

SECTOR IN-DEPTH

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RMBS - Australia

Mortgage Delinquency Map: Home Loan Arrears Rising in All Australian States

Summary

- » Delinquencies increased Australia-wide: The proportion of Australian residential mortgages that were more than 30 days in arrears (30+ delinquency rate) increased to 1.52% in November 2016 from 1.20% in November 2015. Mortgage delinquencies increased in all eight Australian states and territories over the year to November 2016, hitting record highs in Western Australia, South Australia and the Northern Territory. A significant portion of the increase in delinquencies can be attributed to the inclusion of loans under hardship arrangements in the calculation of delinquency rates, but delinquencies increased irrespective of this development.
- » Delinquencies highest in Western Australia, lowest in NSW and ACT: Western Australia had the highest 30+ delinquency rate of any state or territory in Australia. The Western Australian economy is heavily reliant on the resources sector and growth has slowed since the end of the mining boom. The Australian Capital Territory (ACT) had the lowest 30+ delinquency rate. Mortgage performance in New South Wales (NSW) was also relatively strong, despite an increase in delinquencies over the year to November 2016. Over the four years to November 2016, delinquencies in NSW have fallen notably, a decline that has coincided with the run-up in home prices in Sydney.
- » Mining regions dominate worst performing areas, Sydney suburbs top best-performing list: Regions in Western Australia and Queensland with exposure to the resource and mining sectors dominated the list of areas with the highest delinquencies. Suburbs in Sydney where housing market and economic conditions were the most supportive for mortgage borrowers topped the list of best-performing areas.
- » Delinquencies will continue to increase: We expect mortgage delinquencies to continue to increase over 2017. Weaker conditions in states reliant on the mining industry, high underemployment, and less favourable housing and income dynamics will drive delinquencies higher.

Our semi-annual delinquency map report provides a detailed analysis of the rate of residential mortgage arrears at a national, regional and postcode level in Australia. The report is based on the data contained in our supplementary excel report, titled "<u>Australian Residential Mortgage Delinquency Map – November 2016</u>" published on 6 April 2017.

NATIONAL PERFORMANCE

Delinquencies increased Australia-wide

The proportion of Australian residential mortgages that were more than 30 days in arrears increased to 1.52% in November 2016 from 1.20% in November 2015. ¹ Higher delinquencies raise the risk of mortgage defaults and are therefore credit negative for Australian residential mortgage-backed securities (RMBS).

Mortgage delinquencies increased in all eight Australian states and territories over the year to November 2016, hitting record highs in Western Australia, South Australia and the Northern Territory (Exhibit 1).

A significant portion of the increase in delinquencies can be attributed to the inclusion of loans under hardship arrangements - loans where repayments are temporarily postponed or reduced - in the calculation of delinquency rates by some lenders (see highlight box). However, delinquencies increased irrespective of this development.

Exhibit 1
30+ Delinquency Rate for Australian States and Territories

State/Territory	2010	2011	2012	Nov-13	Nov-14	Nov-15	Nov-16	Nov-16 - Nov-15 Change (% pts)
Western Australia	1.44%	2.14%	1.82%	1.38%	1.23%	1.71%	2.76%	1.05
Northern Territory	0.56%	0.94%	0.75%	0.88%	0.49%	0.98%	2.23%	1.25
South Australia	0.97%	1.42%	1.58%	1.43%	1.54%	1.63%	2.16%	0.53
Tasmania	1.05%	1.60%	1.44%	1.17%	1.12%	1.68%	1.84%	0.16
Queensland	1.30%	2.17%	1.98%	1.36%	1.41%	1.37%	1.75%	0.38
Victoria	1.05%	1.43%	1.51%	1.10%	1.18%	1.19%	1.43%	0.24
New South Wales	1.62%	2.02%	1.99%	1.24%	1.02%	0.85%	0.94%	0.09
Australian Capital Territory	0.57%	1.00%	0.83%	0.68%	0.76%	0.82%	0.91%	0.09
Australia	1.33%	1.87%	1.81%	1.24%	1.19%	1.20%	1.52%	0.32

Source: Moody's Investors Service; periodic investor/servicer reports

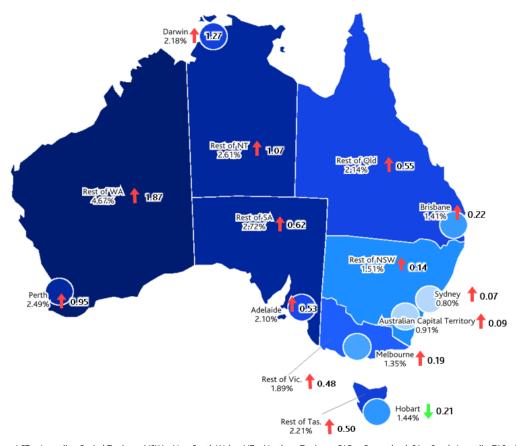
In each state and territory, delinquency rates were lower in capital cities than other regions, reflecting the higher levels of economic diversity and employment stability in city areas (Exhibit 2).

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Exhibit 2

30+ Delinquency Rates for Capital Cities, and Other Parts of Each State





Note: ACT = Australian Capital Territory; NSW = New South Wales; NT = Northern Territory; QLD = Queensland; SA = South Australia; TAS = Tasmania; VIC = Victoria; and WA = Western Australia.

Source: Moody's Investors Service; periodic investor/servicer reports

Delinquencies highest in Western Australia, lowest in NSW and ACT

Western Australia was the worst performing state in November 2016, with the 30+ delinquency rate in this state climbing to 2.76%, the highest since our records began in 2005. Relatively poorer economic and housing market conditions in Western Australia contributed to record mortgage delinquencies.

The Western Australian economy is heavily reliant on the resources sector and growth has slowed over the past two to three years, following the end of the mining boom. Western Australia's final demand — a measure of domestic economic growth that excludes exports — fell sharply by 7.2% over the year to December 2016, owing to a significant decline in business investment and weak household consumption (Exhibit 3).

