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An Overview Of Australia's Housing Market And Residential Mortgage-Backed Securities

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Table Of Contents

An Overview Of Australia's Housing Market And Residential Mortgage-Backed Securities

The Australian residential mortgage-backed securities (RMBS) sector has undergone many changes in the decade since the financial crisis. New issuance volumes have contracted from their pre-crisis highs, but collateral quality is stronger. This is evidenced by lower loan-to-value (LTV) ratios and fewer low-documentation loans in prime and nonconforming portfolios. Asset performance also has been relatively stable throughout this period, with stable employment conditions and low interest rates supporting low arrears and losses.

Economic headwinds such as lower wage growth and high household indebtedness have increased borrowers' vulnerability to interest-rate rises and property price declines. However, most borrowers in Australian RMBS transactions have a demonstrated repayment history and have built up a reasonable level of equity in their home loans, making them better placed to withstand any deterioration in economic conditions and property prices.

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; and
- 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).

Key Influences On Australian RMBS

Influences	Current outlook
Australia's economic fundamentals	The rebalancing of growth away from mining sectors is steadily progressing. Labor market conditions are relatively stable, but underemployment has risen and wage growth is low. This makes borrowers more vulnerable to rising interest rates and a decline in property prices.
Demographic trends	Positive net migration continues, but population growth has slowed since 2012, though it has picked up again in the past 12 months.
Interest rate trends and mortgage arrears	A prolonged period of low interest rates has assisted with debt serviceability, particularly against a backdrop of lower wage growth. We expect recent interest rate rises by lenders out of cycle with official movements to put pressure on arrears because most loans are variable-rate mortgages. Arrears remain below their decade-long average of 1.25%, and even if they do continue to increase from these low levels, we do not expect this to translate into higher defaults in a current economic climate of relatively stable employment conditions.
State of the housing market	Property price growth has persisted unabated, with Sydney and Melbourne recording year-on-year growth as of March 2017 of 14.4% and 13.4%, respectively. Strong property price appreciation, coupled with strong growth in private-sector debt, has increased the risk of a sharp correction in property prices (see "Ratings on 23 Australian Financial Institutions Lowered On Buildup of Economic Imbalances," May 21, 2017). We consider such a scenario to be a stress-case scenario. In our base case, we expect the imbalances to eventually unwind in an orderly manner.

Key Influences On Australian RMBS (cont.)

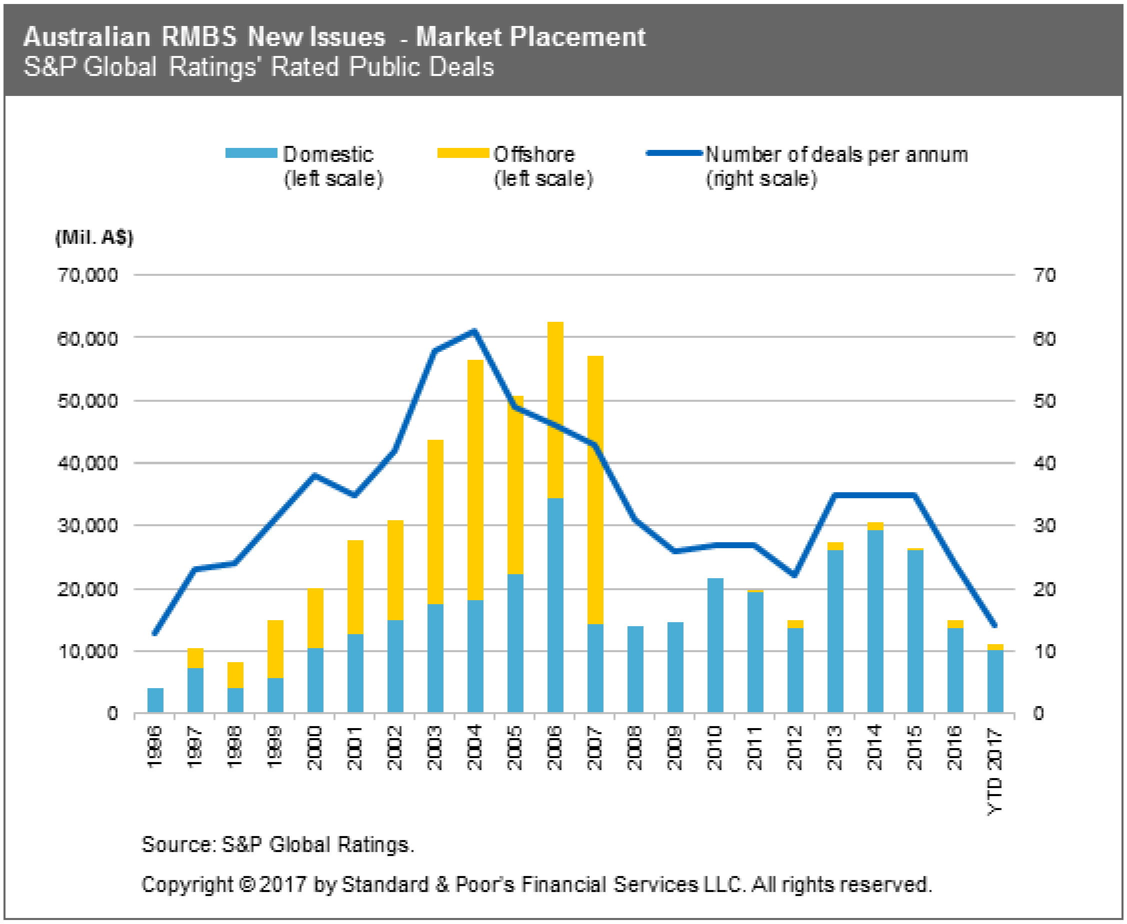
Influences	Current outlook
Household indebtedness	Australia's household debt-to-income ratio has increased from 98% in March 1997 to more than 190% in March 2017. Rising household indebtedness has occurred alongside a relatively uninterrupted period of strong growth in house prices and lower wage growth. This has driven the buildup in imbalances in the economy. A tightening in underwriting standards since 2014 will help to ensure more recent borrowers are better placed to withstand any downturn in economic conditions. These measures, along with the speed limits recently announced by the prudential banking regulator, should partly mitigate the increased risks faced by the Australian banking system due to a rapid rise in property prices in Sydney and Melbourne (see "Ratings on 23 Australian Financial Institutions Lowered On Buildup of Economic Imbalances," May 21, 2017). In the context of Australian RMBS, the relatively modest weighted-average LTV ratio of around 60% means that most borrowers have a degree of buffer against a downturn in property prices and reasonable refinancing prospects to manage their way out of financial difficulty, should this occur.
Mortgage market dynamics	Banks, particularly majors, continue to dominate residential lending in Australia. The differential between lending rates and the cash rate has widened, with lenders increasing rates out of step with official cash rate movements. Issuance by nonbank originators made up around 44% of total structured finance RMBS issuance in 2016, up from 6% in 2011. The proportion of mortgages securitized is around 6%; down from around 22% before the crisis.
Role of lenders' mortgage insurance (LMI)	The use of LMI in Australia is decreasing. The LMI coverage across the 2017 vintage is less than 39%, compared with 100% for the 2007 vintage. LMI is the key counterparty risk for most prime RMBS transactions, particularly for subordinated notes.
Product variations	Discretionary variable-rate mortgages are the predominant loan type in Australia. Low-documentation-style loans now make up around 1% of loans underlying prime RMBS transactions and around 40% of nonconforming transactions, down from 63% in 2007. This has resulted in an overall improvement in the credit quality of the Australian RMBS portfolio.
Regulatory and legal framework	A sound regulatory framework underpins origination and lending practices. A heightened regulatory focus on sound lending practices in recent years has resulted in a tightening of debt serviceability assessments, and this has flowed through to lower LTV ratios for more recent originations.

