Key Takeaways

- Stabilization in some property markets, lower interest rates, and improving refinancing conditions are easing debt-serviceability pressures on borrowers.

- We expect mortgage arrears to remain relatively low in most portfolios as lower interest rates and tax cuts take effect. We expect to see any improvements in arrears in the earlier arrears categories.

- Softer economic conditions have not yet affected the unemployment rate. Stability in employment conditions underpins our stable outlook for the Australian RMBS sector for the next 12 months.

The main risks to the Australian residential mortgage-backed securities (RMBS) sector have decreased in the past year. After weathering a recent property price downturn, the main risks to the sector are less elevated than they were 12 months ago, though economic conditions are weaker.

Stable employment conditions have underpinned the sector’s strong collateral performance to date. Lower interest rates, signs of stabilization in some property markets, and improving refinancing conditions will sustain this performance in the coming months, in our opinion.

Vulnerabilities still persist for some borrowers as weak wage growth and high household debt show no signs of abating. We expect households to adopt a more cautious approach to debt serviceability over the next twelve months by taking advantage of lower interest rates to pay down their mortgages. This will help enhance equity buffers and increase households’ resilience to any economic downturns.
Table 1

<table>
<thead>
<tr>
<th>Key Influences On Australian RMBS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Influences</td>
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<tr>
<td>Australia’s economic fundamentals</td>
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<tr>
<td>Demographic trends</td>
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<tr>
<td>Interest-rate trends and mortgage arrears</td>
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<tr>
<td>State of the housing market</td>
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<tr>
<td>Household indebtedness</td>
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<tr>
<td>Mortgage market dynamics</td>
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<tr>
<td>Role of lenders’ mortgage insurance (LMI)</td>
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<td>Product variations</td>
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<tr>
<td>Regulatory and legal framework</td>
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</tbody>
</table>
### Key Risks And Emerging Themes In The RMBS Sector In 2020

<table>
<thead>
<tr>
<th>Risk/Trend</th>
<th>S&amp;P Global Ratings’ Credit Opinion</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Global</strong></td>
<td></td>
</tr>
<tr>
<td>U.S.-China trade-tech tensions</td>
<td>U.S.-China trade tech tensions have intensified and economic growth in the region has continued to come in below S&amp;P Global Ratings’ expectations. This has been mainly due to weak investment, which suggests that trade-tech war uncertainty is encouraging firms to delay their capital expenditure plans. Consumption and services in the region nevertheless remain resilient.</td>
</tr>
<tr>
<td></td>
<td>A key question is for how long consumers and the services sector can remain insulated from the rest of the economy.</td>
</tr>
<tr>
<td>Interest rates likely to remain</td>
<td>We expect interest rates to remain lower for longer as most central banks’ monetary policy settings remain accommodative.</td>
</tr>
<tr>
<td>lower for longer</td>
<td>Historically, periods of lower interest rates have preceded strong property price appreciation. Lower interest rates may fuel property price growth as access to finance is eased and the potential returns for investors are increasingly attractive versus other investment options.</td>
</tr>
<tr>
<td></td>
<td>A return to strong asset price inflation in a subdued economic environment with weak wage growth has inherent credit risks, given the high household debt levels in Australia. We believe most borrowers, particularly owner-occupiers, are more likely to take advantage of lower interest rates and pay down their mortgages in the short term. We expect that, if needed, the authorities would use macroprudential tools to prevent a rapid buildup of imbalances through the recurrence of strong growth in property prices or private sector debt.</td>
</tr>
<tr>
<td><strong>Domestic</strong></td>
<td></td>
</tr>
<tr>
<td>The risk of counterparty</td>
<td>The Australian Prudential Regulation Authority’s (APRA) announced that it will implement plans to strengthen Australian banks’ loss-absorbing capacity. Following this announcement, S&amp;P Global revised its rating outlook to stable from negative on the four major Australian banks. In addition, we revised the SACPs of the four major banks to ‘a’ from ‘a-’ based on our view that the economic risks facing banks operating in Australia have reduced. This reflects the orderly decline in house prices over the past two years following a period of rapid growth.</td>
</tr>
<tr>
<td>downgrades are reduced because</td>
<td>Australian major banks act as counterparties in many Australian and New Zealand structured finance transactions, performing roles such as derivative counterparty, bank account provider, servicer, and liquidity facility provider.</td>
</tr>
<tr>
<td>we revised our rating outlooks on</td>
<td>The Australian Prudential Regulation Authority’s (APRA) announced that it will implement plans to strengthen Australian banks’ loss-absorbing capacity. Following this announcement, S&amp;P Global revised its rating outlook to stable from negative on the four major Australian banks. In addition, we revised the SACPs of the four major banks to ‘a’ from ‘a-’ based on our view that the economic risks facing banks operating in Australia have reduced. This reflects the orderly decline in house prices over the past two years following a period of rapid growth.</td>
</tr>
<tr>
<td>Australian banks to stable and</td>
<td>Increased demand for housing has led to an increasing share of flats and apartments, particularly in more expensive capital cities. Building standards in recently built high-density apartments have come under increased scrutiny following evacuations of tenants from buildings due to serious defects such as combustible cladding, leaks, and structural problems. We expect dwelling types to come under increased scrutiny from lenders and LMI providers in the years ahead as they seek to minimize exposure to properties with defects.</td>
</tr>
<tr>
<td>increased the standalone credit</td>
<td></td>
</tr>
<tr>
<td>profiles (SACP) on each of the four</td>
<td></td>
</tr>
<tr>
<td>major Australian banks</td>
<td></td>
</tr>
<tr>
<td>The rise of the first-home owner</td>
<td>The decline in house prices in 2017 to mid-2019 helped first-home owners (FHO) to enter the housing market. This can be seen in the higher proportion of housing finance commitments to this borrower cohort. Despite house price moderation, the 20% deposit remains a hurdle for many prospective FHGs, particularly in the more expensive eastern states capital cities. To bridge this gap, many prospective FHGs are using other sources of support outside of their savings including the “bank of mum and dad” and LMI. The Federal Government’s First Home Loan Deposit Scheme will provide further assistance through a government guarantee of eligible mortgage loans for up to 15 per cent of the property purchase price for a limited number of eligible first-home purchasers.</td>
</tr>
<tr>
<td>Exposure to higher loan-to-value</td>
<td></td>
</tr>
<tr>
<td>(LTV) ratio loans may increase in</td>
<td>Exposure to higher loan-to-value (LTV) ratio loans may increase in future RMBS transactions if exposure to FHGs increases in line with increased participation from this borrower cohort in lending growth.</td>
</tr>
<tr>
<td>future RMBS transactions if</td>
<td></td>
</tr>
<tr>
<td>exposure to FHGs increases in</td>
<td></td>
</tr>
<tr>
<td>line with increased participation</td>
<td></td>
</tr>
<tr>
<td>from this borrower cohort in lending growth.</td>
<td></td>
</tr>
</tbody>
</table>
This article on the market's operating environment, structure, and performance provides an overview of:

- Australia's economy and demographic trends.
- The Australian housing market.
- The Australian residential mortgage loan market.
- The role of lenders' mortgage insurance in Australian RMBS.
- Australian housing loan product types.
- The Australian legal and regulatory systems applicable to RMBS.
- The key structural issues of offshore RMBS issuance.
- The performance history of Australian RMBS.

To enhance market transparency, S&P Global Ratings also publishes its rating methodology and assumptions, periodic RMBS performance updates, commentary articles, scenario analysis, and presale reports detailing its analytical rationales supporting the ratings assigned (see references under Related Research).

**Economic And Demographic Trends**

**Economic fundamentals**

Australia is a democratic country, with a diverse, open, and resilient economy. The sovereign credit ratings on Australia benefit from the country's strong institutional settings, its wealthy and resilient economy, monetary policy flexibility, and low government debt.

<table>
<thead>
<tr>
<th>S&amp;P Global Ratings' Economic Indicators</th>
<th>2019F</th>
<th>2020F</th>
<th>Effect on collateral</th>
</tr>
</thead>
<tbody>
<tr>
<td>Real GDP growth (%)</td>
<td>2.0</td>
<td>2.4</td>
<td>Neutral to negative. Slower economic growth could add debt-serviceability pressures for some borrowers.</td>
</tr>
<tr>
<td>Unemployment rate (%)</td>
<td>5.2</td>
<td>5.3</td>
<td>Neutral. Stable employment conditions will continue to underpin low arrears and losses.</td>
</tr>
<tr>
<td>CPI (%)</td>
<td>1.6</td>
<td>2.0</td>
<td>Neutral to negative. Weak wage growth could see debt-repayment capacity challenged at the margins.</td>
</tr>
<tr>
<td>Policy rate (%; EOP)</td>
<td>0.75</td>
<td>0.75</td>
<td>Favorable. Falling interest rates are closely correlated with decreasing arrears because most mortgages are variable rate.</td>
</tr>
</tbody>
</table>


Economic growth has slowed during 2019 as weaker consumption growth and the slowdown in housing market activity weighed on consumer and business sentiment. Despite the softening in economic conditions, employment has held up, with jobs growth robust and the unemployment rate relatively stable.

S&P Global forecasts GDP growth to improve in 2020 as recent tax cuts, signs of stabilization in some established housing markets, lower interest rates, and ongoing infrastructure spending
start to take effect.