At 6.04%, the unemployment rate in Western Australia, which has increased notably since 2013, is higher than the national average of 5.87%. Average weekly wages in Western Australia were unchanged over the year to February 2017 compared with a national average increase of 1.55%. House prices in Perth fell by 4.46% over the year to February 2017 and have been in decline since June 2015.

Australia-wide average 6% 4.7% 3.2% % Change in Final Demand 2.3% 1.3% 0.4% -4% -3.8% ΥoΥ -6% -8% -7.2% New South Wales Victoria Tasmania South Australia Queensland Norther Territory Western Australia

Exhibit 3
Change in State Final Demand (year to December 2016)

Note: State final demand is a subset of Gross State Product (GSP) and includes: (1) general government final consumption expenditure; (2) household final consumption expenditure; (3) private gross capital formation; and (4) public gross capital formation. It differs from GSP in that it excludes exports and imports.

Source: Australian Bureau of Statistics 5206.0 - Australian National Accounts: National Income, Expenditure and Product

The 30+ delinquency rates in the Northern Territory (2.23%) and South Australia (2.16%) also hit record highs in November 2016. Final demand in the Northern Territory contracted 3.8% over the year to December 2016, the weakest performance in the country behind Western Australia. South Australia's final demand increased 1.3%, below the 1.6% national average. The populations in the Northern Territory and South Australia are both relatively small, and mortgages from this territory and state account for just 0.68% and 4.72% of the loans in the RMBS portfolio.

The ACT had the lowest 30+ delinquency rate (0.91%) of any state or territory in Australia in November 2016. A high proportion of borrowers in the ACT are employed by the government, which offers more secure and stable employment compared with jobs in the private sector. The ACT accounts for just 2.12% of the total loans in the RMBS we rate.

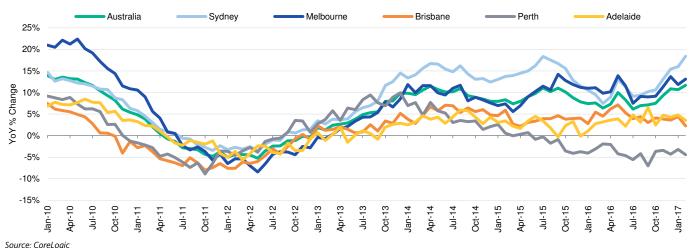
Mortgage performance in NSW — the state that accounts for the largest proportion (32.43%) of mortgage loans in the RMBS we rate — remains relatively strong, despite an increase in delinquencies over the year to November 2016. The 30+ delinquency rate in NSW increased 0.09 percentage points over the year, but at 0.94%, the rate remained at a historically low level for the state.

Over the four years to November 2016, delinquencies in NSW have fallen notably, a decline that has coincided with the run-up in house prices in Sydney. House prices in Sydney rose 18.41% over the year to February 2017, and 13.06% over the year to November 2016 (Exhibit 4).

Rising house prices have been supportive of mortgage performance because they give borrowers at risk of or already in arrears the option to sell their properties quickly for a good price to repay their loans. However, as house prices continue rising without a corresponding increase in income to pay for the more expensive houses, housing affordability decreases and the risk of delinquencies and defaults rises.

In addition to the supportive housing market, mortgage performance in NSW has benefitted from the good economic and labor market conditions in the state. Low interest rates and a weaker Australian dollar have resulted in strong household consumption, private investment and a pick-up in the education and tourism sectors in NSW. The state's final demand increased 4.7% over the year to December 2016, the strongest growth of any state or territory. The unemployment rate in NSW was 5.2% in February 2017, the lowest in Australia.

Exhibit 4 **Australian House Price Growth**



In Victoria, the 30+ delinquency rate increased to 1.43% in November 2016, from 1.19% in November 2015, but remains relatively low compared with other states and territories. Like NSW, Victoria benefitted from above average house price and economic growth over 2016. In Queensland and Tasmania, the 30+ delinquency rate was above the national average in November 2016.

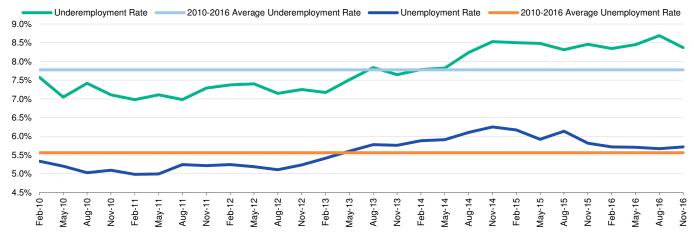
Delinquencies will continue to increase

We expect mortgage delinquencies to continue to increase throughout 2017. Weaker conditions in states reliant on the mining industry, high underemployment, and less favourable housing and income dynamics will continue to drive delinquencies higher.

The end of the mining boom has dampened Australia's economic growth, particularly in resource-reliant states such as Western Australia, the Northern Territory and Queensland and we expect this will weigh on mortgage performance for some time.

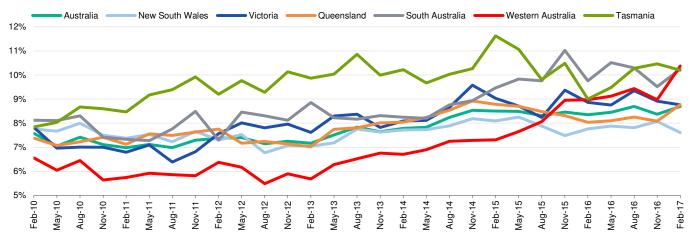
Persistently high underemployment will also constrain economic performance and wage growth, adversely affecting mortgage performance. Australia's unemployment rate was 5.87% in February 2017 and has remained below 6% since January 2016 (Exhibit 5). However, the underemployment rate is much higher, averaging 8.69% Australia-wide and 10.37% in Western Australia in February 2017 (Exhibit 6). Underemployment - a measure of employed persons who want to work more hours than are available to them - results in lower income and reduced capacity to make mortgage repayments, increasing the risk of delinquencies and defaults.

