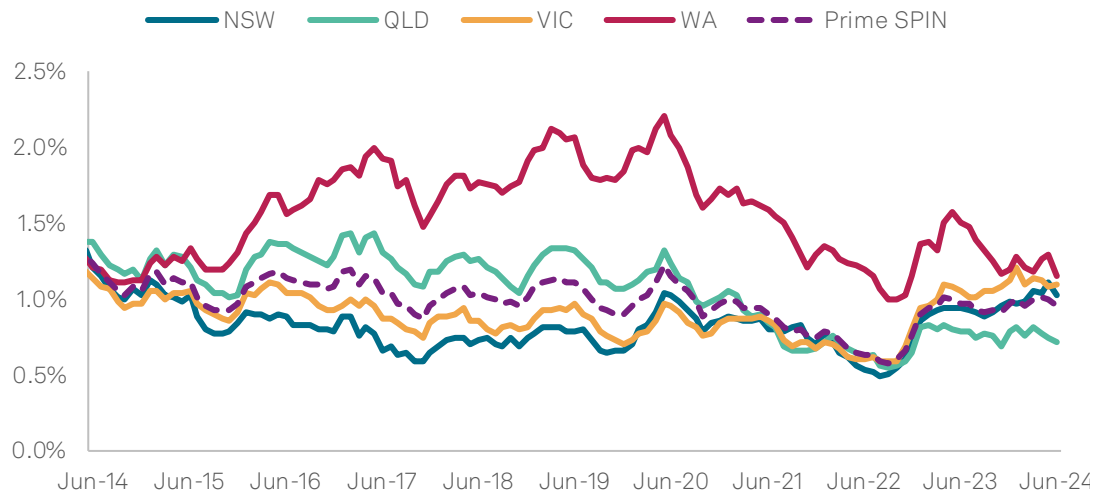


Data as of March 2024 based on prime RMBS loans (excluding non capital market issuance). Source: S&P Global Ratings

# Property Price Divergence And State Arrears

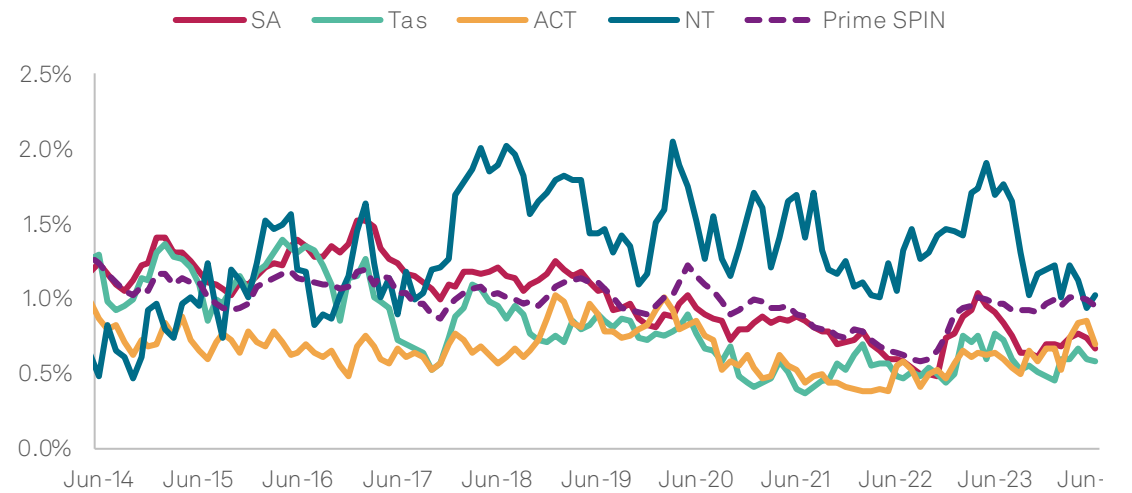
- New South Wales and Victoria, where property prices are moderating, have experienced the largest year-on-year arrears increases.
- Arrears have declined year on year in Queensland, Western Australia, and South Australia.
- Western Australia’s arrears have noticeably improved due to its stronger economic and property price growth.
- Rising property prices in these areas will be helping some borrowers, particularly investors, to cure their arrears positions through enhancing refinancing prospects or enabling the voluntary sale of properties due to equity build up.

State 30-plus days RMBS arrears (%)



Arrears based on loan balances in outstanding prime RMBS transactions rated by S&P Global Ratings. Source: S&P Global Ratings.