**Interest-rate trends**

The RBA is responsible for the country’s monetary policy, with the primary objective of maintaining inflation within a target range of 2% to 3% during the course of the economic cycle. It has kept inflation within this target band on average, through adjustments to the overnight cash rate.

Chart 1 shows the target cash rate from 1997 to 2019.

**Standard Variable Housing Indicator Lending Rate Versus Official Cash Rate**

![Chart showing Standard Variable Housing Indicator Lending Rate Versus Official Cash Rate from 1997 to 2019]

Source: Reserve Bank of Australia.  
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The RBA has cut the cash rate three times in 2019 and is currently at a historic low of 0.75%. The rationale for its decision was to reduce spare capacity in the economy, support employment, and provide greater confidence that inflation will be consistent with its medium-term target. In recent years, we have seen some lenders adjusting interest rates out of step with the RBA, reflecting higher funding costs (chart 1). This highlights the discretionary nature of standard variable rates and the ability of lenders to move out of step with the RBA. Lenders also now differentiate mortgage pricing across product types, charging higher interest rates on investor and interest-only loans.

**Population demographics**

Australia has an estimated population of about 25 million, and is divided into six states and two
mainland territories. Most of Australia’s population is concentrated in coastal regions, particularly in the southeast and east. Most people in these regions live in urban centers, mainly in and around the capital cities (chart 2).

Chart 2

**Australian Population Distribution**

<table>
<thead>
<tr>
<th>State/territory</th>
<th>Local currency rating as of October 2019</th>
<th>Population as of March 2018</th>
<th>Population as of March 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>New South Wales</td>
<td>AAA</td>
<td>7,955,901</td>
<td>8,071,071</td>
</tr>
<tr>
<td>Victoria</td>
<td>AAA</td>
<td>6,429,979</td>
<td>6,566,170</td>
</tr>
<tr>
<td>Queensland</td>
<td>AA+</td>
<td>4,990,681</td>
<td>5,076,512</td>
</tr>
<tr>
<td>South Australia</td>
<td>AA+</td>
<td>1,733,474</td>
<td>1,748,630</td>
</tr>
<tr>
<td>Western Australia</td>
<td>AA+</td>
<td>2,591,887</td>
<td>2,615,794</td>
</tr>
<tr>
<td>Tasmania</td>
<td>AA+</td>
<td>526,663</td>
<td>533,308</td>
</tr>
</tbody>
</table>
Australian Population Distribution (cont.)

<table>
<thead>
<tr>
<th>State/territory</th>
<th>Local currency rating as of October 2019</th>
<th>Population as of March 2018</th>
<th>Population as of March 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australian Capital Territory</td>
<td>AAA</td>
<td>419,192</td>
<td>425,706</td>
</tr>
<tr>
<td>Northern Territory</td>
<td>Not rated</td>
<td>246,688</td>
<td>245,562</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>24,894,465</td>
<td>25,282,753</td>
</tr>
</tbody>
</table>

Source: Australian Bureau of Statistics.

Chart 3

Australian Population Growth Rate (Year On Year)

Australia's population has grown an average of about 1.6% during the past 10 years (chart 3). The population growth rate has been slowing since 2012 due to lower net overseas migration (chart 4), reaching 1.56% as of March 2019. An aging population will see the age distribution of the Australian population change, with a growing percentage of people aged over 65.
Population migration analysis

Interstate and overseas migration rates are key drivers in the demand for residential properties and housing finance in Australia. People move between states and territories for reasons such as employment, lifestyle, and the cost of housing. Table 4 shows interstate and overseas migration by state for the year ended March 31, 2019.

Table 4

<table>
<thead>
<tr>
<th>State</th>
<th>Net overseas migration</th>
<th>Net interstate migration</th>
<th>Net population gain (including natural increases)</th>
</tr>
</thead>
<tbody>
<tr>
<td>New South Wales</td>
<td>90,571</td>
<td>-21,995</td>
<td>114,079</td>
</tr>
<tr>
<td>Victoria</td>
<td>86,706</td>
<td>12,780</td>
<td>133,515</td>
</tr>
<tr>
<td>Queensland</td>
<td>35,292</td>
<td>23,269</td>
<td>88,139</td>
</tr>
<tr>
<td>South Australia</td>
<td>13,656</td>
<td>-4,035</td>
<td>14,778</td>
</tr>
<tr>
<td>Western Australia</td>
<td>16,112</td>
<td>-8,025</td>
<td>25,978</td>
</tr>
<tr>
<td>Tasmania</td>
<td>3,035</td>
<td>2,254</td>
<td>6,387</td>
</tr>
<tr>
<td>Northern Territory</td>
<td>654</td>
<td>-4,256</td>
<td>-1,062</td>
</tr>
<tr>
<td>Australian Capital Territory</td>
<td>3,634</td>
<td>8</td>
<td>6,935</td>
</tr>
<tr>
<td>Australia</td>
<td>249,660</td>
<td>0</td>
<td>388,747</td>
</tr>
</tbody>
</table>

Note: Data are as of March 31, 2019. Source: Australian Bureau of Statistics. N/A—Not applicable.

Strong net overseas migration until recently had underpinned the relatively strong demand for
housing. In terms of net overseas migration, the most common states for immigrants to enter Australia are New South Wales and Victoria--more than 71% of total net overseas migration goes into these two states--followed by Queensland and Western Australia. This is significant because the point of entry has a big impact on where migrants decide to reside permanently.

Chart 5

Net Interstate Migration By State

Queensland recorded the highest net interstate migration in 2018, followed by Victoria. New South Wales had the highest net overseas migration, but the lowest net interstate migration. This partly reflects housing dynamics; people are increasingly leaving the more expensive-property cities of Sydney and Melbourne for more affordable areas, provided employment opportunities exist. New South Wales and Victoria's net population gains were higher than the other states and territories, representing more than 64% of total net population gains as of March 31, 2019.

Urbanization

Australia's population is concentrated in suburban, urban fringe, and inner-city regions, particularly in state capital cities. More than 86% of the total population lived in a significant urban area in 2018, according to the Australian Bureau of Statistics. The bureau defines a significant urban area as town or city with at least 10,000 people. More than 67% of Australia's population lives in a greater capital city area, as of June 30, 2018.

Employment trends

According to the Australian Bureau of Statistics "Characteristics of Employment" publication in August 2018, about 83% of workers in Australia are employees, of whom around 67% work full time. This provides a level of stability to the income of borrowers and their ability to repay their debt obligations. The income and cash flows of self-employed borrowers tend to be more volatile because they are more vulnerable to business cycles and competition. Chart 6 shows Australia's
historical unemployment and underemployment rates between 1978 and June 2019.

Chart 6

**Historical Unemployment Rate In Australia**

![Chart showing historical unemployment rate in Australia](chart)

Source: Australian Bureau of Statistics.

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The highest unemployment levels in the data period are during the early 1980s and early 1990s recessions. In both periods, the unemployment rate exceeded 10%, with the highest level at about 11.2% in December 1992. During both recessions, the unemployment rate increased rapidly and recovered at a slower rate. Since 2003, Australia's unemployment rate has hovered around 6%, reaching a historic low of 4.01% in August 2008. Relatively benign economic conditions and low interest rates have facilitated stable employment conditions. This has underpinned the strong collateral performance of the Australian RMBS sector, evidenced by low levels of arrears and defaults.

The unemployment rate has remained above 5% throughout 2019, despite relatively strong employment growth. This is partly due to a rising participation rate. Strong jobs growth has not translated to wage growth. This trend is not unique to Australia, with much of the developed world experiencing jobs growth and anemic inflation as wage growth stagnates. This could cause some debt serviceability pressures at the margins for highly leveraged households. Lower interest rates and increasing competition for mortgages will help to mitigate this risk in the current environment.

We expect employment growth to be relatively stable in the next 12 months (table 3). Stable employment conditions bode well for Australian RMBS because loss of income is a key cause of default for borrowers.
Credit Culture And Household Balance Sheets

Consumer credit culture

There are a range of consumer credit options in Australia, including housing loans, personal loans, and continuing credit arrangements such as overdrafts and credit cards. Housing-loan products incorporate features that allow consumers to redraw prepaid principal, which may be used for any reasonable purpose. Some housing-loan products also allow consumers to conduct transaction banking through their loan accounts. Check and credit card transactions may be cleared through a consumer’s housing-loan account.

Personal bankruptcies

The level of personal bankruptcies in Australia has been consistently lower than in the U.S. and Canada (chart 7).

Chart 7

Personal Bankruptcies In Australia, Canada, U.K., And U.S.


Underpinning Australia’s historically low level of personal bankruptcies are the:
- Traditionally strong willingness of Australians to repay debt;
- Severe consequences of bankruptcy under Australian law;
- Stigma in Australia associated with bankruptcy; and
- Difficulty in accessing finance after bankruptcy.
Even in bankruptcy, housing-loan lenders continue to have recourse to borrowers to pursue outstanding debts alongside a borrower’s other creditors after the security property is sold.

**Household indebtedness**

Household debt as a percentage of net household disposable income in Australia is high compared with many other Organization for Economic Cooperation and Development (OECD) countries (chart 8).