Exhibit 5
Australian Unemployment and Underemployment Rates



Source: Australian Bureau of Statistics, cat. no. 6202.0 and 6202023

Exhibit 6
Underemployment Rate by State



Source: Australian Bureau of Statistics, cat. no. 6202023

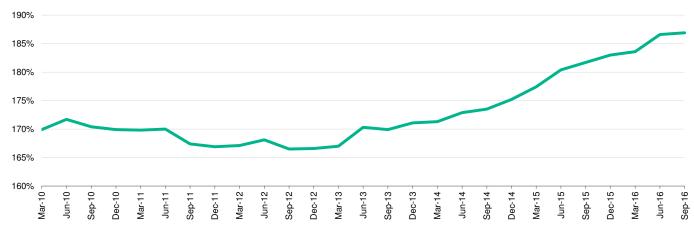
The increasing divergence between house price growth and supporting factors such as household and rental income growth also poses a downside risk for mortgages performance.

While house prices in Australia have risen by an average of 30.15% over the three years to February 2017, average weekly earnings have increased only 4.42%. The large differential between house price and wage growth — particularly in Sydney and Melbourne where house prices have increased the most — means that households have had to take on more debt to fund home purchases.

Higher debt levels make households more vulnerable to economic or housing market shocks, and make meeting mortgage repayments more difficult, increasing the risk of delinquencies and defaults. Household debt as a proportion of disposable income was 187% in September 2016 compared with 170% in September 2013. The 187% household debt level is based on gross household debt and does not consider deposits in mortgage offset accounts.

Exhibit 7

Australian Household Debt as a % of Household Disposable Income



Source: Reserve Bank of Australia

Rental yields have also been declining for the past three years. As a result, the net cost of servicing a housing investment has increased, making investment properties less affordable. The supply of newly-built apartments — particularly in some areas of Sydney and Melbourne - is set to increase significantly over the next two years, which will exert further pressure on rental returns, and raise the risk of mortgage delinquencies and losses.⁴

Changes to hardship reporting compounded increase in delinquencies

The inclusion of loans under hardship arrangements in the calculation of delinquency rates by some mortgage lenders compounded the increase in delinquencies over the year to November 2016.

In late 2015 and through 2016, some lenders that had not previously included hardship loans in their calculation of delinquency rates changed their treatment and reporting of such loans.

Instead of 're-aging' or 'freezing' the delinquencies of hardship loans, these lenders started including the loans in their delinquency rate calculations and/or continued aging these loans through the delinquency buckets.

Some lenders even continued to carry the loans in arrears until the borrower had made three to six months of repayments following the hardship arrangement period.

The change resulted in an approximately 0.10%-0.20% increase in total delinquencies for the portfolio of RMBS we rate over the year to November 2016. If the change was stripped out, the 30-plus delinquency rate in November 2016 would have been 1.3% - 1.4%, rather than 1.52%.

Including hardship loans in the calculation of delinquency rates is a truer reflection of non-paying loans and the risk profile of the RMBS portfolio. However, the increase in delinquencies over the year to November 2016 that can be attributed to this change in reporting does not constitute a deterioration in the risk profile of the RMBS portfolio.

HARDSHIP ARRANGEMENTS

Hardship arrangements can be granted to borrowers facing temporary financial hardship. Typically, mortgage repayments are reduced or postponed altogether for a period of three to six months.

Borrowers do not need to be in arrears in order to request hardship arrangements. Unemployment, underemployment, illness and marriage breakdown are common reasons why hardship arrangements are granted.

Loans with hardship arrangements may or may not be included as part of delinquency reporting depending on the lender.

RE-AGING OF LOANS

Re-aging occurs when lenders grant hardship arrangements to borrowers with delinquent loans and then reclassify - or re-age - the loan from being delinquent to being current, even though the borrower may not be making any repayments for the duration of the hardship arrangement period.

FREEZING DELINQUENCIES

Freezing of delinquencies occurs when lenders grant hardship arrangements to borrowers and then stop aging the loan through the delinquency buckets. This means that a loans that is 30 days in arrears will continue to be reported as 30 days in arrears and will not progress onto 60 days, 90 days, 90+ days in arrears even though the borrower may not be making any repayments for the duration of the hardship arrangement period. Borrowers that were current on their loans when they were granted hardship arrangements are excluded from the arrears reporting for the duration of the hardship arrangement period.

PERFORMANCE BY REGION

Mortgage performance varied significantly between different regions in Australia over the year to November 2016. The 30+ delinquency rates increased in 71 regions and fell in 16 regions over the year.

Worst regions: Mining-related areas dominate

Regions with exposure to the resource and mining sectors dominated the list of areas with the highest delinquencies. In fact, eight of the 10 regions with the highest 30+ delinquency rates in Australia were in either Western Australia or Queensland, and many of these regions are exposed to employment industries directly or indirectly related to mining and resources.

Seven of the 10 worst regions — Western Australia Outback, Queensland Outback, Far West and Orana, Mackay, Western Australia Wheat Belt, Mandurah and Bundbury — have consistently been among the worst performing regions in the country over the last two to three years.

Western Australia Outback, Queensland Outback, South Australia Outback and Mackay recorded the biggest increases in delinquencies over the year to November 2016.