Australian RMBS New Issuance Review

Issuance levels

New issuance fell in 2016 compared with a year earlier because higher note margins kept many issuers on the sidelines. The situation reversed in the first half of 2017 as pricing margins tightened. There also has been greater diversity of issuance by originator types in 2017, with regional bank issuance up on previous years and nonbank financial institutions re-entering the securitization market. Nonconforming issuance as a share of total issuance increased to more than 15% in 2016 from just over 2% in 2012. Investors are increasingly looking to this sector, given its higher yields and relatively stable collateral performance. Chart 1 shows the issuance volumes of Australian RMBS by market placement from 1994 to 2017 (YTD).

Chart 1



While ongoing regulatory developments domestically and internationally continue to affect new issuance volumes, particularly for bank originators, increased investor interest in Australian RMBS, especially from Asian investors, has bolstered new issuance levels.

Australian Government Support

Australian Office of Financial Management

New issuance between 2007 and 2011 was predominantly to domestic investors and the Australian government through its Australian Office of Financial Management (AOFM).

The AOFM set up a program in 2008 to purchase up to A$8 billion of RMBS to support competition in Australia's mortgage markets.

The program was extended by A$8 billion in October 2009 and A$4 billion in April 2011 under the government's Competitive and Sustainable Banking Package. This initiative supported the livelihood of smaller lenders in the market.

The Australian government ended the AOFM RMBS Investment Program in April 2013, citing sufficient private-sector support for the market to operate on its own, while adding that the AOFM would continue to hold until their maturity any securities already purchased. Tasked with selling its RMBS investments, the AOFM conducted a number of auctions. The last one was in October 2015 and the AOFM announced in November 2015 that RMBS auctions will remain suspended until further notice.

Reserve Bank of Australia

To improve liquidity in a number of domestic markets, the RBA expanded the range of securities eligible for its repurchase operations (repo-eligible), which include 'AAA' rated RMBS. A number of lenders, particularly financial institutions, have structured repo-eligible RMBS to meet their liquidity needs since 2008.

Issuers of eligible RMBS are now required to provide loan-level data, security level data, and cash-flow waterfall data for repo-eligible transactions on a monthly basis. These data requirements have been mandatory since June 30, 2015.

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. The country's high external indebtedness and vulnerability to weak commodity export demand moderate these strengths (see "Australia Ratings Affirmed At 'AAA/A-1+'; Outlook Remains Negative," May 16, 2017).

The rating outlook remains negative, reflecting risks to the government's fiscal consolidation plan and risks to the economic, fiscal, and financial stability outlook should the rapid growth of credit and house prices continue (see " Australia Ratings Affirmed At 'AAA/A-1+'; Outlook Remains Negative," May 16, 2017).

Table 1

S&P Global Ratings' Economic Indicators

	2016	2017f	2018f
Real GDP growth (%)	2.5	2.7	2.9
Unemployment rate (%)	5.7	5.8	5.5
CPI (%)	1.3	1.8	2.1

Source: S&P Global Ratings.

Australian GDP has continued to grow at just under 3%. A rebalancing of the economy away from mining investments toward nonmining sectors appears to be well advanced, according to the Reserve Bank of Australia. The unemployment rate has been relatively stable at just under 6%, though underemployment has been rising. Lower wage growth has contributed to low inflation, which has enabled the RBA to keep rates at low levels; however, we expect rates to gradually increase.