**Chart 8**

**Household Debt As A Percentage Of Net Disposable Income 2017**

Australia's household debt did not increase dramatically until interest rates and inflation reached low levels in the 1990s, improving consumer confidence (chart 9).
Most of the increase in household debt was used to buy assets, namely property. Chart 9 shows the increases in household debt as a proportion of household disposable income and housing debt as a proportion of household disposable income from 1998 to 2019. Falling interest rates have coincided with rising household debt, of which the majority is housing related.

While rising housing debt has occurred during a period of rising house prices, the elevated levels of household debt do not provide much headroom if the economy were to deteriorate or when interest rates start to rise again.
Royal Commission

The Royal Commission into Misconduct in the Banking, Superannuation and Financial Services Industry was established on Dec. 14, 2017. The commissioner submitted his final report to the governor-general on Feb. 1, 2019. The Royal Commission highlighted a range of cultural and behavioral matters in the Australian financial system. Changes implemented by the banks and insurers as a consequence--whether by themselves or due to the recommendations--should strengthen the risk culture. Despite these lapses and gaps, the regulation, governance, risk appetite, and risk management within the Australian financial institutions sector remains strong by global standards. The loan-to-value ratios, interest-rate buffers, and predominance of prime mortgages within home loans underscores sound underwriting practices (see "Stronger Governance And Regulation For Australian Financial Sector Following Royal Commission," published Feb. 5, 2019). Australian financial institutions and regulators have been responding during the past 18 months to the issues highlighted within the Royal Commission hearings. This has resulted in lenders expanding the number of expense categories used in debt-serviceability calculations to better reflect borrowers’ true expenditure patterns.

The Australian Housing Market

Dwelling types and locations

According to the Australian Bureau of Statistics, 76% of all Australian dwellings were standalone, detached houses in 2018. The remainder are semidetached or duplex houses, row or terrace houses townhouses (11.4%), or flats and apartments (11.8%). The percentage share of higher-density accommodation has grown in recent years. This is particularly the case in larger cities such as Sydney, where 18.8% of dwellings are flats or apartments. This reflects the finite supply and higher cost of housing in these markets relative to peoples' incomes.

We expect dwelling types to come under increased scrutiny from lenders and LMI providers following some highly publicized evacuations of buildings due to defects such as combustible cladding, leaks, and structural problems. These defects have been more pronounced in tall, high-density apartment blocks built in recent years.

In RMBS pools, property locations are identified by a postcode, which is a four-digit number that identifies each of the postal service’s delivery areas. In metropolitan areas, a single postcode can cover several suburbs. In very remote areas, a single postcode can cover many thousands of kilometers due to the much lower population densities. S&P Global Ratings separates postcodes into inner-city, metropolitan, and nonmetropolitan locations to analyze the elements of RMBS pools that are likely to be affected by a location's characteristics.

Home ownership

Home ownership is an important goal for many Australians. Many Australians consider it important to retain their own homes and, therefore, meet their obligations under housing loans, even if they are experiencing financial stress. This predilection makes housing affordability a
politically sensitive issue.

More than 66% of Australian households live in owner-occupied dwellings. Of these homeowners, 44% own their properties outright (29.5% of all households), without a mortgage loan. The proportion of homeowners without a mortgage has fallen in the past 10 years, while the proportion of households with a mortgage has risen, as has the proportion of renters as a percentage of total households. These changes, albeit incremental, reflect the effects of a prolonged period of strong property price growth, which has affected housing affordability. This has forced more people to rent for longer and increased household indebtedness, which would exacerbate the effects of a severe economic downturn. The composition of Australian households by home ownership, as determined by the Australian Bureau of Statistics, is summarized in chart 10. The latest available data are from the Housing Occupancy and Costs Survey of 2017-2018, produced by the Australian Bureau of Statistics.

Chart 10

**Australian Home Ownership And Mortgage Trends**

Source: Australian Bureau of Statistics.
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An Overview Of Australia's Housing Market And Residential Mortgage-Backed Securities

Chart 11

Ownership Composition Of All Australian Households 2017-2018 ('000)

Total number of households
9,270

Owners without a mortgage
2,734

Owners with a mortgage
3,402

Renters
2,966

Rent-free
166

Home buyers who did not buy or bought without a mortgage in the past three years
5,126

Home buyers who bought with a mortgage in the past three years
1,011

State Housing Authority
287

Private landlords
2,512

Other landlords
166

Recent first-home buyers
349

Recent changeover buyers
658

Bought new home
81

Bought established home
270

Bought new home
112

Bought established home
548

Source: Australian Bureau of Statistics.

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Historical house price trends

Australia's housing market reflects rises and falls in the country's economic cycles. The house price increases of the late 1980s were the result of a variety of factors, including the deregulation of the financial services sector that led to a relaxation in interest-rate controls on housing loans, which were previously capped at 13.5%. This had the effect of increasing the amount of housing finance available. Other key factors were a rise in demand for investment properties after the 1987 stock market correction, higher overseas immigration, the trend toward smaller households, and housing demand by children of the baby-boomer generation.

While the 1991-1992 economic recession was the most severe economic downturn in Australia in many years, residential property values have experienced more severe declines in other periods. Chart 12 maps the annual percentage change in the Australian Bureau of Statistics’ Established House Price Index for each capital city. Housing cycles in Australia reflect the different supply and demand dynamics at play and can be exacerbated by timing lags, most notably construction. The most recent housing cycle in Australia followed an uptick in population growth in the mid-2000s, which increased demand for housing. Construction did not respond to this demand until 2012. As outlined by the Reserve Bank of Australia, one factor contributing to the slow response of supply was the historically high share of medium- and high-density housing. (Once construction is underway it takes about two years to build higher density housing compared with around nine months for a detached house.)

Low interest rates, foreign demand, and a prolonged period of relatively benign economic conditions also kept property prices buoyant in many eastern coast cities, notably Sydney and Melbourne, from 2012 to 2017. The increase in supply of new housing in these markets eventually caught up with demand. Supply of new housing in addition to the decline in foreign demand and tightening in lending standards contributed to the downturn in property prices in 2017. Over the
past few months, property prices have increased again in Sydney and Melbourne. This has coincided with lower interest rates and changes to APRA’s debt serviceability requirements. Housing cycles vary across the country, though. While property prices are recovering in Sydney and Melbourne, they continue to decline in Perth and Darwin, which have lower population growth. A large part of these differences reflect different population dynamics, particularly migration flows. In turn, that also reflects differences in employment and income as well as differences in the cost of housing.

Recent house price trends and outlook

Residential property prices fell 7.4% year on year as of June 2019, according to the Australian Bureau of Statistics. Property price movements vary across the country, but property price growth in most capital cities has slowed or declined during the past 12 months. In Sydney, property price growth was down to 9.6% year on year as of June 30, 2019.

In recent months we have seen evidence of stabilization in some property markets, particularly the larger capital cities, which were home to the biggest declines in the past 12 months.

We attribute the recovery in some housing markets to a number of factors. The results of the Australian Federal election in May effectively removed uncertainty over some taxes that benefit property investors. In addition, the prudential regulator in July 2019 relaxed its lending restrictions by removing a debt serviceability floor of 7% on residential mortgages that it had introduced almost five years ago. Recent interest rate cuts have also helped bolster demand as access to finance has been eased.

Historically, periods of lower interest rates have preceded strong property price appreciation. Lower interest rates could fuel property price growth as the potential returns for investors are increasingly attractive versus other investment options.

Continued strong population growth, lower interest rates, and a limited supply of housing stock could result in a strong resurgence in house prices and household debt. We expect that, if needed, the authorities would use macro-prudential tools to prevent a rapid buildup of imbalances through the recurrence of strong growth in property prices or private sector debt (see "Australian Major Bank Hybrid Issues Upgraded As Economic Risks Ease," published Oct. 24, 2019).

On the supply side, dwelling approvals for houses and units have contracted since late 2017 (chart 13). Dwelling approvals as of August 2019 were down 16% year on year for houses and 32% for units. Tighter lending conditions have impeded access to finance for new developments. In addition, lower property prices also will have weighed on dwelling approval activity. The RBA expects dwelling investment to decline for several quarters because of weaker-than-expected building approvals data in recent months.

As recently outlined by the RBA, while the increase in housing supply has finally met the earlier increase in demand, demand for housing will continue to grow, given population growth, but supply is going to decline. So there is quite likely to be a shortfall again in the foreseeable future.
Fundamental supply and demand imbalances exist in some markets, but these have eased as more supply has come online. The supply-demand balance varies by state, city, and region, but these structural factors will influence the magnitude of property price movements in property markets.

Australian RMBS portfolios are well diversified geographically. Around 32% of loans are secured by properties in New South Wales, followed by Victoria at 24%, and Queensland at 24%. These proportions have been relatively constant for the past 10 years. Around 68% of loan exposures are in metropolitan locations. Exposure to inner-city postcodes—the location of many high-density unit developments—is minimal, at slightly more than 1.0%. Furthermore, the weighted-average LTV ratio of the Australian RMBS portfolio of around 60% means that most borrowers have built up a degree of insulation against depreciation in property prices, particularly for well-seasoned loans in Sydney and Melbourne, which have benefited from the strong appreciation in property prices for the past 10 years. Loans with higher LTV ratios are more exposed to changes in property prices. Around 12% of total RMBS loans outstanding have an LTV ratio in excess of 80%.