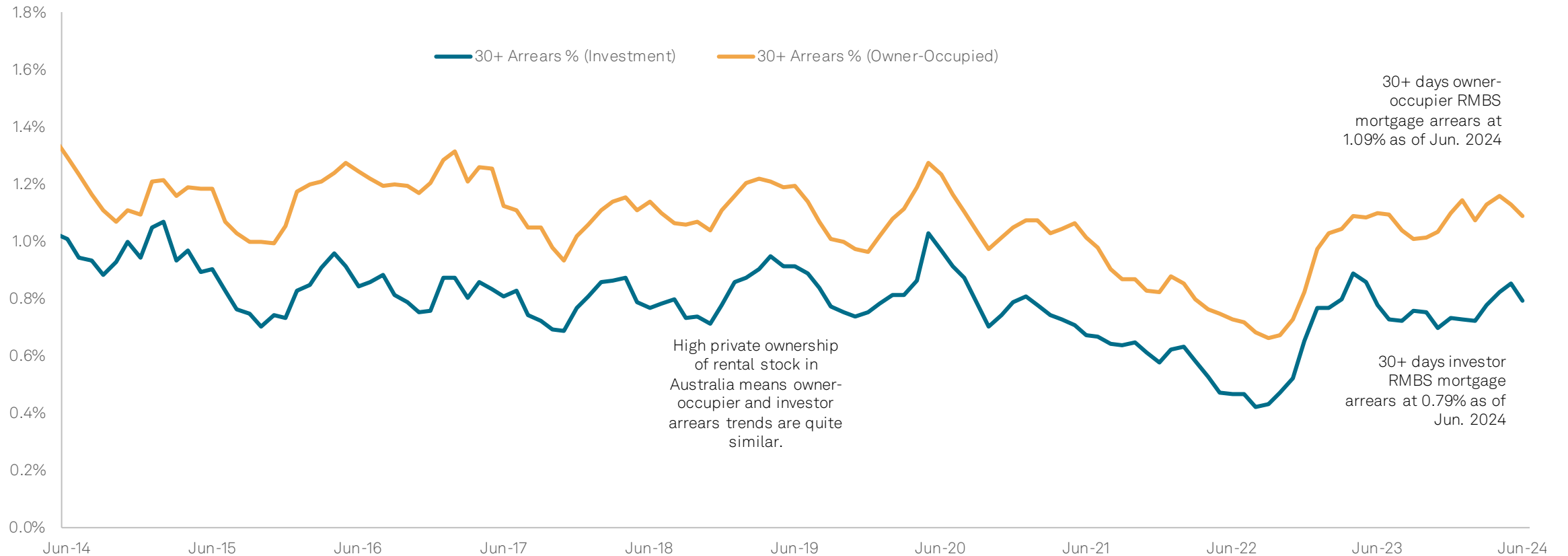
State 30-plus days RMBS arrears (%)



Arrears in NT and ACT are subject to greater volatility given the small size of loans outstandings. Arrears based on loan balances in outstanding prime RMBS transactions rated by S&P Global Ratings. Source: S&P Global Ratings.

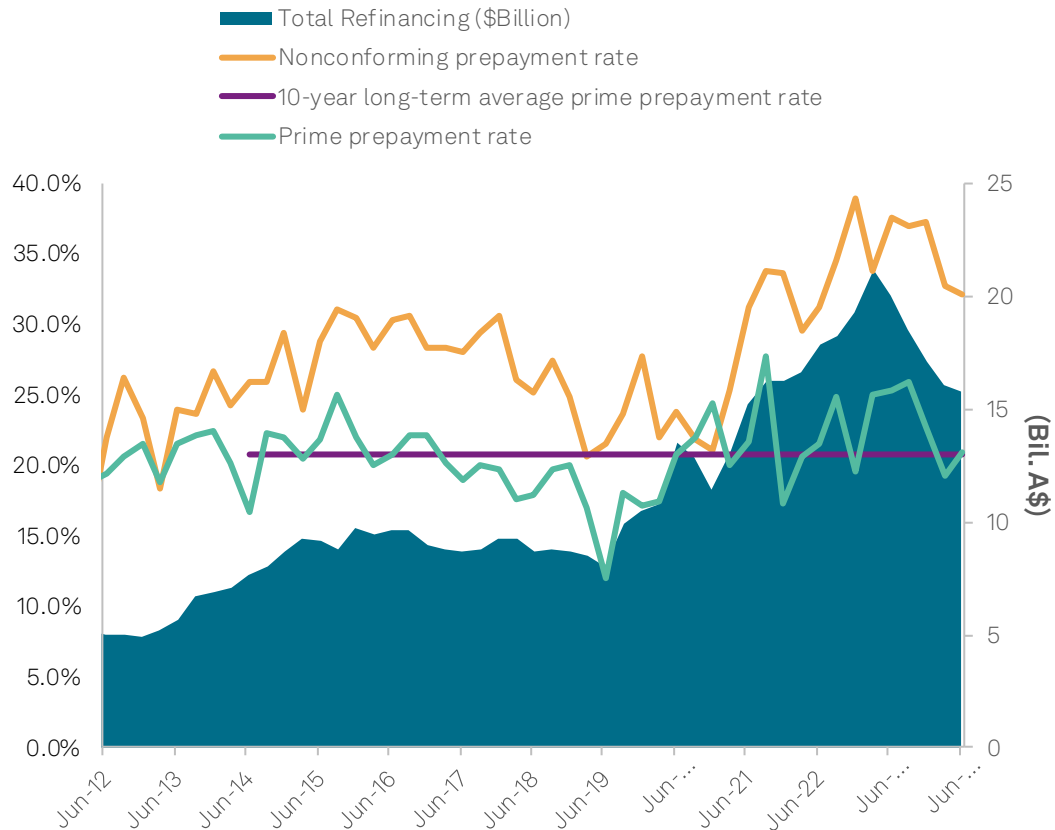
# Higher Property Prices And Rents Are Helping Investor Arrears

Investor and owner-occupier loans more than 30 days in arrears (%)



Source: S&P Global Ratings. Investor and Owner-Occupier arrears are included in prime RMBS transactions rated by S&P Global Ratings excluding non-capital market issuance transactions.

# Prime Prepayment Rates Return to Long-Term Averages



Source: S&P Global Ratings. Australian Bureau of Statistics.