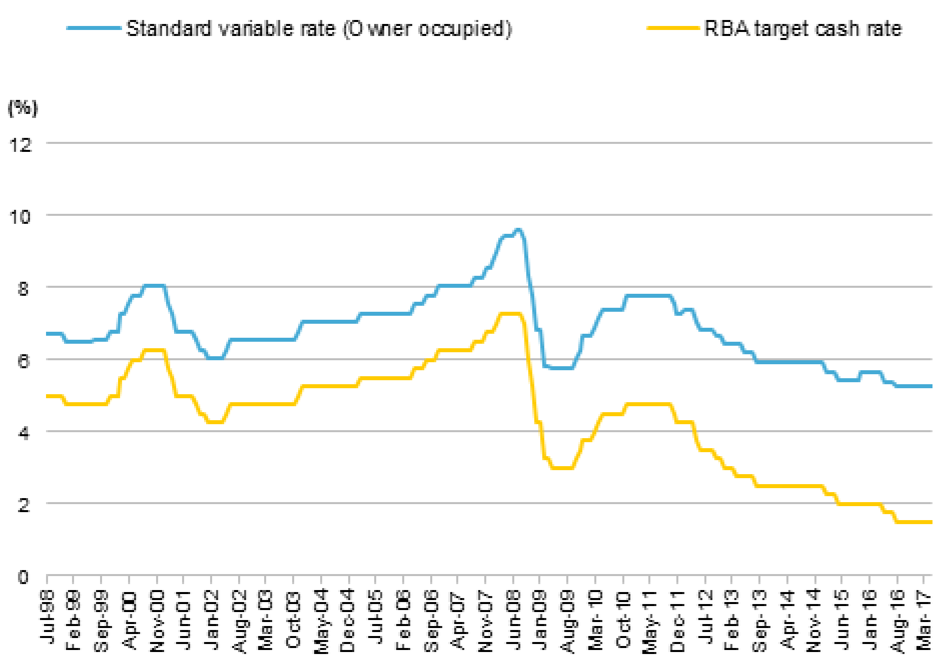
Interest-rate trends

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 2 shows the target cash rate from 1997 to 2017. After a significant reduction in the early 1990s, the rate was steadily raised from 4.25% in December 2001 to 7.25% in March 2008.

Chart 2

Standard Variable Housing Indicator Lending Rate Versus Official Cash Rate



Source: Reserve Bank of Australia.

As the deterioration in global financial markets and economic conditions started to weaken the domestic economy, the RBA lowered the cash rate in rapid steps from September 2008 to a then-49-year low of 3% by April 2009. At the time, the RBA said it considered the then-record decrease in the cash rate to be an "emergency" level that would no longer be warranted as the economy recovered. As the economy started to recover, the RBA began to raise the cash rate, increasing it to 4.75% between October 2009 and November 2010 to balance sustainable growth in economic activity and a consistent inflation rate compared with the RBA target in the years ahead.

The RBA again lowered the cash rate between late 2011 and August 2016, when it reached its current level of 1.50%. However, in recent years, we have seen some lenders adjusting interest rates out of step with the RBA due to tight funding markets (chart 2). The differential between the cash rate and standard variable rates has widened, reaching a peak of 3.80% in March 2017. This highlights the discretionary nature of standard variable rates and the ability of lenders to move out of step with the RBA. Lenders have also started to differentiate mortgage pricing across product types, charging higher interest rates on investor and interest-only loans. This is to bring lending growth in these products in line with regulatory requirements.

Population demographics

Australia has an estimated population of about 23.4 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 3).