The rise of the first-home owner

Recent house price depreciation and lending restrictions on investors has enabled more first-home owners (FHOs) to access the property market as housing affordability pressures have eased. Growth in lending to FHOs has increased to 29.8% of total owner-occupier residential mortgage lending as of August 2019 from around 20.6% in August 2016.

To assist FHOs in procuring a home, the Australian government has recently announced a First Home Loan Deposit Scheme (FHLDS). The FHLDS, which goes live in January 2020, aims to improve home ownership by first-home buyers through a government guarantee of eligible mortgage loans for up to 15% of the property purchase price. The scheme is capped at 10,000...
buyers. Given the strong participation of FHOs in mortgage lending growth, we expect the scheme to be oversubscribed. The Australian Prudential Regulation Authority is proposing to reflect the government guarantee as a form of credit risk mitigation in the capital framework by applying a lower capital requirement to eligible FHLDS loans.

S&P Global Ratings considers FHOs to be more likely to default than non-FHOs in the archetypical pool due to a lack of a home loan payment history. To reflect this higher risk, we apply a higher default multiple to FHOs until they have established a payment history of at least 18 months.

The Australian Residential Mortgage Loan Market

Despite the risks in the broader operating environment, we believe the Australian mortgage market has a number of features that increase its resilience to an economic slowdown, including:

- A majority of Australian housing loans are based on discretionary variable-rate loans, which can subject borrowers to payment shocks should interest rates increase rapidly. As such, borrowers generally prefer to repay home loans as fast as possible to reduce the potential exposure. Furthermore, the variable-rate feature enhances the effectiveness of expansionary monetary policy.

- In Australia, unlike loans to investors, loans to owner occupiers do not benefit from tax deductions to offset interest payments on their mortgage loans. As a result, owner occupiers have an incentive to pay down their loans rapidly, creating further borrower equity in the security properties.

- Current mortgage interest rates are generally low.

- A range of structural features in the Australian housing market likely have helped to make borrowers and lenders more conservative. For example, there is a strong social stigma attached to default and limited options for credit-impaired borrowers.

- The Responsible Lending Conduct Obligations of the National Consumer Credit Protection Act ensures minimum standards in verifying consumer information and assessing borrower capacity by credit providers.

- Regulators continue to reinforce prudent lending standards.

Market size

There are now more than A$1.82 trillion worth of home loans outstanding in Australia, of which about 7.5% are securitized. The percentage of home loans securitized has decreased from a high of 24% in 2007 due to the amortization of RMBS issued before June 2007, and the much smaller volumes of RMBS issued since then. Chart 14 shows the value of Australian housing finance—securitized and nonsecuritized—and the percentage of loans securitized from 1990 to 2019.
Lenders

Banks continue to be the main providers of housing finance in Australia. After falling to 77% in 2002, banks now account for 96% of housing finance commitments.

The four large major commercial banks dominate Australia's banking sector. Regional and other banks, building societies, and credit unions have traditionally made up the remainder of the market. The major Australian banks use securitization to varying degrees, mainly as a source of funding diversification and liquidity. Australia's regional banks, which were common issuers of RMBS, tap securitization markets for funding and funding diversification, liquidity, and regulatory capital relief.

Issuance from nonbank originators has gained momentum in recent years, reflecting their increased lending volumes as banks have retreated from certain loan segments. New issuance from nonbanks made up around 47% of total RMBS new issuance as of Oct. 31, 2019, compared with 6.4% in 2011.

RMBS new issuance

RMBS new issuance gathered momentum in 2019 after a more subdued year in 2018, with more than $A26.2 billion in RMBS issued as of October. Nonbank originators dominated again in 2019, accounting for approximately 50% of RMBS new issuance. Despite the prominence of the nonbank sector, other banks and major banks have contributed a greater share of total RMBS issuance than in 2018. We expect the recent stabilization in property prices in major capital cities, lowering of interest rates, and removal of some macro prudential measures to help lending growth. This should help sustain the supply of RMBS new issuance, in addition to continued demand from domestic and offshore investors seeking higher yields in a low interest-rate environment.
An Overview Of Australia's Housing Market And Residential Mortgage-Backed Securities

Loan lifecycle

A typical Australian housing loan will follow a similar course during its lifecycle. Broadly, the stages of a typical loan would include documentation verification, debt-serviceability assessment, property valuation checks, LMI checks, and loan settlement (chart 16).
Chart 16

**Loan Application Process**

1. **Documentation verification**
   - Lender confirms accuracy of supporting documentation and checks proof of income and identification.

2. **Debt-serviceability assessment**
   - Lender calculates debt-to-income or net service ratio.
   - Most lenders assess at interest rates higher than the actual borrower rate and incorporate buffers.
   - Loan approval process can be centralized or decentralized and can incorporate automated credit decisioning.

3. **Property valuation checks**
   - A registered panel valuer provides a property valuation to the lender.
   - Desktop valuations might be used for loans with lower loan-to-value ratios.

4. **LMI checks**
   - Lenders refer loans requiring mortgage insurance to an LMI provider for approval.

5. **Loan settlement**
   - The lender settles funds and lodges title with the respective Land Registry.
   - Office or via an electronic exchange if conditions are met and the borrower accepts the offer.

**Mortgage arrears process**

For loans that fall into arrears, and are unable to become current, the following steps may also become a feature of the loan life cycle (chart 17).
Underwriting standards

Increased regulatory scrutiny of mortgage lending standards has resulted in a general lowering of LTV ratios and improved debt-serviceability standards over the past four years. These measures—alone with the speed limits that were introduced by the prudential banking regulator have slowed risky or speculative lending in the banking sector. We expect banks and other ADIs lending behavior to remain conservative in the current regulatory environment.

The underwriting policies and procedures of bank and nonbank lenders for residential mortgages are of a relatively uniform and high standard throughout Australia. This is primarily due to Australia’s prudential regulatory framework, consumer credit legislation, the nature and maturity of Australia’s mortgage market, and the extensive use of lenders’ mortgage insurance, though this is declining. The standards mainly focus on establishing a borrower’s capacity and willingness to pay, and the quality and value of the underlying security.

Debt serviceability

Serviceability is typically determined by one of two methods. One method involves ensuring that debt commitments do not exceed a certain percentage of a borrower’s gross monthly income. The
other method involves calculating surplus income by deducting living expenses and debt repayments from monthly income net of tax. APRA has tightened its regulatory guidance on mortgage lending standards since 2014, against a backdrop of rising household indebtedness, low wage growth, and low interest rates.

S&P Global Ratings has observed a general convergence in lending standards in the RMBS sector, in line with APRA's expectations, as articulated in "Prudential Practice Guide 223." This has occurred in the bank and nonbank sectors.

The incorporation of interest-rate buffers in debt serviceability calculations and a greater focus on expense verification show that lending standards have improved in the past five years. While more recent vintages of loan originations were underwritten at the peak of the property cycle, this has been offset by tighter lending standards.

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Some Macroprudential Measures Have Been Wound Back in 2019

APRA in May 2019 proposed removing the minimum interest rate floor of 7% for debt serviceability calculations prescribed in guidance. The proposal was confirmed on July 5, 2019, and the guidance took effect immediately. Banks can now review and set their own interest rate floors, and guidance recommends an interest rate buffer of 2.5%.

These changes will influence the maximum borrowing capacity for a given borrower.

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Third-party originations

One distribution channel used in the market is mortgage originators, also known as mortgage brokers or mortgage managers. These are companies or individuals who refer borrowers to lenders in exchange for a commission from the lender. Third-party originated loans make up around 50% of total bank lending in Australia. Nonbank lenders and foreign banks operating in Australia rely on brokers for over 90% of their loan book.

The involvement of brokers and third-party originators in the RMBS sector is limited to the referral of borrowers to lenders, with brokers performing more of an intermediary role between the lender and borrower. Credit decisions generally are made centrally, and third parties are not involved. However, third parties can provide borrower information to lenders, leading to a risk of broker fraud if appropriate procedures are not in place to verify the accuracy and completeness of the information provided.

Some lenders have processes to verify the information they receive from brokers, but practices vary. With the growing reliance on this origination channel to expand market share, this will be an area of increased regulatory focus.

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Savings verification

Australian lenders traditionally required borrowers to prove that they have a regular savings pattern. S&P Global Ratings believes that it would be prudent for a lender to review a borrower's savings history because this indicates a borrower's ability to forego a portion of net income and decreases the likelihood of payment shock when mortgage repayments are required. While such standards across the industry are changing (mortgage insurers currently require genuine savings
Credit reporting

The ability to access the historical credit performance of a borrower is generally an integral part of the decision to extend credit. Most Australian lenders conduct a credit check on each potential borrower as part of their underwriting processes.

Credit-reporting agency subscribers include banks, financial institutions, other credit providers, telecommunication companies, utilities, and parties with an interest in the payment patterns of nonperforming customers. Subscribers provide credit-reporting agencies with details of any application for credit, loans repaid, and accounts overdue by 60 days or more.

The integrity of the credit-reporting agency's database depends on diligent reporting of relevant information by subscribers.

Australia until recently had a negative credit-reporting environment, in which the information available from an agency was confined to credit enquiries made by prospective borrowers, defaulting accounts, court judgments, or bankruptcies. Reforms to the Privacy Act came into effect in March 2014, moving Australia from a negative credit-reporting environment to one of comprehensive credit-reporting, in line with many other OECD countries.