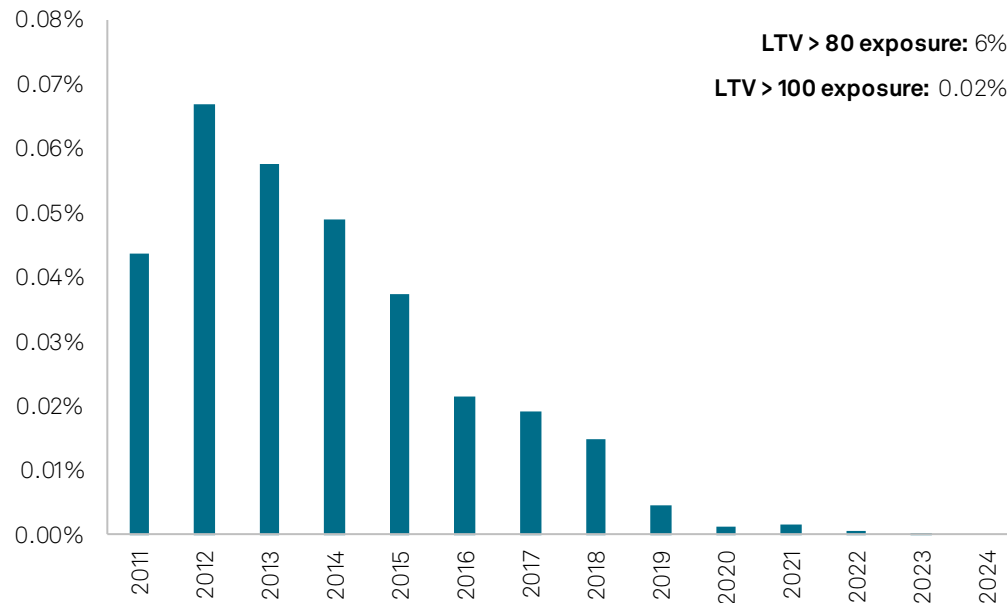
- Prime prepayment rates increased to 20.99% in Q2 from 19.32% in Q1.
- Nonconforming prepayment rates decreased to 32.18% in Q2 from 32.66% in Q1.
- Prepayment rates typically rise in Q2 so there is a cyclical element to this trend.
- Nonbanks' lower interest buffers used in debt serviceability assessments help them to underwrite larger loans than banks who are subject to APRA's 3% serviceability buffer.
- This, along with the stabilization in interest rates, is reducing the amount of refinancing activity from nonbank borrowers to banks.
- Forecast higher unemployment, slower economic growth, and cost-of-living pressures will dampen borrowers' ability to make additional repayments.
- This trend will be more pronounced in the nonconforming sector, given the more limited refinancing prospects of these borrower cohorts.

# Losses Less Likely With Rising Property Prices

RMBS sector's modest LTV ratio profile, low exposure to high LTV ratio loans, and continued property price growth will limit losses

## Cumulative gross loss by vintage of origination

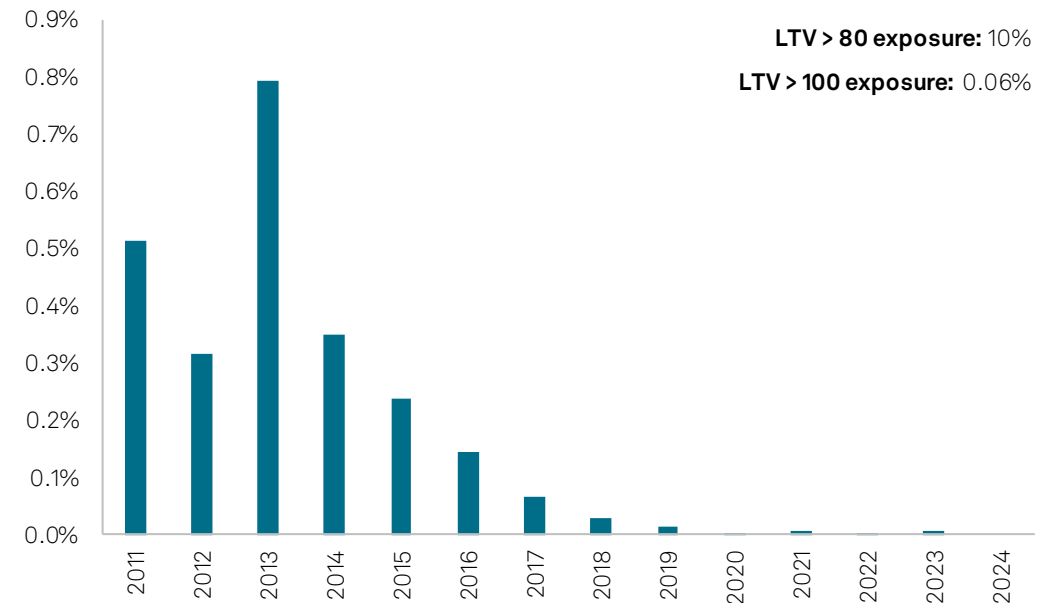
Prime RMBS (%)



LTV--Loan to value ratio. Source: S&P Global Ratings.

## Cumulative gross loss by vintage of origination

Nonconforming RMBS (%)



LTV--Loan to value ratio. Source: S&P Global Ratings.