Exhibit 8
Australia's 10 Worst-Performing Regions

			Nov-15	Nov-16	Nov-16 - Nov-15
Region	State/Territory	WACLTV	30-Plus Delinquency	30-Plus Delinquency	Change (% pts)
Western Australia - Outback	Western Australia	63.8%	2.85%	6.54%	3.69
Queensland - Outback	Queensland	67.0%	2.90%	5.51%	2.61
Far West and Orana	New South Wales	67.4%	3.56%	4.55%	0.99
Mackay	Queensland	65.6%	2.81%	4.24%	1.43
Western Australia - Wheat Belt	Western Australia	60.1%	3.12%	3.80%	0.68
South Australia - Outback	South Australia	66.7%	2.08%	3.55%	1.47
Mandurah	Western Australia	64.2%	3.15%	3.46%	0.31
Townsville	Queensland	65.5%	2.06%	3.14%	1.08
Bunbury	Western Australia	61.0%	2.56%	3.04%	0.48
Perth - North East	Western Australia	62.6%	1.77%	2.97%	1.20

Note: WACLTV = Weighted average current loan to value ratio, weighted by current balance Source: Moody's Investors Service; periodic investor/servicer reports

Best regions: Sydney areas top the list

Sydney — where housing market and economic conditions were the most supportive for mortgage borrowers — accounted for the majority of regions with the lowest delinquencies in Australia in November 2016. Eight of the 10 regions with the lowest 30+ delinquency rates were in Sydney.

Home prices in Sydney have increased strongly. In addition, mortgage borrowers in these best-performing regions are most likely to be employed in professional services industries. These occupations tend to earn higher wages and have more stable economic and employment conditions when compared to mining and construction-related employment.

Exhibit 9
Australia's 10 Best-Performing Regions

Region	State/Territory	WACLTV	Nov-15 30-Plus Delinquency	Nov-16 30-Plus Delinquency	Nov-16 - Nov-15 Change (% pts)
Sydney - North Sydney and Hornsby	New South Wales	57.2%	0.23%	0.36%	0.13
Sydney - Eastern Suburbs	New South Wales	55.9%	0.38%	0.43%	0.05
Sydney - Ryde	New South Wales	59.8%	0.37%	0.48%	0.11
Sydney - City and Inner South	New South Wales	62.7%	0.30%	0.62%	0.32
Sydney - Northern Beaches	New South Wales	55.7%	0.41%	0.68%	0.27
Melbourne - Inner East	Victoria	60.2%	0.51%	0.71%	0.20
Sydney - Inner West	New South Wales	58.9%	0.46%	0.75%	0.29
Sydney - Baulkham Hills and Hawkesbury	New South Wales	58.8%	0.72%	0.75%	0.03
Brisbane - North	Queensland	64.9%	0.84%	0.79%	-0.05
Sydney - Sutherland	New South Wales	56.5%	0.52%	0.81%	0.29

PERFORMANCE BY POSTCODE⁵

Worst postcodes: Suburbs in Queensland and Western Australia dominate

Suburbs with the postcode 4825 (Alpurrurulam) in Queensland had the highest 30-plus delinquency rate (7.76%) in Australia in November 2016, followed by postcodes 6168 (Cooloongup in Western Australia) and 6066 (Ballajura in Western Australia). Six of the 20 worst-performing postcodes were in Queensland and ten were in Western Australia.

The 30+ delinquency rate in each of the 20 worst-performing postcodes exceeded 3.75%, much higher than the national average of 1.52%. Delinquency rates in 16 of the 20 worst-performing postcodes deteriorated by more than 1 percentage point over the year to November 2016.

The weighted average current loan to value ratio for most of the worst performing postcodes was higher than the national average of 62.5%.

Exhibit 10

Australia's 20 Worst-Performing Postcodes

					Nov-15	Nov-16	
					30-Plus	30-Plus	Nov-16 - Nov-15
Postcode	Locality	Region	State/Territory	WACLTV	Delinquency	Delinquency	Change (% pts)
4825	Alpurrurulam	Queensland - Outback	Queensland	70.7%	3.99%	7.76%	3.77
6168	Cooloongup	Perth - South West	Western Australia	66.2%	2.87%	5.76%	2.89
6066	Ballajura	Perth - North East	Western Australia	63.2%	2.31%	4.78%	2.47
6167	Anketell	Perth - South West	Western Australia	68.1%	3.02%	4.61%	1.59
6169	Safety Bay	Perth - South West	Western Australia	64.4%	2.49%	4.25%	1.76
6056	Baskerville	Perth - North East	Western Australia	62.2%	2.01%	4.25%	2.24
6025	Craigie	Perth - North West	Western Australia	59.4%	2.14%	4.17%	2.03
4280	Jimboomba	Logan - Beaudesert	Queensland	64.2%	3.41%	4.15%	0.74
4703	Adelaide Park	Fitzroy	Queensland	62.5%	2.07%	4.13%	2.06
5108	Paralowie	Adelaide - North	South Australia	67.7%	2.68%	4.11%	1.43
4815	Condon	Townsville	Queensland	69.3%	2.43%	4.10%	1.67
6112	Armadale	Perth - South East	Western Australia	68.5%	2.75%	4.08%	1.33
6059	Dianella	Perth - North West	Western Australia	61.3%	3.33%	4.07%	0.74
4740	Alexandra	Mackay	Queensland	65.4%	2.42%	4.06%	1.64
3337	Kurunjang	Melbourne - West	Victoria	68.5%	2.22%	4.05%	1.83
3976	Hampton Park	Melbourne - South East	Victoria	66.5%	2.54%	4.02%	1.48
5109	Brahma Lodge	Adelaide - North	South Australia	65.0%	3.59%	4.00%	0.41
6530	Beachlands	Western Australia - Outback	Western Australia	64.3%	3.31%	3.84%	0.53
4124	Boronia Heights	Logan - Beaudesert	Queensland	63.9%	1.72%	3.79%	2.07
6111	Ashendon	Perth - South East	Western Australia	62.2%	2.38%	3.79%	1.41

WACLTV = Weighted average current loan to value ratio, weighted by current balance Source: Moody's Investors Service; periodic investor/servicer reports

Best postcodes: Sydney suburbs on top

Eight postcodes had zero mortgage delinquencies in November 2016, making them the best performing in the country. Thirteen of the 20 best-performing postcodes in Australia were in Sydney.

All 20 of the best-performing postcodes were located in capital city regions, where employment is concentrated in professional services.

The weighted average current loan to value ratios for most of the best-performing postcodes was lower than the national average of 62.5%.