Other ADIs not subject to CCR are incentivized to supply credit information to credit-reporting bodies because they will not receive information unless they also provide credit data. This is the "principle of reciprocity" under CCR. The Australian Securities and Investments Commission (ASIC) is responsible for monitoring compliance with CCR and it has authority to expand the content required to be supplied.

Property-valuation methods

When underwriting a mortgage loan, Australian lenders will value a property using one of several methods. For loans with primary lenders' mortgage insurance (LMI), the minimum valuation requirements will be determined by the LMI provider. When loans are originated without primary LMI, such as loans that are ultimately covered by a pool insurance policy when the loan is securitized, the valuation method initially will be at the discretion of the lender, and reviewed by the LMI provider if pool cover is requested.

Full property inspections by a qualified valuer tend to be undertaken for riskier loans or properties. A full valuation gives a valuer the best opportunity to understand the specific conditions of the property that may affect the future sale value. Some lenders also rely on "curb-side" or "drive-by" valuations, which involve a valuer estimating the value of a property by viewing it from the street. This is less comprehensive than a full valuation. Automated valuations are now also in use with a variety of valuation models and approaches available to lenders. They include using a statistically based valuation through to a registered valuer utilizing satellite photos, site photos, and street maps to value the property from a desktop, with the option of conducting a full onsite valuation if this information does not provide sufficient clarity.

Some lenders have "no valuation" policies that rely on other methods to determine the realizable value of a security property for loans with lower LTV ratios. These include relying on the contract of sale for "arms-length" transactions, valuer-general assessments, council rate notices, or databases of historical sale prices to substantiate borrower estimates of property values.
Residential mortgage loan servicing

In the Australian market, servicing is generally undertaken by the originator of the mortgage loans, though outsourcing some or all of the servicing functions to third parties is becoming more common.

Servicing in Australia is generally of a high quality, by global standards. The extensive application of technology and electronic funds transfer arrangements are features of the Australian market.

Servicer evaluations performed by S&P Global Ratings indicate that most servicers involved in securitization transactions maintain a relatively high standard. All seven residential servicers with S&P Global Ratings public rankings are ranked either STRONG or ABOVE AVERAGE.

The Role Of Lenders' Mortgage Insurance

Most prime residential mortgages securitized through the RMBS market in Australia until recently were fully mortgage insured under a primary or pool mortgage insurance policy. Under the primary policy, LMI providers typically underwrite each loan individually. A pool policy is a policy taken out mainly for securitization purposes and, as the name suggests, is underwritten on a pool basis, generally when the loans have LTV ratios below 80%.

A limited number of lenders may have delegated authority to underwrite in accordance to LMI providers' guidelines under an open policy; LMI providers do a sample audit of the underwriting of such policies. Almost all policies are provided by an insurer with a financial strength rating of at least 'A', such as Genworth Financial Mortgage Insurance Pty Ltd. (Genworth Australia) and QBE Lenders' Mortgage Insurance Ltd. (QBE LMI). The underwriting and servicing standards imposed by the mortgage insurers traditionally have had a strong bearing on the policies and procedures of lenders using the RMBS market, particularly for the nonbank lenders who rely on securitization for funding. The ratings on Genworth Australia and QBE LMI remain higher than their parents' core operating companies' ratings as we consider them to be partly insulated subsidiaries. This view is largely supported by Australia's robust regulatory regime, which we believe affords these entities with a degree of protection from financial deterioration at the group level.

LMI was introduced in Australia in 1965 to cover lenders against losses on loans secured by mortgages. This type of insurance became popular because lenders were often unwilling to provide home loans with an LTV ratio exceeding 80%, and due to the APRA prudential framework that includes lower capital requirements for insured mortgages of smaller financial institutions. The availability of insurance to cover the additional risk of lending to this level allowed lenders to be less restricted in determining acceptable loan profiles, thereby giving residential property buyers greater access to the housing-loan market. The Australian LMI experience initially mirrored the U.S. practice, in which cover was restricted to the top 20% of the principal loan balance applying only to owner-occupied residential lending. The industry has since diversified, and 100% insurance coverage for the residential market, including residential investment, is standard practice in Australia today.

Mortgage insurers' product suites include reduced or low documentation loans, high LTV ratio loans, large loans, and loans to borrowers with minor credit impairments. However, LMI providers were quick to alter criteria and reduce their exposures to risky loans under slowing economic conditions, such as by reducing LTV ratios for some products, particularly low-doc lending.
LMI use is declining in the Australian RMBS sector

The prevalence of LMI in Australian RMBS transactions has declined in recent years. The decline reflects the reduced appetite for high LTV ratio lending, which has slowed in response to regulatory requirements such as higher risk weightings.

LMI covers about 44% of loans, by outstanding balance, in Australian RMBS transactions. More than 90% of Australian RMBS transactions have LMI coverage, but an increasing number have only partial coverage.

We lowered our ratings on QBE Lenders' Mortgage Insurance Ltd. and Genworth Financial Mortgage Insurance Pty Ltd. to ‘A’ on July 25, 2019. This resulted in us lowering our ratings on 23 tranches of Australian and New Zealand structured finance transactions.

Housing-Loan Product Types

The home-lending market has been subject to high levels of competition, and product innovation has become one of its key features. Most lenders offer standard housing-loan products with a wide range of options.

Standard housing loan

The standard housing loan in Australia is a fully amortizing principal-and-interest loan, with a term of 25 to 30 years, secured by a first-ranking registered mortgage over the borrower’s home. The interest rate on the standard housing loan is a variable rate that may be altered at any time at the lender’s discretion. While historically many lenders only adjust interest rates when the RBA adjusts monetary policy and announces an adjustment to the overnight cash rate, in recent years we have seen more lenders adjusting interest rates out of step with the RBA due to the tight funding markets.

The common features of a standard housing loan in Australia are outlined in table 5.

Table 5

<table>
<thead>
<tr>
<th>Standard Loan Product Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loan type</td>
</tr>
<tr>
<td>Prime loans</td>
</tr>
<tr>
<td>Nonconforming loans</td>
</tr>
<tr>
<td>Subprime loans</td>
</tr>
<tr>
<td>Loan purpose</td>
</tr>
<tr>
<td>Purchase a home</td>
</tr>
<tr>
<td>Refinance</td>
</tr>
<tr>
<td>Debt consolidation</td>
</tr>
<tr>
<td>Equity take out</td>
</tr>
<tr>
<td>Construction loan</td>
</tr>
</tbody>
</table>
### Standard Loan Product Options (cont.)

<table>
<thead>
<tr>
<th>Property occupancy</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Owner-occupier</td>
<td>Loan is for home purchase</td>
</tr>
<tr>
<td>Investor</td>
<td>Loan is not for the primary place of residence. The investor property classification includes holiday/second homes.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Payment features</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Redraw</td>
<td>Redraws permit borrowers to redraw any funds paid ahead of the scheduled amortized balance of the loan.</td>
</tr>
<tr>
<td>Further advance</td>
<td>Further advance allows a borrower to request additional funds through a variation of the mortgage. Lender usually undertakes a full credit assessment at the time of the further advance.</td>
</tr>
<tr>
<td>Line of credit</td>
<td>Borrowers receive a line of credit secured against their homes. The limit is generally fixed and borrowers can draw up and down against the limit as they please. Repayments are less regular.</td>
</tr>
<tr>
<td>Interest-offset accounts*</td>
<td>Noninterest-bearing deposit account directly linked to the loan. The lender notionally reduces the balance of the loan account by the amount of funds held in the offset account for the purpose of calculating interest payments.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Interest rate types</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Fixed</td>
<td>Interest rates on fixed loans are usually fixed for a period of up to five years. Loan rate switches to variable after this point.</td>
</tr>
<tr>
<td>Variable rate</td>
<td>Discretionary variable-rate loans. Lending practices in Australia recognize and account for borrower exposure to interest-rate changes through the incorporation of interest-rate buffers in debt serviceability assessments.</td>
</tr>
<tr>
<td>Split rate</td>
<td>The loan is split into two or more accounts and the rate on each account may be either fixed or variable.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Repayment options</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Amortizing</td>
<td>Both principal and interest repayments are made over the remaining term of the loan. Both principal and interest repayments are made during the remaining term of the loan.</td>
</tr>
<tr>
<td>Interest only</td>
<td>The interest-only period normally ranges between five and 10 years.</td>
</tr>
<tr>
<td>Bullet loans</td>
<td>The borrower is required to pay all or a significant portion of principal by loan maturity date.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Documentation type</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Full documentation</td>
<td>Loans for which the borrower’s income has been fully verified by the lender through reference to relevant source documents such as payslips or tax returns.</td>
</tr>
<tr>
<td>Limited documentation</td>
<td>Loans for which the borrower’s income has not been fully verified by the lender. Limited-documentation loans are often referred to by a variety of terms, including self-certified and stated-income loans.</td>
</tr>
</tbody>
</table>

*In RMBS transactions, the seller usually pays the interest-offset amount into the trust during each payment period. If this arrangement is not in place, increased liquidity support and interest-rate mechanisms may be used to mitigate liquidity and yield risks.