# The 10 Worst-Performing Postcodes

State	Suburb	Postcode	Loans in arrears (%)
NSW	Casula	2170	3.16%
VIC	Craigieburn	3064	2.81%
NSW	Bateau Bay	2261	2.52%
QLD	Advancetown	4211	2.46%
VIC	Doreen	3754	2.40%
VIC	Burnside	3023	2.34%
NSW	Blacktown	2148	2.26%
NSW	Alison	2259	2.18%
WA	Armadale	6112	2.14%
NSW	Camden	2570	2.09%

Data as of Jun. 2024. For a full list of suburbs/localities attached to these postcodes, please refer to the Australia Post website. Postcode data is subject to greater volatility given the small sample size of loans in a postcode area. Source: S&P Global Ratings.

# SA4 Listing Arrears And Exposure

Geographic area map code	Regional name	State	30+ days arrears level Jun. 2024	Exposure across RMBS
101	Capital Region	NSW	1.08%	1.34%
102	Central Coast	NSW	1.27%	1.55%
103	Central West	NSW	0.74%	0.51%
104	Coffs Harbour - Grafton	NSW	0.98%	0.39%
105	Far West and Orana	NSW	0.83%	0.18%
106	Hunter Valley exc Newcastle	NSW	0.95%	1.49%
107	Illawarra	NSW	1.31%	1.97%
108	Mid North Coast	NSW	0.74%	0.49%
109	Murray	NSW	0.56%	0.72%
110	New England and North West	NSW	1.09%	0.26%
111	Newcastle and Lake Macquarie	NSW	0.59%	1.58%
112	Richmond - Tweed	NSW	1.29%	1.06%
113	Riverina	NSW	2.27%	0.09%
114	Southern Highlands and Shoalhaven	NSW	1.45%	0.26%
115	Sydney - Baulkham Hills and Hawkesbury	NSW	0.83%	2.01%
116	Sydney - Blacktown	NSW	1.14%	2.42%
117	Sydney - City and Inner South	NSW	0.62%	2.94%
118	Sydney - Eastern Suburbs	NSW	0.52%	0.78%
119	Sydney - Inner South West	NSW	1.58%	3.19%
120	Sydney - Inner West	NSW	0.74%	1.17%
121	Sydney - North Sydney and Hornsby	NSW	0.76%	2.10%
122	Sydney - Northern Beaches	NSW	0.49%	1.33%

Geographic area map code	Regional name	State	30+ days arrears level Jun. 2024	Exposure across RMBS
123	Sydney - Outer South West	NSW	1.50%	1.16%
124	Sydney - Outer West and Blue Mountains	NSW	1.22%	0.91%
125	Sydney - Parramatta	NSW	1.15%	2.14%
126	Sydney - Ryde	NSW	1.09%	0.50%
127	Sydney - South West	NSW	1.53%	0.93%
128	Sydney - Sutherland	NSW	0.59%	0.85%
201	Ballarat	Vic	1.02%	0.76%
202	Bendigo	Vic	0.66%	0.35%
203	Geelong	Vic	0.44%	1.28%
204	Hume	Vic	1.17%	0.30%
205	Latrobe - Gippsland	Vic	1.18%	0.69%
206	Melbourne - Inner	Vic	0.85%	4.43%
207	Melbourne - Inner East	Vic	0.58%	1.70%
208	Melbourne - Inner South	Vic	0.71%	2.08%
209	Melbourne - North East	Vic	1.16%	2.65%
210	Melbourne - North West	Vic	1.80%	1.24%
211	Melbourne - Outer East	Vic	0.96%	2.39%
212	Melbourne - South East	Vic	1.45%	2.57%
213	Melbourne - West	Vic	1.36%	2.92%
214	Mornington Peninsula	Vic	0.92%	1.28%
215	North West	Vic	1.12%	0.12%
216	Shepparton	Vic	1.35%	0.11%

Source: S&P Global Ratings Data as of Jun. 2024.. Loan level data is based on loans underlying prime RMBS transactions rated by S&P Global Ratings.



# SA4 Listing Arrears And Exposure

Geographic area map code	Regional name	State	30+ days arrears level Jun. 2024	Exposure across RMBS
217	Warrnambool and South West	Vic	1.34%	0.18%
301	Brisbane - East	Qld	0.79%	1.51%
302	Brisbane - North	Qld	0.64%	2.13%
303	Brisbane - South	Qld	0.53%	2.88%
304	Brisbane - West	Qld	0.61%	1.28%
305	Brisbane Inner City	Qld	0.50%	0.94%
306	Cairns	Qld	1.03%	0.73%
307	Darling Downs - Maranoa	Qld	0.62%	0.92%
308	Fitzroy	Qld	1.28%	0.71%
309	Gold Coast	Qld	0.82%	3.52%
310	Ipswich	Qld	1.26%	1.36%
311	Logan - Beaudesert	Qld	1.09%	0.72%
312	Mackay	Qld	0.97%	0.56%
313	Moreton Bay - North	Qld	0.94%	1.42%
314	Moreton Bay - South	Qld	0.48%	0.71%
315	Queensland - Outback	Qld	2.67%	0.11%
316	Sunshine Coast	Qld	0.59%	1.76%
317	Toowoomba	Qld	3.06%	0.01%
318	Townsville	Qld	0.96%	0.79%
319	Wide Bay	Qld	1.00%	0.57%
401	Adelaide - Central and Hills	SA	0.67%	1.57%
402	Adelaide - North	SA	0.66%	1.29%