Exhibit 11
Australia's 20 Best-Performing Postcodes

					Nov-15 30-Plus	Nov-16 30-Plus	Nov-16 - Nov-15
Postcode	Locality	Region	State/Territory	WACLTV	Delinquency	Delinquency	Change (% pts)
2026	Bondi	Sydney - Eastern Suburbs	New South Wales	57.7%	0.41%	0.00%	-0.41
2035	Maroubra	Sydney - Eastern Suburbs	New South Wales	57.0%	0.23%	0.00%	-0.23
2036	Chifley	Sydney - Eastern Suburbs	New South Wales	60.0%	0.00%	0.00%	0.00
2065	Crows Nest	Sydney - North Sydney and Hornsby	New South Wales	59.2%	0.61%	0.00%	-0.61
2151	North Parramatta	Sydney - Parramatta	New South Wales	61.8%	1.13%	0.00%	-1.13
3084	Banyule	Melbourne - North East	Victoria	55.7%	1.77%	0.00%	-1.77
3128	Box Hill	Melbourne - Inner East	Victoria	63.3%	0.00%	0.00%	0.00
4011	Clayfield	Brisbane Inner City	Queensland	62.9%	1.78%	0.00%	-1.78
2010	Darlinghurst	Sydney - City and Inner South	New South Wales	60.9%	0.37%	0.02%	-0.35
3056	Brunswick	Melbourne - Inner	Victoria	64.1%	0.39%	0.02%	-0.37
2067	Chatswood	Sydney - North Sydney and Hornsby	New South Wales	61.4%	0.00%	0.10%	0.10
3149	Mount Waverley	Melbourne - South East	Victoria	62.4%	0.76%	0.13%	-0.63
2017	Waterloo	Sydney - City and Inner South	New South Wales	70.3%	0.25%	0.14%	-0.11
2230	Bundeena	Sydney - Sutherland	New South Wales	54.4%	0.58%	0.14%	-0.44
2234	Alfords Point	Sydney - Sutherland	New South Wales	56.9%	0.63%	0.17%	-0.46
3031	Flemington	Melbourne - Inner	Victoria	61.6%	0.00%	0.17%	0.17
2077	Asquith	Sydney - North Sydney and Hornsby	New South Wales	61.3%	0.31%	0.18%	-0.13
2122	Eastwood	Sydney - Ryde	New South Wales	61.8%	0.16%	0.18%	0.02
4005	New Farm	Brisbane Inner City	Queensland	61.7%	0.43%	0.18%	-0.25
2066	Lane Cove	Sydney - North Sydney and Hornsby	New South Wales	56.5%	0.00%	0.20%	0.20

Note: WACLTV = Weighted average current loan to value ratio, weighted by current balance

Source: Moody's Investors Service; periodic investor/servicer reports

STATES IN FOCUS

New South Wales

Exhibit 12 30+ Delinquency Rates for NSW Regions

		Nov-15	Nov-16	Nov-16 - Nov-15
Region	WACLTV	30-Plus Delinquency	30-Plus Delinquency	Change (% pts)
Far West and Orana	67.4%	3.56%	4.55%	0.99
Central West	65.5%	1.61%	2.07%	0.46
Mid North Coast	63.1%	1.28%	1.95%	0.67
Capital Region	61.7%	1.33%	1.93%	0.60
Hunter Valley exc Newcastle	67.4%	1.53%	1.62%	0.09
Central Coast	63.5%	1.81%	1.55%	-0.26
Riverina	63.4%	1.20%	1.51%	0.31
Coffs Harbour - Grafton	61.6%	1.04%	1.45%	0.41
Richmond - Tweed	60.6%	1.49%	1.43%	-0.06
New England and North West	64.3%	1.42%	1.40%	-0.02
Sydney - Blacktown	63.7%	1.44%	1.21%	-0.23
Murray	65.0%	2.17%	1.21%	-0.96
Sydney - South West	61.1%	1.41%	1.19%	-0.22
Sydney - Outer South West	63.7%	1.72%	1.18%	-0.54
llawarra	60.7%	1.18%	1.17%	-0.01
Southern Highlands and Shoalhaven	60.3%	1.03%	1.16%	0.13
Sydney - Outer West and Blue Mountains	63.4%	1.33%	1.03%	-0.30
Newcastle and Lake Macquarie	63.7%	1.17%	1.01%	-0.16
Sydney - Parramatta	63.6%	0.85%	0.95%	0.10
Sydney - Inner South West	60.6%	0.76%	0.83%	0.07
Sydney - Sutherland	56.5%	0.52%	0.81%	0.29
Sydney - Baulkham Hills and Hawkesbury	58.8%	0.72%	0.75%	0.03
Sydney - Inner West	58.9%	0.46%	0.75%	0.29
Sydney - Northern Beaches	55.7%	0.41%	0.68%	0.27
Sydney - City and Inner South	62.7%	0.30%	0.62%	0.32
Sydney - Ryde	59.8%	0.37%	0.48%	0.11
Sydney - Eastern Suburbs	55.9%	0.38%	0.43%	0.05
Sydney - North Sydney and Hornsby	57.2%	0.23%	0.36%	0.13

Note: WACLTV = Weighted average current loan to value ratio, weighted by current balance Source: Moody's Investors Service; periodic investor/servicer reports

Exhibit 13
Ten Worst-Performing Postcodes in NSW

				Nov-15	Nov-16	Nov-16 - Nov-15
Postcode	Locality	Region	WACLTV	30-Plus Delinquency	30-Plus Delinquency	Change (% pts)
2830	Ballimore	Far West and Orana	69.7%	2.68%	3.27%	0.59
2263	Canton Beach	Central Coast	69.4%	2.39%	2.64%	0.25
2800	Belgravia	Central West	68.6%	1.92%	2.53%	0.61
2168	Ashcroft	Sydney - South West	63.9%	3.51%	2.53%	-0.98
2031	Clovelly	Sydney - Eastern Suburbs	58.6%	0.73%	2.14%	1.41
2190	Chullora	Sydney - Inner South West	61.6%	2.58%	2.09%	-0.49
2500	Coniston	Illawarra	62.7%	1.91%	2.09%	0.18
2259	Alison	Central Coast	65.7%	2.03%	2.00%	-0.03
2142	Blaxcell	Sydney - Parramatta	63.8%	1.27%	1.93%	0.66
2251	Avoca Beach	Central Coast	61.5%	1.47%	1.88%	0.41