### Documentation standards

Documentation standards in RMBS are generally classified as either full or limited (income partially verified). S&P Global Ratings classifies low- and alternative-documentation loans as "limited." Low-documentation product standards differ, and in Australia include an element of supporting evidence of income, and are not solely reliant on a stated income. Such products are targeted at self-employed borrowers. While they are considered lower documentation, they are not written on a stated income or no income verification basis.
We see higher residual risk for low-documentation loans than for full-documentation loans. The primary risk is that the borrower’s income may be overstated.

Some originators historically only required a signed statement from the borrower that the borrower could afford the loan repayments. Since the global financial crisis, changes in the Responsible Lending Conduct Obligations of the National Consumer Credit Protection Act require credit providers to make reasonable inquiries and take reasonable steps to verify information, and make a final assessment as to whether the consumer has the capacity to repay the loan without experiencing financial hardship. As a result, the standards for verifying information and assessing borrower capacity have generally been raised for reduced-documentation loans.

Underwriting requirements vary from lender to lender, but they typically impose lower maximum LTV ratios. Exposure to low-documentation loans in the Australian prime RMBS sector is low, at 0.87%. The exposure is higher in the nonconforming sector, at 46%, though this percentage has declined since the financial crisis.

Table 6 provides examples of the common income-verification documentation standards in the Australian residential mortgage market.

**Table 6**

**Australian Mortgage Documentation Standards**

<table>
<thead>
<tr>
<th></th>
<th>Full-doc PAYG</th>
<th>Full-doc self-employed</th>
<th>Low-doc</th>
<th>No doc*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Income documentation</td>
<td>Last two pay slips, and letter of employment, tax assessments, three months’ bank statements</td>
<td>Last two years’ tax returns and last two</td>
<td>ABN/GST registration for 12 or six months, declaration of financial</td>
<td>Declaration of</td>
</tr>
<tr>
<td>required</td>
<td>or similar</td>
<td>years’ tax assessment notices</td>
<td>position, and six months’ business bank statement, six months’ BAS</td>
<td>affordability</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>or similar</td>
<td></td>
</tr>
</tbody>
</table>

*No longer a feature of the Australian residential mortgage lending market

**Nonstandard Housing Loans**

**Reverse-mortgage loans**

These loans enable borrowers to access equity in a property by borrowing against the value of the house. Repayment of the loan is not required until the property is sold. Sale of the property will occur at the earlier of the death of the homeowner, when the owner ceases to occupy the home, or a contractual breach.

Typically, these loans are offered to retirees as lump sums, periodic payments, or lines of credit, and are secured by a first-registered mortgage over residential property. There remains no publicly rated reverse-mortgage securitization in the Australian market.

Reverse-mortgage loans are not included in a typical RMBS transaction.

**Loans to self-managed super funds**

Loans to self-managed super funds (SMSFs) are limited-recourse borrowing arrangements, whereby an independent trustee holds legal title of the property on trust. Income sources
available to service SMSF loans are limited due to the legislation surrounding SMSFs. Income sources include mandatory and voluntary superannuation contributions, rental income from the mortgaged property, and income from other investments in the fund. The lender's rigor in serviceability assessment is an important consideration in our analysis.

Although SMSF loans are limited-recourse lending, the risk of this affecting borrowers' payment behavior could be somewhat mitigated by features such as personal guarantees provided by SMSF members. A strong, well-documented personal guarantee contains features that create the full-recourse characteristics that are typically exhibited in a first-registered, full-recourse residential mortgage. Compliance with the relevant legislation is crucial to our analysis of these loan products.

Several bank lenders have ceased originating SMSF loans, particularly in the wake of the Banking Royal Commission. Several nonbank lenders still originate these loan products.

**Australian Legal And Regulatory Systems Applicable To RMBS**

Generally speaking, the Australian legal system is a common-law system similar to the U.K., comprising statutory law and case-law components. Property and consumer-lending laws regulate the rights and obligations of borrowers and lenders. Despite recent consumer-friendly reforms, the law generally favors lenders because it provides a conclusive registration process for real property and a prescriptive but efficient enforcement process.

**Land title and registration**

Most privately owned land in Australia is recorded on a comprehensive, state-based register with a unique title registration number assigned to each parcel of land known as the Torrens Title system.

All dealings with land, such as the transferring or granting of a mortgage should be noted on the title. A registered interest can only be defeated if it was registered with fraudulent intent. The priority between competing interests in land typically will be determined by referring to when they were registered. In most cases, the first interest to be registered will prevail.

The title-registration process ensures a low-risk environment for purchasers and lenders, providing basic due diligence is undertaken. In most cases, the due diligence process is performed by an approved solicitor, the lender's staff, or a title insurer. Due diligence primarily involves obtaining and checking the registrar's copy of the certificate of title and other publicly available information.

The property exchange settlement process until recently was paper based. The process has moved online. Property Exchange Australia is Australia's first online property exchange network. Through its digital platform, members, such as lawyers, conveyancers, and financial institutions, can lodge documents with Land Registries and complete financial settlements electronically. Transactions conducted on the exchange include property transfers, caveats, new mortgages, settlement notices, mortgage discharges, and refinances.

Most residential properties are held on freehold title except in the Australian Capital Territory, which has long-term leasehold interests. Different forms of titles, such as strata and leasehold titles, also can be included in securitized pools. Strata titles are similar to the U.S. condominium titles. When they are included in securitization pools, leasehold titles typically have terms that are at least 15 years in excess of the term of the securitized mortgage.
Enforcement process

Australian real property legislation prescribes a process for enforcement and recovery of defaulted mortgages. This involves the issuance of written default notices and giving the borrower a maximum timeframe to remedy the default. If the default is not remedied within the prescribed time, the lender is entitled to sell the property and recover the debt. S&P Global Ratings assumes that the entire recovery process will take no longer than 12 to 24 months for a weighted-average pool. The Australian process has some stringent procedural requirements, but is generally more favorable to the lender than the equivalent U.S. process.

Personal Property Security Act (PPSA)

In Australian securitizations, a special-purpose entity (SPE) typically grants a security for the benefit of the holders of the rated security. This security previously was by way of a fixed and floating charge. When the Personal Property Securities Act came into force in January 2012, fixed and floating charges were essentially replaced with general security agreements that also require registration to perfect the security.

Personal recourse

In Australia, lenders have personal recourse or "full" recourse against borrowers for any shortfalls in their recoveries of mortgage loans. Lenders have the right to obtain court orders to access any of a borrower’s other assets or to have the borrower declared bankrupt.

Set-off

In the context of residential mortgage lending, set-off can occur in two ways:
- Equitable set-off, which may be exercised at any time; or
- Insolvency set-off, which may be exercised on the insolvency of one of the parties.

Most mortgage loans seek to avoid the risk of equitable set-off by including a term whereby the borrower agrees not to set off any payments due under the loan against any amounts due by the lender to the borrower. The transaction parties obtain confirmation from their legal representative—a copy of which is usually provided to S&P Global Ratings—that such an agreement is effective and mitigates set-off risk in a securitization transaction. Generally, we understand a well-drafted clause will be effective unless the borrower maintains an account with the lender that is in some way connected to the loan, and a clean legal opinion about the set-off risk of a transaction cannot be given.

In the absence of a waiver of set-off clause in the loan documentation, the transaction may seek to mitigate this risk. A borrower’s equitable right to a set-off crystallizes when the borrower is notified that his or her loan has been assigned to a third party. This means that the borrower remains entitled to exercise an equitable right to set off deposits up to the time of notice, but is not entitled to set off amounts deposited after receiving the assignment notice. Typically, these accounts are transaction accounts that have high turnover rates that quickly reduce set-off exposures.

Insolvency set-off can occur when a deposit-taking institution lends money to a borrower who has
funds deposited with that institution. If the lender becomes insolvent, the borrower may set off his or her deposit against the outstanding loan. However, a borrower's right to insolvency set-off will be eliminated on assignment of the loan to a special-purpose entity. The assignment breaks the required mutuality between the borrower and the lender.

**Taxation issues**

**Stamp duty:** Depending on the states and territories involved, purchases and sales of real estate in Australia may be subject to stamp duty. The rate of stamp duty varies among states and territories, but in most cases it is levied on the gross purchase price. Depending on the state or territory in which a property is located, the duty may be as high as 7% of the purchase price.

**Interest deductibility:** Interest on mortgage loans used to finance owner-occupied properties in Australia is not tax deductible. This increases the incentive to repay home loans faster. In contrast, interest paid on loans used to finance investment properties that generate rental income are tax deductible, and this may lead to a slower rate of repayment. Empirical data collected by S&P Global Ratings on portfolios indicate that this distinction does not significantly affect the default frequency.

**Capital-gains tax:** Any gains realized on the sale of a borrower's primary place of residence are free from tax. However, any gain realized on the sale of an investment property is subject to capital gains tax. The costs associated with transferring property, including stamp duty and capital-gains tax, mitigate the risk of widespread speculative activities.

**Key regulations governing the Australian mortgage market and RMBS**

**National consumer credit regime:** Consumer credit law reforms have resulted in a single national consumer credit regime governed by the National Credit Protection Act 2009 (Cth) (NCCP) administered by ASIC.