Geographic area map code	Regional name	State	30+ days arrears level Jun. 2024	Exposure across RMBS
403	Adelaide - South	SA	0.48%	1.42%
404	Adelaide - West	SA	0.49%	0.83%
405	Barossa - Yorke - Mid North	SA	1.35%	0.15%
406	South Australia - Outback	SA	0.78%	0.13%
407	South Australia - South East	SA	1.21%	0.34%
501	Bunbury	WA	0.88%	0.43%
502	Mandurah	WA	1.71%	0.31%
503	Perth - Inner	WA	0.82%	0.87%
504	Perth - North East	WA	1.43%	1.12%
505	Perth - North West	WA	1.24%	1.70%
506	Perth - South East	WA	1.29%	1.75%
507	Perth - South West	WA	1.00%	1.44%
508	Western Australia - Outback	WA	1.73%	0.29%
509	Western Australia - Wheat Belt	WA	2.19%	0.12%
601	Hobart	Tas	0.62%	1.01%
602	Launceston and North East	Tas	0.46%	0.38%
603	South East	Tas	1.77%	0.03%
604	West and North West	Tas	0.64%	0.25%
701	Darwin	NT	0.89%	0.54%
702	Northern Territory - Outback	NT	2.41%	0.08%
801	Australian Capital Territory	ACT	0.63%	1.92%

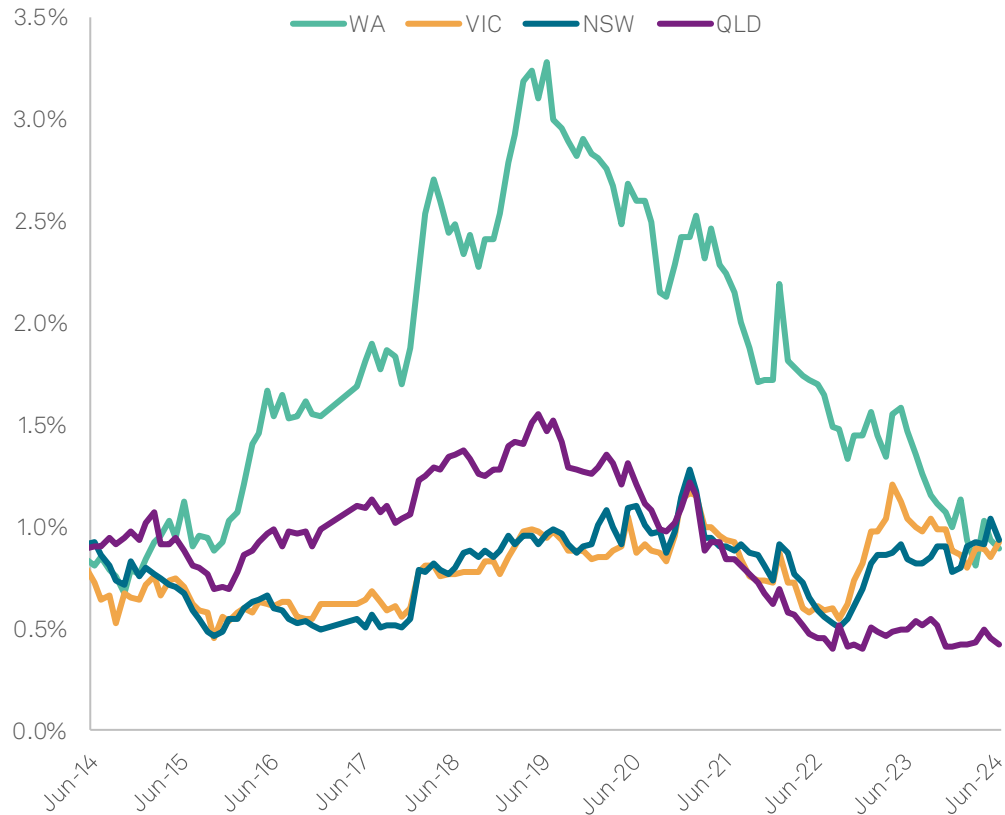
Source: S&P Global Ratings Data as of Jun. 2024.. Loan level data is based on loans underlying prime RMBS transactions rated by S&P Global Ratings.

# Hot Topics

Investor Arrears and Property Price  
Dynamics

# Investor Arrears Diverge

Investor loans more than 30 days in arrears (%)