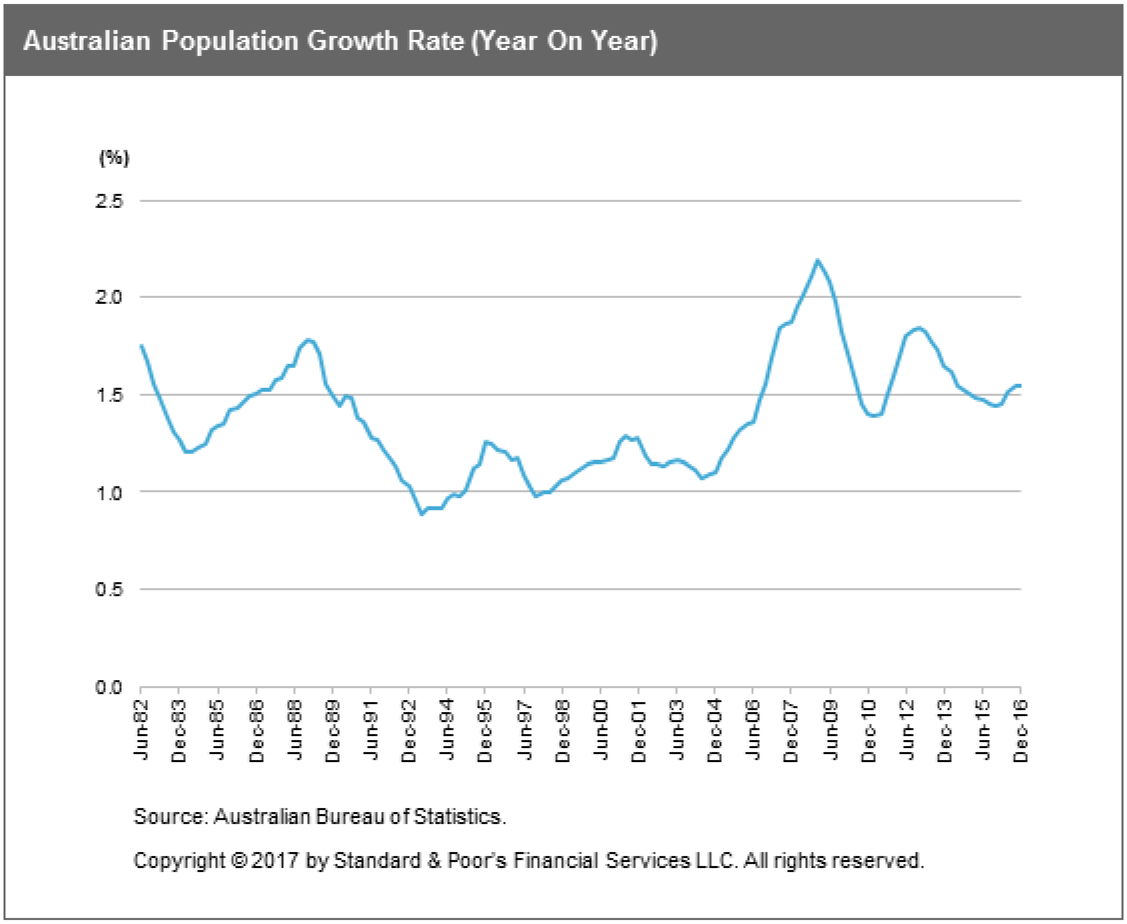
Chart 3

Australian Population Distribution

State/Territory	Local currency rating as of June 2017	Population as of December 2015	Population as of December 2016
New South Wales (NSW)	AAA	7,681,409	7,797,791
Victoria (VIC)	AAA	6,097,599	6,244,227
Queensland (QLD)	AA+	4,813,297	4,883,739
South Australia (SA)	AA	1,706,644	1,716,966
Western Australia (WA)	AA+	2,550,953	2,567,788
Tasmania (TAS)	AA+	516,078	519,050
Australian Capital Territory (ACT)	AAA	399,578	406,403
Northern Territory (NT)	Not rated	244,403	245,048
Total		**24,009,961**	**24,381,012**

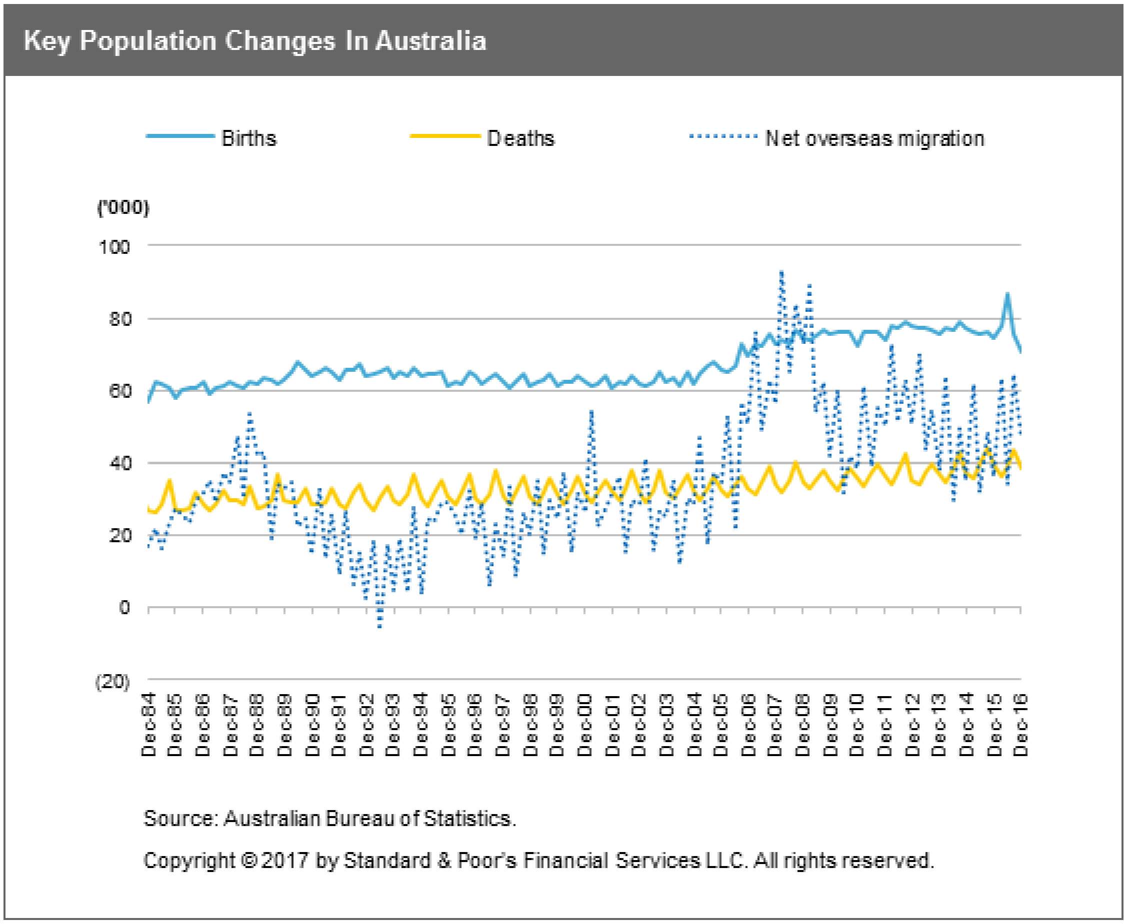
Source: Australian Bureau of Statistics.

Chart 4



Australia's population has grown an average of about 1.7% during the past 10 years. The population growth rate has been slowing since 2012 due to lower net overseas migration, though it has picked up a little in recent quarters, reaching 1.55% as of December 2016. An aging population will see the age distribution of the Australian population change, with a growing percentage of people aged over 65.

Chart 5



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 2 shows interstate and overseas migration by state for the year ended Dec. 31, 2016.

Table 2

Interstate And Overseas Migration By State (As Of Sept. 30, 2015)