The NCCP includes the National Credit Code (NCC), which applies to Australian credit license holders with respect to credit contracts entered into on or after July 1, 2010. The NCC replaces previous state-based consumer credit codes and the Uniform Consumer Credit Code (UCCC), but largely replicates the previous UCCC. It applies to all contracts for the supply of credit to individuals or strata corporations for the following:
- Personal, domestic, or household purposes;
- To purchase, renovate or improve residential property for investment purposes; or
- To refinance such debt.

The NCC imposes a code of conduct on lenders, which dictates a range of conditions, such as minimum disclosure requirements. Other conditions cover interest-rate charging and adjustment mechanisms; procedures for contract variations, including on the basis of financial hardship as a result of illness, unemployment or other reasonable causes; and enforcement procedures.

**Unfair contract terms:** Under the NCC, the terms of an "unjust" contract may be reassessed by a court in certain circumstances, such as when a lender has used unfair tactics, or when a lender knew or failed to determine that the borrower could not afford to repay the loan. An unfair contract term will be void, but the contract will continue if it is capable of operating without that term.
Hardship provisions: In 2009 the Australian government established a set of principles to assist borrowers experiencing financial difficulty. The principles provide guidance for consumers and the retail banks, credit unions, and building societies that have adopted them.

Hardship concessions can include a reduction in the interest rate or payment, lengthening of loan maturity, or full or partial deferral of interest for a temporary period.

Under APRA’s prudential practice guidance for hardship loan arrears reporting, arrears would continue to accrue, based on the original scheduled payments, until the loan is brought back into performing status.

A breach of any of the key requirements of the NCC may lead to criminal sanctions and severe civil penalties. However, a contravention of the legislation will generally not affect the validity of the credit contract or related mortgage or guarantee.

Regulatory developments in securitization

Domestic regulations governing securitization are increasingly influenced by international regulatory developments, and Australian securitization new issuance has not been immune to these developments. Among the international securitization developments significant to the Australian market are the publication of the final criteria for identifying simple, transparent, and comparable securitizations, and the Basel Committee on Banking Supervision guidance and framework around the capital treatment of securitization exposures.

Banking regulation – APS 120: The Australian Prudential Regulation Authority (APRA) regulates securitization activities of ADIs through its Prudential Standard APS 120. The Prudential Standard requires ADIs to adopt prudent practices to manage the risks related to securitization and to ensure that appropriate capital is held against that risk.

APRA in November 2016 released its final revised Prudential Standard APS 120 Securitization (APS 120). The revised APS 120 became effective in January 2018.

The key features of the revised standard include:

- Explicit recognition of securitization for funding purposes in addition to regulatory capital relief securitizations.
- Removal of the use of advanced modeling approaches to determine regulatory capital requirements for securitization exposures.
- Ability to use standardized approaches for capital treatment to assign a risk weight for nonsenior securitization exposures.
- Warehouses with availability periods might qualify for capital relief, provided the renegotiation of terms and conditions relates to funding rates only.
- Allowance of ADIs (originators and nonoriginators) to apply a risk weight cap for senior exposures which are not resecuritization exposures.

APRA said it has seen no immediate need to implement the STC standard. It said it would consider at a later date the merit of amending APS 120 to incorporate STC criteria.
Key Structural Issues Of Offshore RMBS Issuance

Cross-jurisdictional issues
Any securitization that issues into the U.S. or European markets also must address numerous cross-border issues, such as sovereign risk, foreign-currency risk, and cross-border taxes, all of which are not present in a domestic transaction.

Sovereign risk
Australia currently has foreign and local currency unsolicited ratings of AAA/Stable/A-1+.

Cross-currency swap
Australian RMBS transactions issue securities denominated in currencies other than Australian dollars. Cross-currency swaps are entered into to hedge the obligations on the notes and the Australian-dollar cash flows on the underlying mortgages. In an adverse credit cycle, the counterparty risk becomes a more prominent factor in influencing the credit quality of a transaction. For example, global RMBS transactions with multicurrency obligations expose all noteholders, including Australian dollar-denominated obligations, to currency-swap counterparty risk.

Withholding tax
An Australian resident issuer may be required to deduct withholding tax from payments of interest to a foreign-resident investor unless the specific exemptions provided for in section 128F of the “Income Tax Assessment Act 1936” (and subsequent amendments) apply to the payments. Satisfaction of the exemption requirements is relatively straightforward, and most transactions are structured to include them, with the result that offshore investors receive all payments free and clear of Australia-levied taxes.

Trustee roles
Most transactions use a separate trustee for the trust and security trustee. For offshore transactions, an additional note trustee may be appointed because the investors may be located offshore while the supporting collateral is in Australia. The security trustee is generally concerned with the maintenance and exercise of the secured assets, and usually will be based in Australia. The trustee is generally concerned with ensuring compliance with the note terms and conditions on behalf of the investors. If a separate note trustee is appointed, they fulfill some of these responsibilities and are likely to be domiciled in the U.S. or Europe to better coordinate with investors. Reporting lines between the trustees are typically documented. The note trustee typically provides instruction to the security trustee to take action under the security when required.
Performance Of Australian RMBS

Performance of Australian residential mortgage loans

Australian RMBS continue to perform well, with low arrears and loss levels relative to outstanding loan balances. Total prime RMBS arrears remain low, as demonstrated by Standard & Poor’s Performance Index (SPIN) for Australian mortgages (chart 18a).

Arrears levels increased during the first six months of the year as declining property prices and tightened lending conditions affected refinancing conditions for some borrowers. Recent rate cuts and stabilization in property prices has improved refinancing rates and this is starting to flow through to mortgage arrears. Refinancing is a common way for borrowers to self-manage their way out of arrears.

We expect arrears to continue to decline, albeit modestly, as low wage growth, high household debt levels, and a softening economy act as a constraint on household finances.

We expect improvements in arrears to flow through to earlier arrears categories. The more severe arrears categories of 90-plus days are unlikely to be affected as much by falling interest rates, given the age of many of these loans and the high market value declines that borrowers in these categories have experienced. Some 50% of loans in this category are domiciled in Western Australia and Queensland, and were written at the peak of the mining boom, resulting in large property market value declines. According to RBA estimates, around 3.75% of mortgage balances (by value) are in negative equity. This is up from around 2% a year ago. More than half of these mortgages are in Western Australia and the Northern Territory, where a little under 20% of balances are in negative equity.

A prolonged period of drought in many parts of regional Australia is also likely to keep arrears elevated in nonmetropolitan areas in the coming months. This is likely to keep arrears levels elevated in regional bank portfolios and some RMBS portfolios issued by credit unions that have a higher geographic exposure to a particularly nonmetropolitan area.
The SPIN measures weighted-average arrears that 30 or more days past due.

A more significant level of arrears is concentrated in nonconforming and portfolios and low-doc loans (charts 18b and 18c). Borrowers in these portfolios are more susceptible to changing economic conditions and find it difficult to refinance when lenders tighten their lending criteria. Since the global financial crisis, however, specialist lenders have also tightened their underwriting standards and decisively managed default situations. More nonconforming pools now have a mixture of full-documentation loans made to prime borrowers, in addition to low-documentation loans and more traditional subprime loans made to borrowers with adverse credit histories. This has contributed to arrears generally improving in this sector compared with the highs recorded after the 2008 financial crisis.

The stronger arrears performance in the nonconforming sector in recent years also reflects the significant increase in new issuance volumes, with total current loan balances outstanding more than doubling in the past five years. This will have diluted the SPIN to some degree.

Low-doc and nonconforming loans now form a small part of total RMBS loans outstanding, at just under 4%.
An Overview Of Australia's Housing Market And Residential Mortgage-Backed Securities

Chart 18b

Australian RMBS Nonconforming SPIN
Performance History

Source: S&P Global Ratings.
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Management and measurement of arrears

The two most common ways of measuring and managing arrears in Australia are the "scheduled-balance" approach—also known as the "Australian arrears method"—and the "missed-payments" approach. The scheduled-balance approach is used by most banks, credit unions, and building societies. The missed-payments approach historically has been used by nonbank lenders that want to establish regular cash inflows to match their payment obligations to investors who hold securities issued under their RMBS programs. This is changing, however, because many nonbank lenders are increasingly using the scheduled-balance approach.

There can be considerable differences between the levels of arrears measured under the two approaches. This can often result in significant variances in the reported arrears position of a mortgage portfolio. Investors should be aware of the distinction between the two measures. The missed-payments approach produces a higher but more conservative measure of arrears.

The scheduled-balance approach involves measuring and managing arrears by reference to the scheduled amortization curve of each loan. A loan is only deemed to be delinquent when the outstanding balance of the loan exceeds the scheduled amortization balance. A loan will not be delinquent simply because a number of scheduled payments may have been missed. This approach gives borrowers the flexibility to manage repayments to suit their needs on the condition...
that the balance of the loan remains at or less than the scheduled amortization balance. Failure to make a loan repayment when the scheduled amortization curve is above the current loan balance is referred to as a "payment holiday."

The missed-payments approach deems a loan to be delinquent when a scheduled payment is not made, even though a borrower may be substantially ahead of the scheduled amortization balance. This approach is designed to ensure that borrowers establish a regular payment pattern, and it can provide an early warning of borrower credit issues, such as unemployment or marriage breakdown, which may affect a borrower’s ability to meet loan repayments. This early warning provides the lender and borrower with more time to develop strategies to make losses less severe than they would be otherwise.