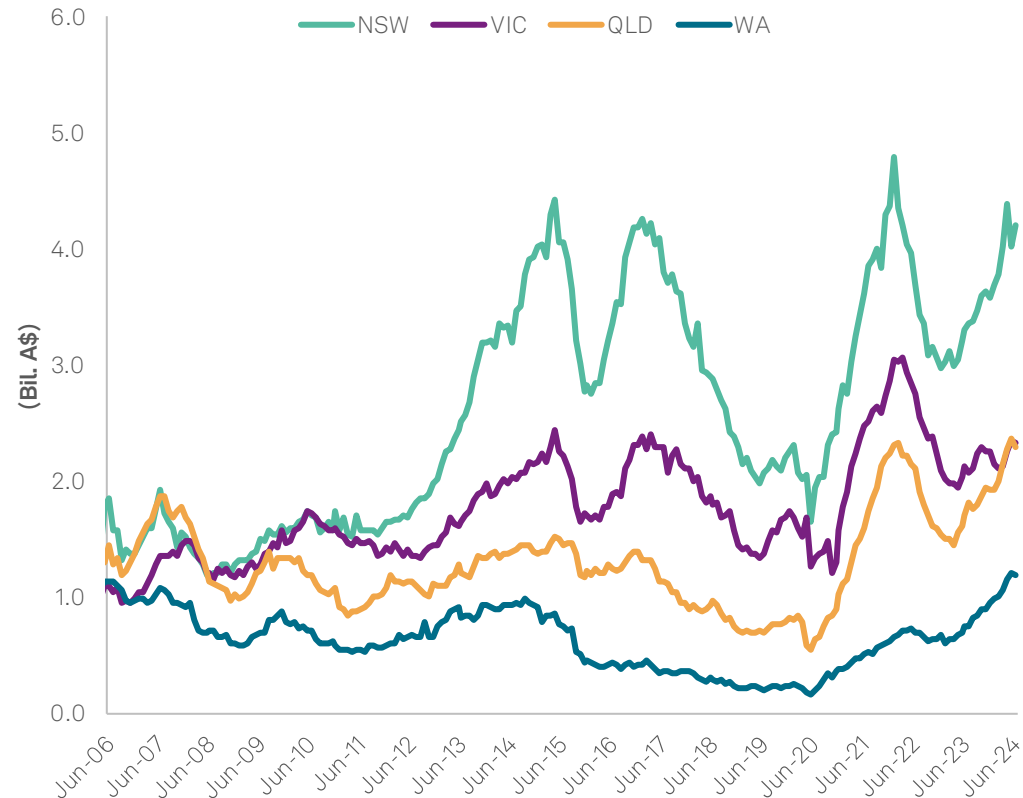


S&P Global Ratings. Investment loans in arrears are based on loans in Australian RMBS transactions rated by S&P Global Ratings.

- Investor arrears have fallen in Western Australia and Queensland as property prices have risen.
- Investor arrears in New South Wales and Victoria are rising faster than in other states.
- Rising arrears in New South Wales and Victoria partly reflect greater levels of leverage required to access property markets relative to income, and higher property taxes adding to cash flow pressures.
- A long-awaited recovery in Western Australia's property prices has helped improve a prolonged period of higher arrears by enabling more borrowers to sell properties without realizing a loss.
- Arrears are typically more volatile in Western Australia given its smaller size and greater reliance on a few key industries for employment.
- When property prices are rising, investors can more easily sell in the event of financial pressure, given that the property is not their primary place of residence.

# Investor Lending Is Gathering Pace, Except In Victoria

New loan commitments for investor housing

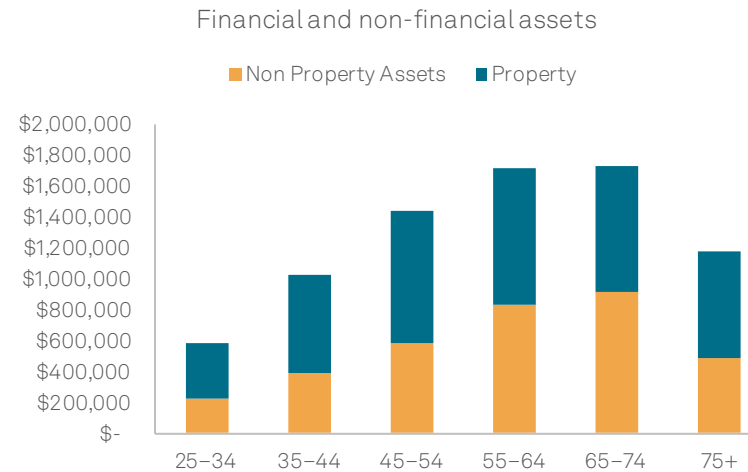
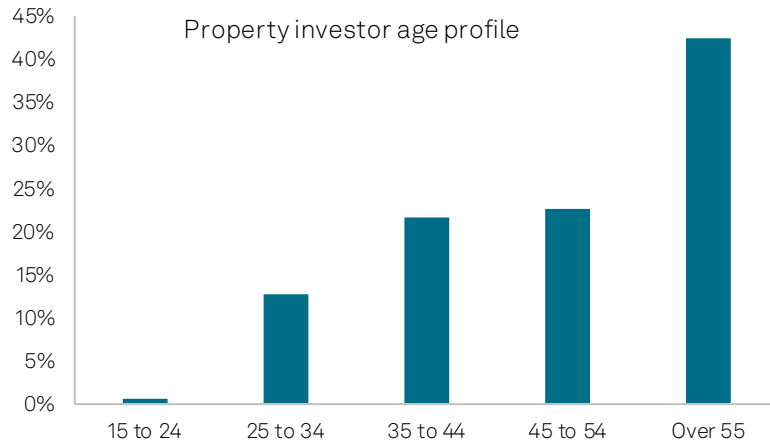
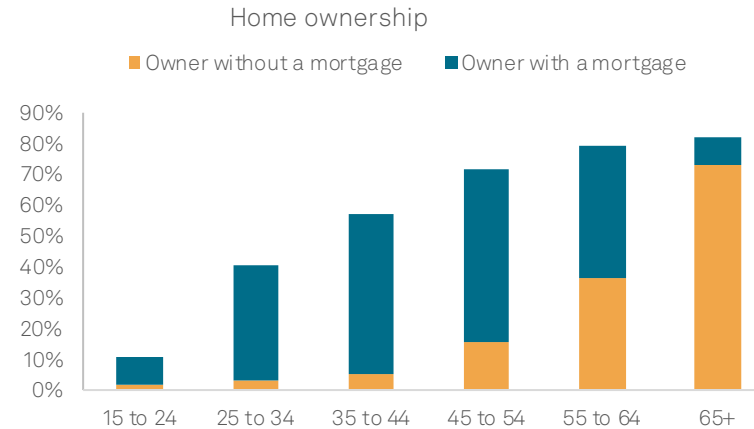
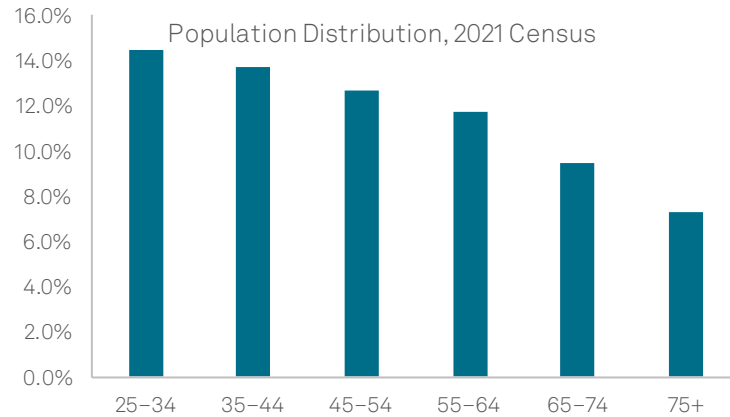