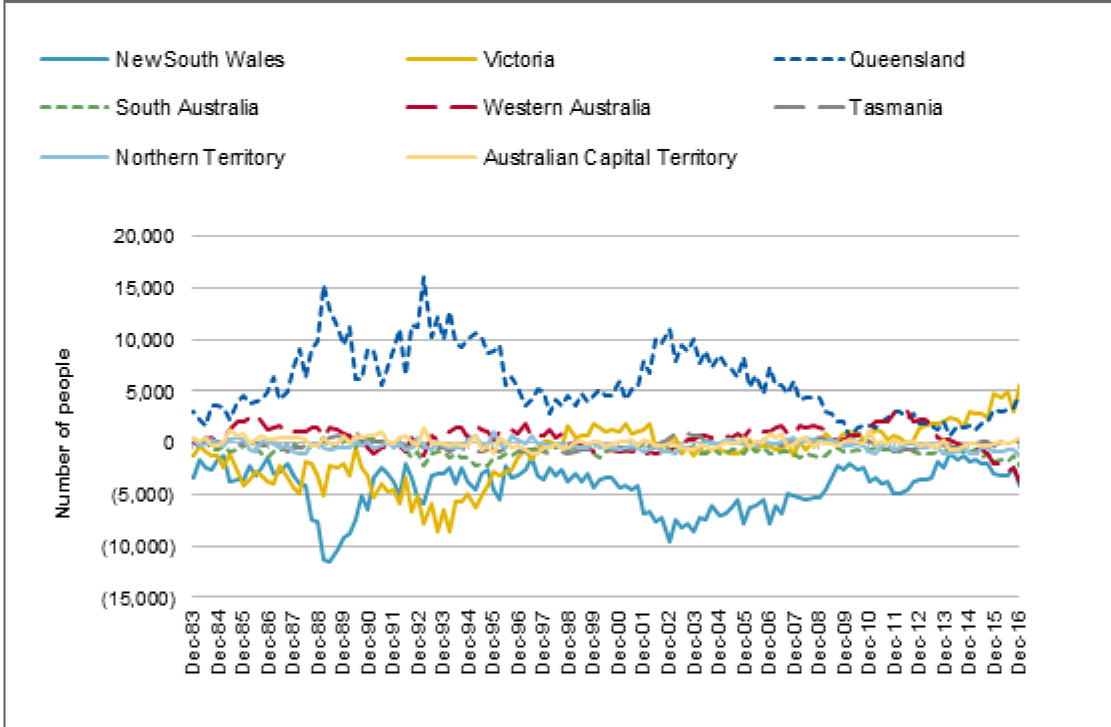
	Net overseas migration	Net interstate migration	Net population gain (including natural increases)
New South Wales	84,835	-12,822	116,382
Victoria	74,051	17,987	146,628
Queensland	23,023	14,652	70,442
South Australia	9,942	-6,903	10,322
Western Australia	12,921	-10,824	16,835
Tasmania	1,261	467	2,972
Northern Territory	2,879	-3,178	645
Australian Capital Territory	2,074	621	6,825
Australia	210,986	N/A	371,051

Source: Australian Bureau of Statistics. N/A--Not applicable.

Strong net overseas migration 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 75% of total net interstate 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 6

Net Interstate Migration By State



Source: Australian Bureau of Statistics.

Victoria recorded the highest net interstate migration in 2016, followed by Queensland. New South Wales had the highest net overseas migration, but the lowest net interstate migration. This could reflect people moving out of Sydney to take advantage of cheaper housing and increasing employment opportunities in other parts of the country. New South Wales and Victoria's net population gains were significantly higher than the other states and territories, representing more than 70% of total net population gains as of Sept. 30, 2016.

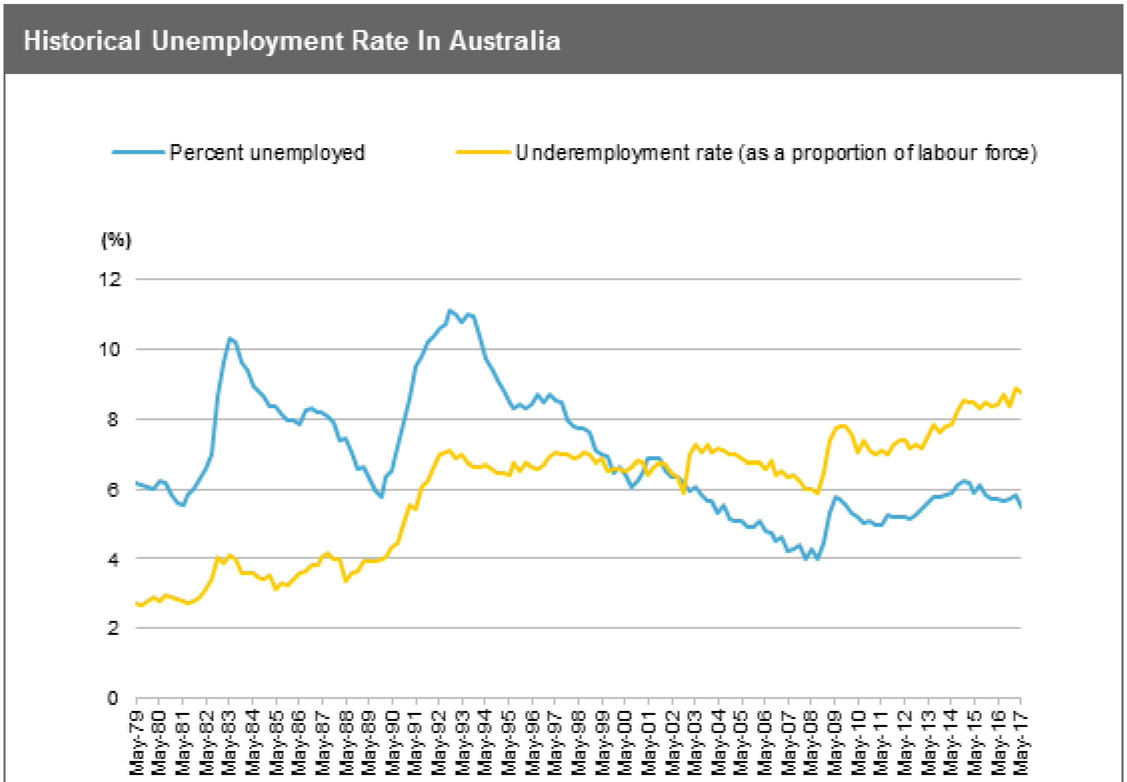
Urbanization

Australia's population is concentrated in suburban, urban fringe, and inner-city regions, particularly in state capital cities. According to the 2016 Census results, more than two-thirds of Australians live in capital cities. According to the Australian Bureau of Statistics, between the Censuses the number of people living in capital cities grew nearly twice as fast as the number of people living outside of capital cities. Sydney and Melbourne remain the key population centers.