Characteristics of Australia’s residential mortgage market

Some of the fundamental characteristics of the Australian market that underpin the credit quality of residential mortgage loans are:

- The full-recourse nature of loans to borrowers, which promotes borrower accountability.
- The consumer credit legislation promotes lender accountability, with recent amendment to Commonwealth and state legislation to further emphasize responsible lending obligations.
- The uniformity and generally high standards of the underwriting policies and procedures of bank and nonbank lenders for residential mortgages. This is primarily due to Australia’s prudential regulatory framework, consumer credit legislation, the nature and maturity of Australia’s mortgage market, and the extensive use of lenders’ mortgage insurance.
- A strong home-ownership ethos and a high free-and-clear ownership rate.
- The rarity of severe downturns in nominal property prices across the country.
- The taxation system, which encourages rapid repayment of housing loans and acts as a disincentive to speculative behavior; for example, a high entry cost through stamp duty and capital gains tax.

Causes of default

We generally consider the major causes of default in Australia to be:

- Personal crisis, most commonly, marital disputes, illness, and death;
- Loss of income, commonly caused by job loss, a decrease in paid overtime, decrease in commissions, or the loss of a second job; and
- Loan affordability, predominantly due to interest-rate increases or other commitments.

Correlation of defaults and economic cycles

The Australian economy, like all economies, is characterized by its cycles. In Australia, it is common to see a period with a frequency of defaults immediately before low or negative economic growth. The nexus between defaults and economic downturns indicates that borrowers in the years before a downturn expect good economic conditions and sound employment prospects to continue. This level of optimism fuels demand for property, raises prices, and pushes the
serviceability of housing loans beyond the capacity of many people.

Expectations about the economy can act as a catalyst for change. When the market overheats, government monetary policy is tightened and the rise in interest rates leads to a decrease in affordability. At the same time, unemployment tends to increase. Higher property prices also trigger revisions to buyers’ expectations and reduce demand, which ultimately results in lower property prices.

At the low point in an economic cycle, recession and loss or reduction of income may result. There is also likely to be an increased incidence of default and bigger losses suffered by those people with mortgages written leading up to and at the height of the boom. These loans may not be well enough seasoned to have built up substantial equity; in fact, they may have less equity than when written, as a result of potentially then-prevailing lower property prices.

Although an economic downturn can have severe results, the level of arrears and defaults in Australia during these stressed periods has remained low to date by global standards.

The performance of Australian RMBS through the 2007 to 2009 downturn displayed the correlation of defaults and economic cycles discussed above. The highest cumulative losses experienced have been in the 2004 and 2005 vintages.

**Losses on Australian RMBS pools**

The performance of Australian prime RMBS transactions has been robust to date; there have been no charge offs--post-LMI and excess spread--on any rated notes. All losses as a result of foreclosures on properties secured by defaulted loans have been met by lenders’ mortgage insurance, the seller (as damages under its representation and warranties), or excess spread.

Chart 19a and chart 19b show the cumulative gross loss experiences by vintage.

The absolute level of gross losses on loans in Australian prime RMBS pools has been extremely low compared with the volume of loans that have been securitized. The 2010 vintage has seen a spike in the level of losses compared with similar vintages, though at 0.16% it is still low and is
due to a single low-doc transaction that has now been repaid.

Chart 19c and chart 19d show the cumulative gross loss experience by vintage for nonconforming transactions.

Although higher than before the downturn, the loss experience remained low through the 2007-2009 economic slowdown.

**Mortgage insurance claims history**

The experience of the Australian mortgage-insurance industry has been used to examine the performance of housing loans in Australia. Mortgage insurers have kept statistically significant portfolios and empirical data since 1965. S&P Global Ratings also has used surveillance information collected on rated RMBS programs during the past 20 years.
Notable periods in chart 20:
- Loans written after 1989 experienced long periods of decreases in lending rates, with moderate rises along the way.
- Australia experienced two recessions during these periods: the first in the early 1980s, followed by another in the early 1990s.

The Australian mortgage insurance industry’s claims experience for residential mortgage loans has been relatively low. The average cumulative claims frequency by underwriting year is about 0.62%. This has resulted in an average cumulative loss severity by underwriting year of about 0.24% of the total value of residential mortgage loans insured by Australia’s four mortgage insurers from 1973. Chart 20 shows the cumulative claims frequency and loss severity of mortgage insurance claims by underwriting year. Based on our observations, we believe that a
significant proportion of losses in a portfolio originated in a vintage tend to occur within the first five years, so the portfolios of more recent vintages have yet to show the full extent of any potential losses.

Loss curves
Prime amortizing mortgage loan pools display a typical loss curve, which is represented in chart 21.

Chart 21

S&P Global Ratings' Assumed Default Curve

If nominal house prices begin to appreciate more slowly, the risk period could become longer because equity in the property would not accumulate as rapidly as when nominal prices were increasing quickly. The faster payoff rate in Australia, which is due to factors such as there being no tax deductions for interest payments on owner-occupier loans, could partly counter the effect of lower nominal property price inflation on the loss-curve horizon.

The default curves for nonconforming loans are noticeably different compared with the prime assumed default curve, showing higher defaults earlier in the life of the transaction. Based on the performance data of nonconforming transactions that it rates, S&P Global Ratings has observed that higher prepayment rates and more front-end defaults occur in such transactions.
Prepayment behaviors of RMBS pools

By global standards, Australian RMBS pools tend to have relatively high prepayment speeds. The main reasons for this are the rate of refinancing, the existence of a mobile workforce, and the fact that interest on housing loans is not tax deductible. Refinancing rates are influenced by the strength of residential property markets, mobility within the workforce, interstate migration, and competition between lenders.

Conditional prepayment rates (CPRs) vary from program to program. The variation can be caused by high levels of refinancing away from a lender or by the structural features of a transaction that require a lender to repurchase loans in certain circumstances. A common example of this occurs in RMBS programs in which a loan is repurchased from the pool if the borrower seeks an additional loan advance beyond his or her scheduled balance. Another example is when borrowers change loan products after the commencement of a securitization program and their loans are repurchased from the collateral pool by the lender. These structural features vary by transaction.

S&P Global Ratings has developed indices representing the weighted-average annualized quarterly prepayment rates for rated prime and nonconforming RMBS transactions, known as the Standard & Poor’s Prepayment Index (SPPI). The SPPI is available on a quarterly basis in the S&P Global Ratings publication "RMBS Performance Watch: Australia and New Zealand" (chart 22).

Nonconforming pools tend to have higher CPRs than prime pools due to the high level of refinancing activity because borrowers either become eligible for prime loans with lower interest rates or they default and foreclose on the property to repay the loan.

Nonconforming prepayment rates declined after the economic slowdown of 2007-2009, reflecting the difficulty these borrowers face in refinancing their loans, given the reduced competition in this market segment now. Prepayment rates for prime and nonconforming loans have slowed in recent quarters, reflecting tougher refinancing conditions for certain borrowers, given the general tightening in lending standards. Recent rate cuts have led to increased competition among lenders for borrowers of a sound credit quality. We expect the recent rise in refinancing rates to translate to an increase in prepayment rates in the next 12 months.
Counterparty risk in RMBS

The key reason for rating movements in the Australian RMBS sector historically has been rating transitions in key transaction counterparties, namely LMI providers and swap providers.

Following the lowering of our ratings of QBE Lenders' Mortgage Insurance Ltd. and Genworth Financial Mortgage Insurance Pty Ltd. to 'A' on July 25, 2019, we lowered our ratings on 23 tranches of Australia and New Zealand structured finance transactions. Most of these ratings were in the 'AA (sf)' and 'A (sf)' category.

The stable outlook of the four major banks is credit positive for the Australian RMBS sector because the major banks perform a number of roles, including swap provider and bank account provider, in many transactions.

Related Criteria

- Criteria: Methodology For Assessing Mortgage Insurance And Similar Guarantees And Supports In Structured And Public Sector Finance And Covered Bonds, Dec. 7, 2014
- Criteria: Australian RMBS Rating Methodology And Assumptions, Sept. 1, 2011

Related Research

- Australian Major Bank Hybrid Issues Upgraded As Economic Risks Ease, Oct. 24, 2019
- Credit Conditions Asia-Pacific: China Slows, Trade Tensions Blow, Sept. 30, 2019
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- Australian Property Seminar: Signs Of Life In A Slowing Economy, Sept. 10, 2019
- Credit FAQ: Can Australian RMBS Ratings Withstand A Slowing Economy And Lower Property Prices? July 30, 2019
- Softening Macroeconomic Conditions Will Test Australian RMBS, March 4, 2019
- Stronger Governance And Regulation For Australian Financial Sector Following Royal Commission, Feb. 5, 2019
- Does the Declining Use Of Lenders' Mortgage Insurance Make Australian RMBS "Less Prime"? Oct. 17, 2018
- Why Australian RMBS Ratings Are Less Reliant On Lenders' Mortgage Insurance, June 12, 2018
- Research Update: Australia Ratings Affirmed At 'AAA/A-1+', Outlook Remains Negative, May 16, 2017

Useful Links

- The Australian government provides detailed reporting and operational notices at http://www.aofm.gov.au/content/rmbs.asp?NavID=60
- The Australian Bureau of Statistics provided a range of statistics utilized in this report (see http://www.abs.gov.au)

This report does not constitute a rating action.

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