Source: Australian Bureau of Statistics

- Investor housing finance is gathering pace in most states as enthusiasm for capital gains builds with expectations of interest rate cuts.
- Victoria's higher property taxes are likely to be dampening property sentiment, reducing demand for investor finance.
- Reduced demand for investment financing in Victoria is influencing property price dynamics across the states, with Brisbane's median property price now higher than Melbourne's, as property investors look further afield for capital gains.
- Over 60% of property investors reside in New South Wales or Victoria according to the Australian Bureau of Statistics.
- Across the Australian RMBS sector, around 25% of investment properties are in Queensland, versus 34% in New South Wales and 26% in Victoria.

# Demographic and Intergenerational Wealth Profiles

## Wealth, home-ownership and demographic profiles



- Mature age cohorts are more highly represented in investor property ownership.
- A large proportion of the total assets of mature age cohorts is invested in property.
- Investor behaviour has a large influence on property price dynamics given the high level of private ownership of rental stock in Australia.
- Investor loans make up around 36% of loans underlying Australian RMBS transactions.
- The figure is higher in nonbank transactions, at around 47%.
- Lower arrears in nonbank transactions partly reflects their greater exposure to investor loans.

Sources: Australian Bureau of Statistics, S&P Global Ratings. Note. S&P Global Ratings. Data is from the Australian Bureau of Statistics Housing Occupancy and Costs., and Household Income and Wealth, 2019-2020 (latest published series available).

# New Zealand

# S&P Global Ratings Economic Outlook

	2024f	2025f	Outlook	Effect on credit quality
<b>Real GDP forecast (% year over year)</b>	1.1	2.5	Higher interest rates are dragging on consumer demand. High frequency indicators point to a material weakening in economic activity according to the Reserve Bank of New Zealand.	<b>Negative.</b> New Zealand's earlier commencement of its tightening cycle have slowed the economy down with flow-on effects to household demand and property markets.
<b>Unemployment rate (year average; %)</b>	4.5	4.7	Unemployment is forecast to rise as the economy weakens and public sector job losses materialize.	<b>Negative.</b> Rising unemployment will lead to higher arrears, albeit off a low base in New Zealand.
<b>CPI (%)</b>	3.0	2.3	Inflation is returning to within its target range. We do not forecast inflation to return to its target range until 2025.	<b>Neutral to negative.</b> Higher inflation erodes real wages. Wage increases will support debt serviceability, but this will be offset by rising mortgage rates.
<b>Policy rate, end of year (%)</b>	5.00	4.25	The Reserve Bank of New Zealand lowered the cash rate to 5.25% in August.	<b>Neutral.</b> A lowering in the cash rate will be positive for debt serviceability to the extent it is passed on to borrowers.

f--Forecast. CPI--Consumer price index. Source: S&P Global Ratings.

# Debt Serviceability Pressures Likely To Ease With Rate Cuts In Play

- According to the Reserve Bank of New Zealand, further reductions in mortgage rates are likely to flow through to the household sector relatively quickly as more households are choosing shorter pricing tenors.
- The share of income required to service mortgages is around 50%, up from 30% during the pandemic. This varies across the country and is higher in Auckland.
- The housing market recovery has lost momentum, with higher interest rates constraining affordability, and sentiment low with rising unemployment and sluggish economic growth.
- We expect house prices to continue their mid-single digit recovery over the next two years. Ongoing supply shortages, the loosening of monetary policy, and a slight loosening of macroprudential lending restrictions should continue to support the recovery in property prices in New Zealand under our base case (see “Banking Industry Country Risk Assessment: New Zealand,” published May 14, 2024).
- RMBS issuance has been constrained by subdued housing lending growth. Banks remain the dominant lenders in the residential mortgage space. Nonbanks occupy a small share and typically target more niche borrower segments.
- Subdued consumer spending due to higher interest rates may also slow ABS issuance. But the short tenors of ABS securities means a more frequent cadence of issuance is possible.



# RMBS Sector Performance Remains Stable

- The credit quality of the New Zealand RMBS sector is strong, as indicated by:
  - A weighted-average LTV ratio of 53.02%.
  - An average loan size of NZ\$326,030.
  - A weighted-average seasoning of 55 months.
  - Low levels of arrears in most portfolios.
- All losses to date have been fully covered by excess spread or lenders' mortgage insurance.
- Given the small overall pool of loans across the New Zealand RMBS sector, arrears movements are subject to greater volatility.