Employment trends

According to the Australian Bureau of Statistics "Characteristics of Employment" publication in August 2016, about 82% of employed persons in Australian are employees, of whom around 75% have paid leave entitlements. 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 7



Note: Seasonally adjusted. Source: Australian Bureau of Statistics.

Australia's unemployment rate began declining after the early 1990s recession to reach a historical low of 4.1% in early 2008. The unemployment rate began to rise in mid-2008 to around September 2009, reflecting weakening economic conditions. Underemployment has been rising in Australia since 2010. This has occurred alongside stronger growth in part-time employment versus full-time employment, and partly reflects Australia's transition from mining investment to a more service-oriented economy.

The unemployment rate bottomed out in early 2008 at 3.98% and has hovered between 5% and 6% since May 2009. At these levels, arrears performance has been relatively stable. The performance has been bolstered by a prolonged period of low interest rates, which might have masked the effects on debt serviceability of lower wage growth, high household indebtedness, and increasing underemployment.

We expect employment growth to be relatively stable, supported by relatively stable GDP growth (table 1). Stable employment conditions bode well for Australian RMBS because loss of income is a key cause of default for borrowers. Chart 7 shows Australia's historical unemployment and underemployment rate between 1978 and May 2017. The highest unemployment levels experienced 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.

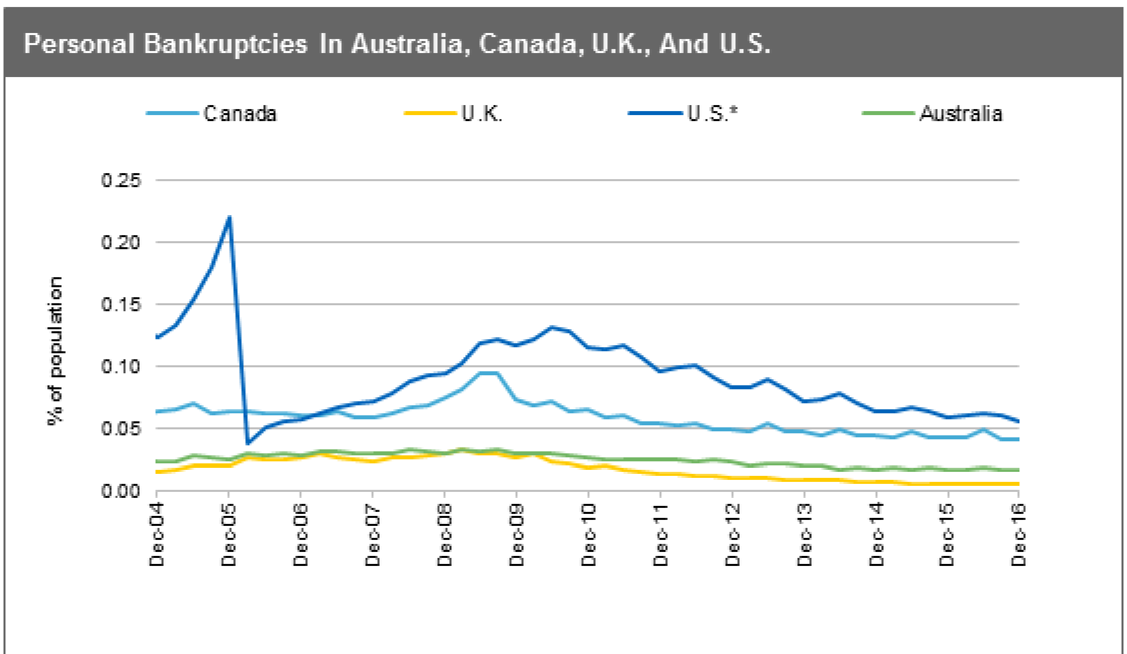
Home ownership

Home ownership is an important goal for many Australians. This is reflected in a high rate of home ownership, free and clear of mortgages (refer to the Housing Ownership section of this report). 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.

Personal bankruptcies

The level of personal bankruptcies in Australia has been consistently lower than in the U.S. and Canada (chart 8).

Chart 8



*Chapter 15 was added and Section 304 was terminated by changes in the bankruptcy laws effective on Oct. 17, 2005. Section 101 of the U.S. Bankruptcy Code defines consumer (nonbusiness) debt as that incurred by an individual primarily for a personal, family, or household purpose. The nature of the debt is business if the debtor is a corporation or partnership, or if debt related to the operation of a business predominates. Source: Office of Superintendent of Bankruptcy (Canada), Australian Financial Security Authority, U.S. Bankruptcy Court, and Department of Business Innovation & Skills (U.K.).

Underpinning Australia's historically low level of personal bankruptcies are the:

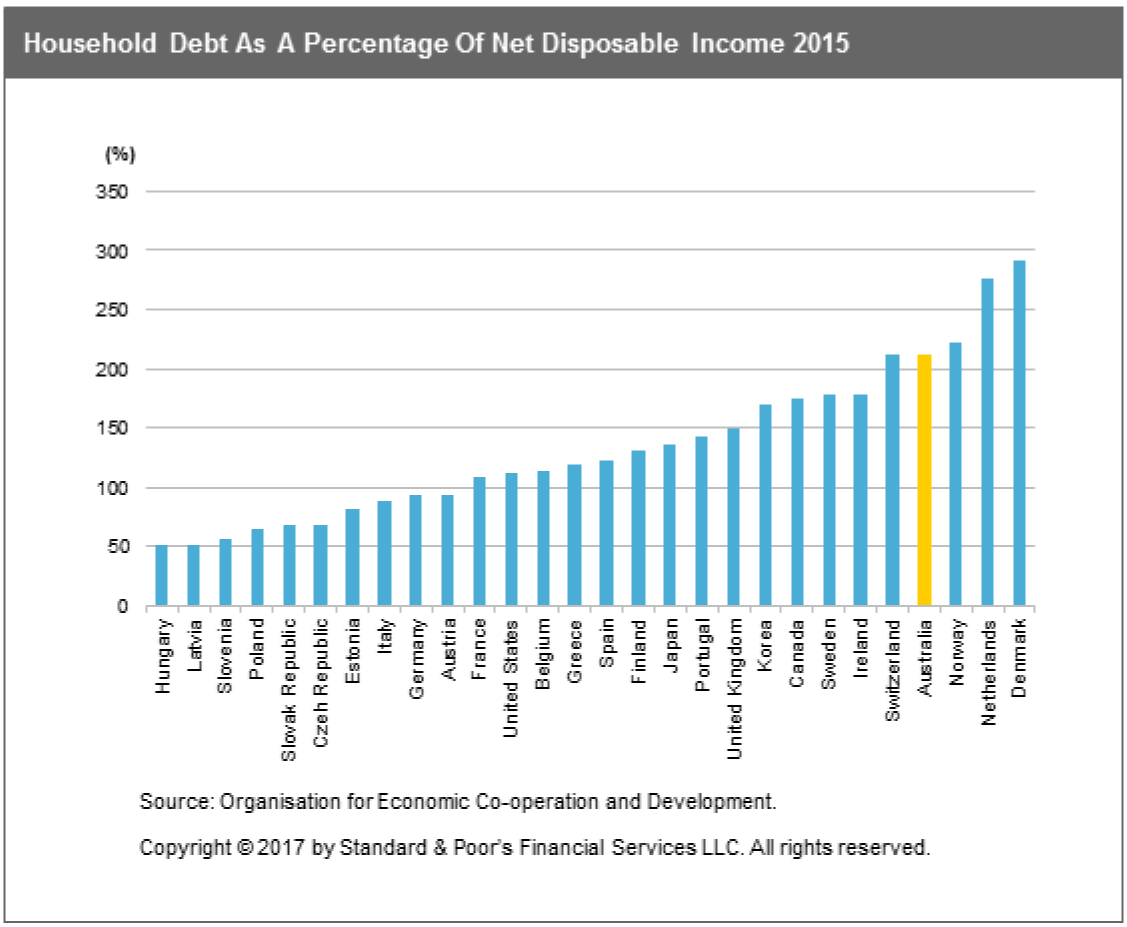
- Traditionally strong willingness of Australians to repay debt;
- Severe consequences of bankruptcy under Australian law;
- Stigma in Australia associated with bankruptcy; and
- Difficulty in accessing finance after bankruptcy.

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.

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.

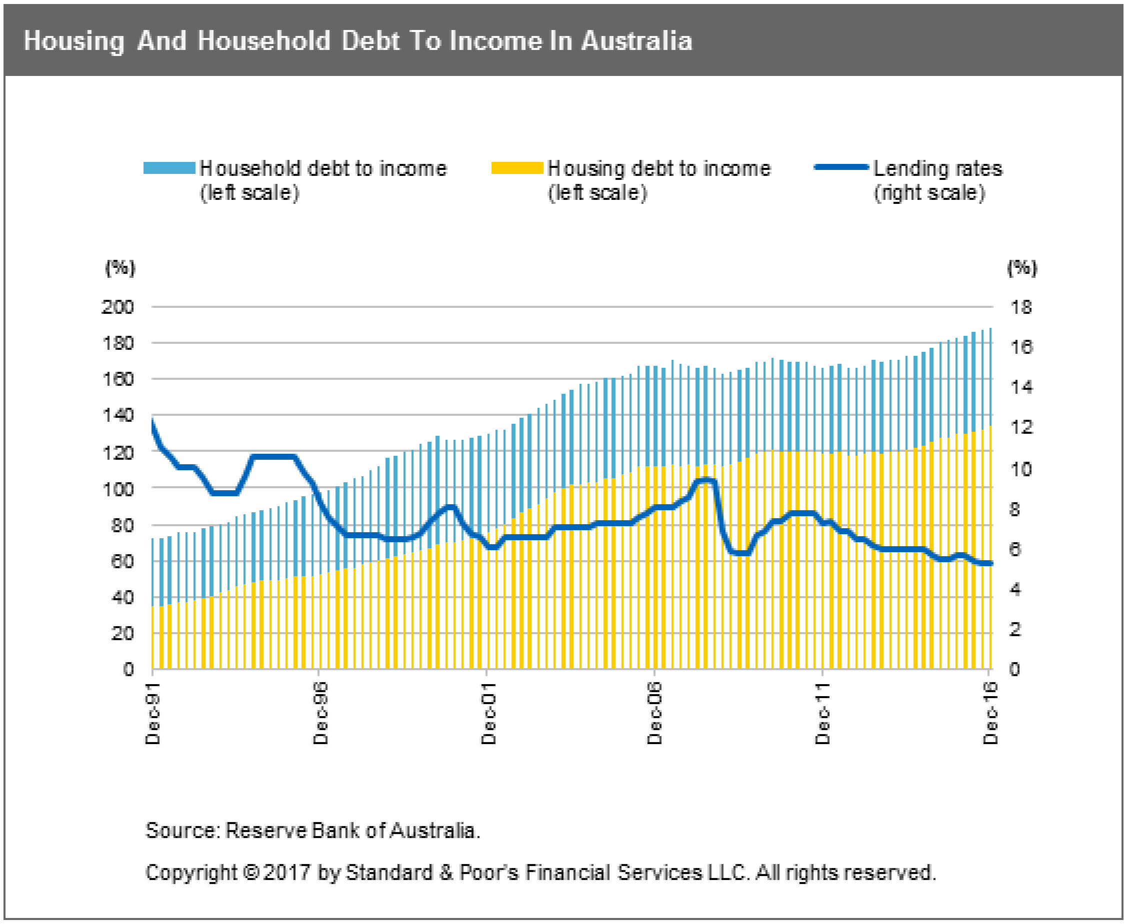
Chart 9



Household debt as a percentage of net household disposable income in Australia is high compared with many other OECD countries (chart 9).