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Exhibit 14 Ten Best-Performing Postcodes in NSW

				Nov-15	Nov-16	Nov-16 - Nov-15
Postcode	Locality	Region	WACLTV	30-Plus Delinquency	30-Plus Delinquency	Change (% pts)
2026	Bondi	Sydney - Eastern Suburbs	59.2%	0.41%	0.00%	-0.41
2035	Maroubra	Sydney - Eastern Suburbs	58.8%	0.23%	0.00%	-0.23
2036	Chifley	Sydney - Eastern Suburbs	61.1%	0.00%	0.00%	0.00
2065	Crows Nest	Sydney - North Sydney and	59.7%	0.61%	0.00%	-0.61
2151	North Parramatta	Sydney - Parramatta	61.4%	1.13%	0.00%	-1.13
2010	Darlinghurst	Sydney - City and Inner South	62.2%	0.37%	0.02%	-0.35
2067	Chatswood	Sydney - North Sydney and	62.9%	0.00%	0.10%	0.10
2017	Waterloo	Sydney - City and Inner South	70.9%	0.25%	0.14%	-0.11
2230	Bundeena	Sydney - Sutherland	55.5%	0.58%	0.14%	-0.44
2234	Alfords Point	Sydney - Sutherland	57.5%	0.63%	0.17%	-0.46

Victoria

Exhibit 15 30+ Delinquency Rates for Victorian Regions

		Nov-15	Nov-16	Nov-16 - Nov-15
Region	WACLTV	30-Plus Delinquency	30-Plus Delinquency	Change (% pts)
Hume	64.1%	1.69%	2.88%	1.19
Latrobe - Gippsland	62.7%	1.44%	2.36%	0.92
Shepparton	63.1%	1.73%	2.35%	0.62
Melbourne - North West	64.2%	1.87%	2.07%	0.20
Melbourne - West	65.7%	1.70%	1.96%	0.26
Mornington Peninsula	62.2%	1.53%	1.87%	0.34
Ballarat	65.0%	1.92%	1.86%	-0.06
Warrnambool and South West	62.1%	1.18%	1.74%	0.56
North West	64.7%	1.53%	1.71%	0.18
Bendigo	61.4%	1.38%	1.65%	0.27
Melbourne - South East	64.1%	1.23%	1.53%	0.30
Melbourne - North East	63.2%	1.50%	1.47%	-0.03
Geelong	62.4%	1.11%	1.36%	0.25
Melbourne - Outer East	61.0%	1.25%	1.26%	0.01
Melbourne - Inner South	58.1%	0.74%	1.12%	0.38
Melbourne - Inner	63.5%	0.72%	0.85%	0.13
Melbourne - Inner East	60.2%	0.51%	0.71%	0.20

Note: WACLTV = Weighted average current loan to value ratio, weighted by current balance Source: Moody's Investors Service; periodic investor/servicer reports

Exhibit 16 Ten Worst-Performing Postcodes in Victoria

				Nov-15	Nov-16	Nov-16 - Nov-15
Postcode	Locality	Region	WACLTV	30-Plus Delinquency	30-Plus Delinquency	Change (% pts)
3337	Kurunjang	Melbourne - West	69.8%	2.22%	4.05%	1.83
3976	Hampton Park	Melbourne - South East	67.8%	2.54%	4.02%	1.48
3752	South Morang	Melbourne - North East	66.6%	2.60%	3.53%	0.93
3023	Burnside	Melbourne - West	66.5%	3.34%	3.50%	0.16
3064	Craigieburn	Melbourne - North West	69.6%	3.41%	3.14%	-0.27
3228	Bellbrae	Geelong	61.1%	2.46%	2.93%	0.47
3020	Albion	Melbourne - West	65.7%	2.60%	2.73%	0.13
3156	Ferntree Gully	Melbourne - Outer East	62.4%	2.09%	2.61%	0.52
3338	Brookfield	Melbourne - West	70.5%	2.11%	2.58%	0.47
3977	Botanic Ridge	Melbourne - South East	68.5%	1.71%	2.55%	0.84

Note: WACLTV = Weighted average current loan to value ratio, weighted by current balance

Source: Moody's Investors Service; periodic investor/servicer reports

Exhibit 17 Ten Best-Performing Postcodes in Victoria

				Nov-15	Nov-16	Nov-16 - Nov-15
Postcode	Locality	Region	WACLTV	30-Plus Delinquency	30-Plus Delinquency	Change (% pts)
3084	Banyule	Melbourne - North East	56.0%	1.77%	0.00%	-1.77
3128	Box Hill	Melbourne - Inner East	64.6%	0.00%	0.00%	0.00
3056	Brunswick	Melbourne - Inner	64.8%	0.39%	0.02%	-0.37
3149	Mount Waverley	Melbourne - South East	63.4%	0.76%	0.13%	-0.63
3031	Flemington	Melbourne - Inner	62.5%	0.00%	0.17%	0.17
3108	Doncaster	Melbourne - Inner East	67.5%	0.83%	0.24%	-0.59
3071	Thornbury	Melbourne - Inner	62.2%	0.00%	0.36%	0.36
3192	Cheltenham	Melbourne - Inner South	61.7%	0.85%	0.46%	-0.39
3196	Bonbeach	Melbourne - Inner South	63.5%	0.98%	0.47%	-0.51
3122	Auburn South	Melbourne - Inner East	58.7%	0.68%	0.49%	-0.19

Note: WACLTV = Weighted average current loan to value ratio, weighted by current balance