# RMBS Analytical Contacts

Erin Kitson

**Primary Analyst | Sector Specialist Research**

[erin.kitson@spglobal.com](mailto:erin.kitson@spglobal.com)

Kate Thomson

**Analytical Manager**

[kate.thomson@spglobal.com](mailto:kate.thomson@spglobal.com)

Narelle Coneybeare

**Sector Lead**

[narelle.coneybeare@spglobal.com](mailto:narelle.coneybeare@spglobal.com)

Elizabeth Steenson

**Lead Analyst**

[elizabeth.steenson@spglobal.com](mailto:elizabeth.steenson@spglobal.com)

Alisha Treacy

**Lead Analyst**

[alisha.treacy@spglobal.com](mailto:alisha.treacy@spglobal.com)

Timothy Bartl

**Lead Analyst**

[timothy.bartl@spglobal.com](mailto:timothy.bartl@spglobal.com)

Paul Prajogo

**Lead Analyst**

[paul.prajogo@spglobal.com](mailto:paul.prajogo@spglobal.com)

# How To Access RMBS Performance Watch

RMBS Performance Watch including arrears, prepayment, and pool statistics data can be accessed using the link below:



Copyright © 2024 by Standard & Poor's Financial Services LLC. All rights reserved.

No content (including ratings, credit-related analyses and data, valuations, model, software or other application or output therefrom) or any part thereof (Content) may be modified, reverse engineered, reproduced or distributed in any form by any means, or stored in a database or retrieval system, without the prior written permission of Standard & Poor's Financial Services LLC or its affiliates (collectively, S&P). The Content shall not be used for any unlawful or unauthorized purposes. S&P and any third-party providers, as well as their directors, officers, shareholders, employees or agents (collectively S&P Parties) do not guarantee the accuracy, completeness, timeliness or availability of the Content. S&P Parties are not responsible for any errors or omissions (negligent or otherwise), regardless of the cause, for the results obtained from the use of the Content, or for the security or maintenance of any data input by the user. The Content is provided on an "as is" basis. S&P PARTIES DISCLAIM ANY AND ALL EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE, FREEDOM FROM BUGS, SOFTWARE ERRORS OR DEFECTS, THAT THE CONTENT'S FUNCTIONING WILL BE UNINTERRUPTED, OR THAT THE CONTENT WILL OPERATE WITH ANY SOFTWARE OR HARDWARE CONFIGURATION. In no event shall S&P Parties be liable to any party for any direct, indirect, incidental, exemplary, compensatory, punitive, special or consequential damages, costs, expenses, legal fees, or losses (including, without limitation, lost income or lost profits and opportunity costs or losses caused by negligence) in connection with any use of the Content even if advised of the possibility of such damages.

Credit-related and other analyses, including ratings, and statements in the Content are statements of opinion as of the date they are expressed and not statements of fact. S&P's opinions, analyses, and rating acknowledgment decisions (described below) are not recommendations to purchase, hold, or sell any securities or to make any investment decisions, and do not address the suitability of any security. S&P assumes no obligation to update the Content following publication in any form or format. The Content should not be relied on and is not a substitute for the skill, judgment and experience of the user, its management, employees, advisors and/or clients when making investment and other business decisions. S&P does not act as a fiduciary or an investment advisor except where registered as such. While S&P has obtained information from sources it believes to be reliable, S&P does not perform an audit and undertakes no duty of due diligence or independent verification of any information it receives. Rating-related publications may be published for a variety of reasons that are not necessarily dependent on action by rating committees, including, but not limited to, the publication of a periodic update on a credit rating and related analyses.

To the extent that regulatory authorities allow a rating agency to acknowledge in one jurisdiction a rating issued in another jurisdiction for certain regulatory purposes, S&P reserves the right to assign, withdraw, or suspend such acknowledgement at any time and in its sole discretion. S&P Parties disclaim any duty whatsoever arising out of the assignment, withdrawal, or suspension of an acknowledgment as well as any liability for any damage alleged to have been suffered on account thereof.

S&P keeps certain activities of its business units separate from each other in order to preserve the independence and objectivity of their respective activities. As a result, certain business units of S&P may have information that is not available to other S&P business units. S&P has established policies and procedures to maintain the confidentiality of certain nonpublic information received in connection with each analytical process.

S&P may receive compensation for its ratings and certain analyses, normally from issuers or underwriters of securities or from obligors. S&P reserves the right to disseminate its opinions and analyses. S&P's public ratings and analyses are made available on its Web sites, [www.spglobal.com/ratings](http://www.spglobal.com/ratings) (free of charge) and [www.ratingsdirect.com](http://www.ratingsdirect.com) (subscription) and may be distributed through other means, including via S&P publications and third-party redistributors. Additional information about our ratings fees is available at [www.spglobal.com/ratings/usratingsfees](http://www.spglobal.com/ratings/usratingsfees).

Australia: S&P Global Ratings Australia Pty Ltd holds Australian financial services license number 337565 under the Corporations Act 2001. S&P Global Ratings' credit ratings and related research are not intended for and must not be distributed to any person in Australia other than a wholesale client (as defined in Chapter 7 of the Corporations Act).

STANDARD & POOR'S, S&P and RATINGSDIRECT are registered trademarks of Standard & Poor's Financial Services LLC.

## **spglobal.com/ratings**

**S&P Global**  
Ratings