Source: Moody's Investors Service; periodic investor/servicer reports

Queensland

Exhibit 18
30+ Delinquency Rates for Queensland Regions

		Nov-15	Nov-16	Nov-16 - Nov-15
Region	WACLTV	30-Plus Delinquency	30-Plus Delinquency	Change (% pts)
Queensland - Outback	67.0%	2.90%	5.51%	2.61
Mackay	65.6%	2.81%	4.24%	1.43
Townsville	65.5%	2.06%	3.14%	1.08
Fitzroy	65.5%	1.80%	2.82%	1.02
Darling Downs - Maranoa	64.1%	1.53%	2.71%	1.18
Logan - Beaudesert	66.7%	1.93%	2.48%	0.55
Wide Bay	64.2%	1.89%	2.20%	0.31
Moreton Bay - North	66.4%	1.90%	2.07%	0.17
pswich	67.6%	1.67%	1.85%	0.18
Cairns	63.7%	1.79%	1.76%	-0.03
Sunshine Coast	62.6%	1.04%	1.75%	0.71
Gold Coast	65.9%	1.34%	1.52%	0.18
Toowoomba	65.6%	1.28%	1.40%	0.12
Brisbane - East	62.3%	1.11%	1.37%	0.26
Moreton Bay - South	65.6%	1.45%	1.36%	-0.09
Brisbane - West	59.9%	0.76%	1.04%	0.28
Brisbane - South	62.9%	0.81%	1.04%	0.23
Brisbane Inner City	63.6%	0.60%	0.86%	0.26
Brisbane - North	64.9%	0.84%	0.79%	-0.05

Note: WACLTV = Weighted average current loan to value ratio, weighted by current balance Source: Moody's Investors Service; periodic investor/servicer reports

Exhibit 19
Ten Worst-Performing Postcodes in Queensland

				Nov-15	Nov-16	Nov-16 - Nov-15
Postcode	Locality	Region	WACLTV	30-Plus Delinquency	30-Plus Delinquency	Change (% pts)
4825	Alpurrurulam	Queensland - Outback	70.0%	3.99%	7.76%	3.77
4280	Jimboomba	Logan - Beaudesert	64.1%	3.41%	4.15%	0.74
4703	Adelaide Park	Fitzroy	61.4%	2.07%	4.13%	2.06
4815	Condon	Townsville	69.8%	2.43%	4.10%	1.67
4740	Alexandra	Mackay	65.2%	2.42%	4.06%	1.64
4124	Boronia Heights	Logan - Beaudesert	64.2%	1.72%	3.79%	2.07
4114	Kingston	Logan - Beaudesert	71.2%	3.26%	3.53%	0.27
4128	Shailer Park	Logan - Beaudesert	63.0%	1.58%	3.24%	1.66
4570	Amamoor	Wide Bay	63.8%	2.45%	3.21%	0.76
4817	Alice River	Townsville	65.9%	2.43%	3.20%	0.77

Note: WACLTV = Weighted average current loan to value ratio, weighted by current balance Source: Moody's Investors Service; periodic investor/servicer reports

Exhibit 20
Ten Best-Performing Postcodes in Queensland

				Nov-15	Nov-16	Nov-16 - Nov-15
Postcode	Locality	Region	WACLTV	30-Plus Delinquency	30-Plus Delinquency	Change (% pts)
4011	Clayfield	Brisbane Inner City	63.2%	1.78%	0.00%	-1.78
4005	New Farm	Brisbane Inner City	62.4%	0.43%	0.18%	-0.25
4178	Lytton	Brisbane - East	63.9%	0.85%	0.23%	-0.62
4068	Chelmer	Brisbane - West	59.6%	0.14%	0.30%	0.16
4285	Allenview	Logan - Beaudesert	65.4%	1.49%	0.40%	-1.09
4012	Nundah	Brisbane - North	67.3%	0.51%	0.44%	-0.07
4573	Coolum Beach	Sunshine Coast	65.0%	0.55%	0.47%	-0.08
4053	Brookside Centre	Brisbane - North	63.4%	0.43%	0.49%	0.06
4000	Brisbane Adelaide	Brisbane Inner City	65.4%	0.26%	0.50%	0.24
4055	Bunya	Brisbane - South	62.6%	0.64%	0.50%	-0.14

South Australia

Exhibit 21

30+ Delinquency Rates for South Australian Regions

Pagion	WACLTV	Nov-15 30-Plus Delinguency	Nov-16 30-Plus Delinguency	Nov-16 - Nov-15 Change (% pts)
Region	WACLIV	30-Plus Delinquency	30-Plus Delinquency	Change (% pts)
South Australia - Outback	66.7%	2.08%	3.55%	1.47
Barossa - Yorke - Mid North	64.0%	2.03%	2.79%	0.76
Adelaide - North	66.0%	2.25%	2.77%	0.52
South Australia - South East	63.7%	2.14%	2.33%	0.19
Adelaide - South	63.1%	1.26%	1.98%	0.72
Adelaide - Central and Hills	61.0%	1.29%	1.75%	0.46
Adelaide - West	61.7%	1.37%	1.69%	0.32

Note: WACLTV = Weighted average current loan to value ratio, weighted by current balance Source: Moody's Investors Service; periodic investor/servicer reports

Exhibit 22

30+ Delinquency Rates for South Australian Postcodes

				Nov-15	Nov-16	Nov-16 - Nov-15
Postcode	Locality	Region	WACLTV	30-Plus Delinquency	30-Plus Delinquency	Change (% pts)
5108	Paralowie	Adelaide - North	67.8%	2.68%	4.11%	1.43
5109	Brahma Lodge	Adelaide - North	65.4%	3.59%	4.00%	0.41
5114	Andrews Farm	Adelaide - North	70.1%	2.88%	2.79%	-0.09
5159	Aberfoyle Park	Adelaide - South	63.6%	1.71%	2.63%	0.92
5095	Mawson Lakes	Adelaide - North	67.9%	1.96%	2.38%	0.42
5162	Morphett Vale	Adelaide - South	66.2%	2.19%	2.28%	0.09
5125	Golden Grove	Adelaide - North	62.2%	1.59%	1.54%	-0.05
5158	Hallett Cove	Adelaide - South	62.9%	1.21%	1.15%	-0.06

Western Australia

Exhibit 23 30+ Delinquency Rates for Western Australian Regions

Region	WACLTV	Nov-15 30-Plus Delinquency	Nov-16 30-Plus Delinquency	Nov-16 - Nov-15 Change (% pts)
Western Australia - Outback	63.8%	2.85%	6.54%	3.69
Western Australia - Wheat Belt	60.1%	3.12%	3.80%	0.68
Mandurah	64.2%	3.15%	3.46%	0.31
Bunbury	61.0%	2.56%	3.04%	0.48
Perth - North East	62.6%	1.77%	2.97%	1.20
Perth - South West	62.7%	1.32%	2.64%	1.32
Perth - South East	63.3%	1.52%	2.51%	0.99
Perth - North West	62.1%	1.66%	2.46%	0.80
Perth - Inner	56.4%	0.88%	1.33%	0.45

Note: WACLTV = Weighted average current loan to value ratio, weighted by current balance

Source: Moody's Investors Service; periodic investor/servicer reports

Exhibit 24 Ten Worst-Performing Postcodes in Western Australia

				Nov-15	Nov-16	Nov-16 - Nov-15
Postcode	Locality	Region	WACLTV	30-Plus Delinquency	30-Plus Delinquency	Change (% pts)
6168	Cooloongup	Perth - South West	66.5%	2.87%	5.76%	2.89
6066	Ballajura	Perth - North East	63.5%	2.31%	4.78%	2.47
6167	Anketell	Perth - South West	68.1%	3.02%	4.61%	1.59
6169	Safety Bay	Perth - South West	64.8%	2.49%	4.25%	1.76
6056	Baskerville	Perth - North East	62.5%	2.01%	4.25%	2.24
6025	Craigie	Perth - North West	60.3%	2.14%	4.17%	2.03
6112	Armadale	Perth - South East	67.3%	2.75%	4.08%	1.33
6059	Dianella	Perth - North West	61.0%	3.33%	4.07%	0.74
6530	Beachlands	Western Australia - Outback	64.9%	3.31%	3.84%	0.53
6111	Ashendon	Perth - South East	62.9%	2.38%	3.79%	1.41

Note: WACLTV = Weighted average current loan to value ratio, weighted by current balance Source: Moody's Investors Service; periodic investor/servicer reports

Exhibit 25 Ten Best-Performing Postcodes in Western Australia

Postcode	Locality	Region	WACLTV	Nov-15 30-Plus Delinguency	Nov-16 30-Plus Delinguency	Nov-16 - Nov-15 Change (% pts)
6018	Churchlands	Perth - North West	60.6%	1.13%	0.47%	-0.66
6019	Scarborough	Perth - North West	61.2%	0.12%	0.62%	0.50
6152	Como	Perth - South East	59.4%	1.43%	0.96%	-0.47
6155	Canning Vale	Perth - South East	60.3%	0.32%	1.27%	0.95
6054	Ashfield	Perth - North East	62.1%	1.72%	1.41%	-0.31
6061	Balga	Perth - North West	66.4%	0.63%	1.82%	1.19
6164	Atwell	Perth - South West	64.9%	1.25%	1.88%	0.63
6062	Embleton	Perth - North East	59.8%	1.38%	1.89%	0.51
6107	Beckenham	Perth - South East	66.8%	0.80%	2.09%	1.29
6171	Baldivis	Perth - South West	71.7%	1.35%	2.20%	0.85

Moody's Related Research

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- » Rising Housing Prices Provide Equity Cushion to Absorb Losses, January 2017 (1052145)
- » Buy-to-Let RMBS Global: Regulations Easing Risks in Mature Markets; Developing Markets Gain Traction, December 2016 (1042762)
- » Resurgent Housing Prices Eroding Affordability Despite Interest Rate Cuts, November 2016 (1046359)
- » Apartment Construction Boom Poses Moderate Risk to Australian RMBS, September 2016 (1043599)
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- » Residential Mortgage Delinquency Map: Improving NSW Underpins Steady Performance, March 2016 (1021746)
- » Negative Euribor Rates Pose Risks to Some Australian RMBS and ABS, February 2016 (1015737)

Outlook

- » Structured Finance Global: Outlook 2017 Tepid Growth Props Up Asset Quality, December 2016 (1056203)
- » Australia 2017 Outlook Delinquencies Will Increase Moderately, November 2016 (1043742)

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- » Global Structured Finance Collateral Performance Review (SF220325)
- » Australian RMBS Indices Q4 2016 Excel Data, March 2017 (SF449146)

Rating Methodology

- » Moody's Approach to Rating RMBS Using the MILAN Framework (1039709)
- » RMBS Rating Methodology Supplement Australia (SF393088)

To access any of these reports, click on the entry above. Note that these references are current as of the date of publication of this report and that more recent reports may be available. All research may not be available to all clients.

Endnotes

1 This report compares delinquencies between November 2016 and November 2015 rather than May 2016 (the period for the previous Mortgage Delinquency Map report) to avoid differences caused by seasonal fluctuations.

- 2 See <u>Australian Residential Mortgage Delinquency Map November 2016</u> for historical 30+ delinquency rates stretching back to 2005.
- 3 Source: Australian Bureau of Statistics.
- 4 See RMBS Australia: Apartment Construction Boom Poses Moderate Risk to Australian RMBS and RMBS Australia: Record Low Rental Yields Increase Risks for Residential Property Investors.
- 5 Postcode analysis has several well-known deficiencies, including the fact that it is difficult to apply meaningful analytical judgment at such a granular level. To ensure that results are meaningful, we have excluded postcodes with less than 400 loans.

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