Australia's household debt did not increase dramatically until interest rates and inflation reached low levels in the 1990s, improving consumer confidence (chart 10).

Chart 10



Most of the increase in household debt was used to buy assets, namely property. Chart 10 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 2017. Falling interest rates have coincided with rising household debt, of which the majority is housing related.

While rising housing debt has occurred alongside 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. On May 21, 2017, we lowered our ratings on 23 Australian financial institutions based on a buildup of economic imbalances (see "Ratings On 23 Australian Financial Institutions Lowered On Buildup Of Economic Imbalances," May 21, 2017). As outlined in our rating report, strong growth in private-sector debt, coupled with an increase in property prices nationally, has driven the buildup in imbalances in the economy, increasing the risk of a sharp correction in property prices. While our base case assumes that economic imbalances should unwind in an orderly manner, as has been the case in past property cycles, we now expect an orderly unwinding of imbalances from a higher level, given the rapid rise in property prices and household debt.

Increased regulatory scrutiny of mortgage lending standards has resulted in a general lowering of LTV ratios and improved debt-serviceability standards. These measures, along with the speed limits recently announced by the prudential banking regulator, should partly mitigate the increased risks faced by the Australian banking system due to a rapid rise in property prices in Sydney and Melbourne (see "Credit FAQ: What's Behind Today's Downgrades Of 23 Australian Financial Institutions?" May 22, 2017). Nevertheless, until these imbalances unwind substantially, we consider that the Australian banking sector risks will remain elevated.

Despite these 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.

A substantial increase in unemployment and the associated fall in disposable income are the key factors that could trigger a rise in defaults. We are paying increasing attention to the effect of lower wage growth and rising underemployment on debt serviceability. The low interest-rate environment undoubtedly has helped to offset the effects of lower wage growth. While lower wage growth could affect arrears, we do not expect it to translate into higher defaults while employment conditions remain relatively stable.

The Australian Housing Market

Dwelling types and locations

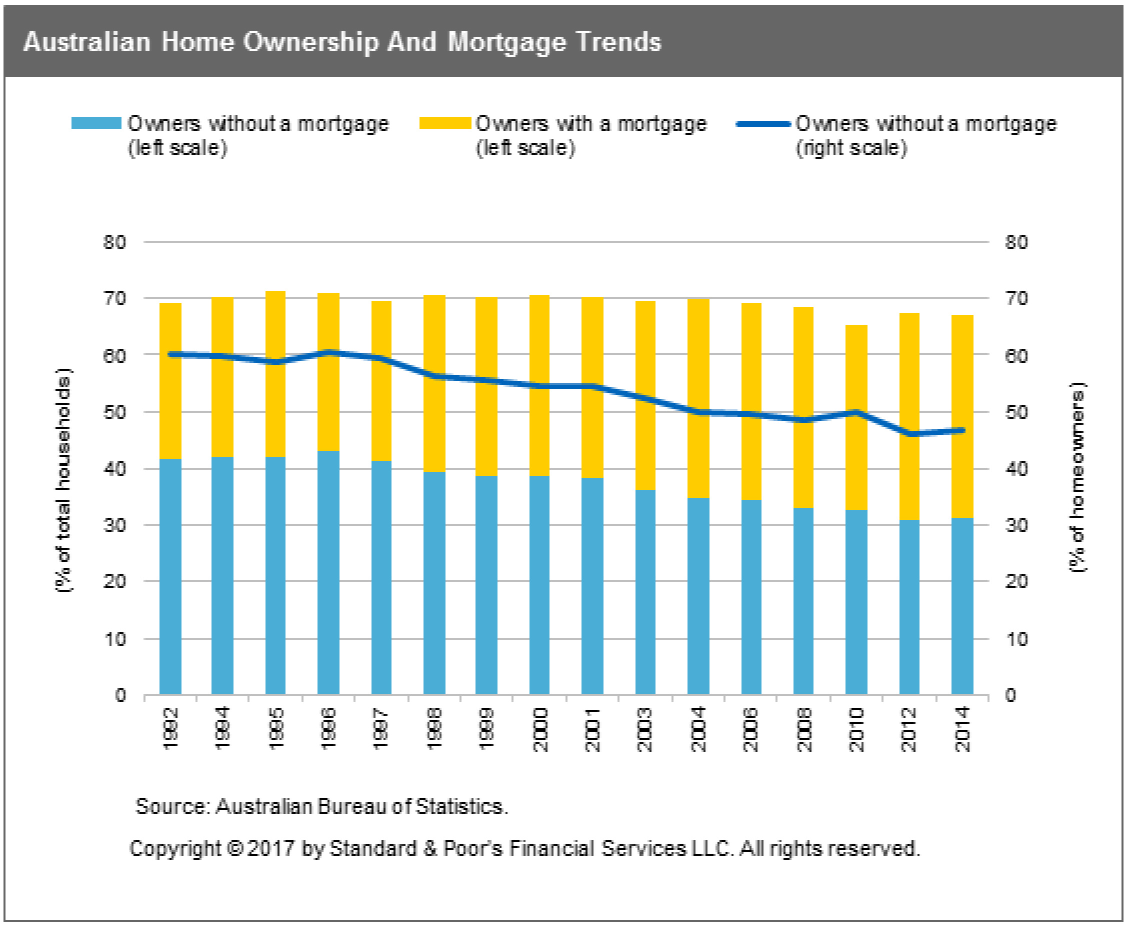
According to the Australian Bureau of Statistics 2016 Census results, 73% of all Australian dwellings were stand-alone, detached houses in 2016, down from 76% in 2011. The remainder are semidetached or duplex houses, row or terrace houses townhouses (12.7%), or flats and apartments (13.1%). The percentage share of higher-density accommodation has grown 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 ("Australian RMBS Postcode Classification Assumptions," July 10, 2013).

Home ownership

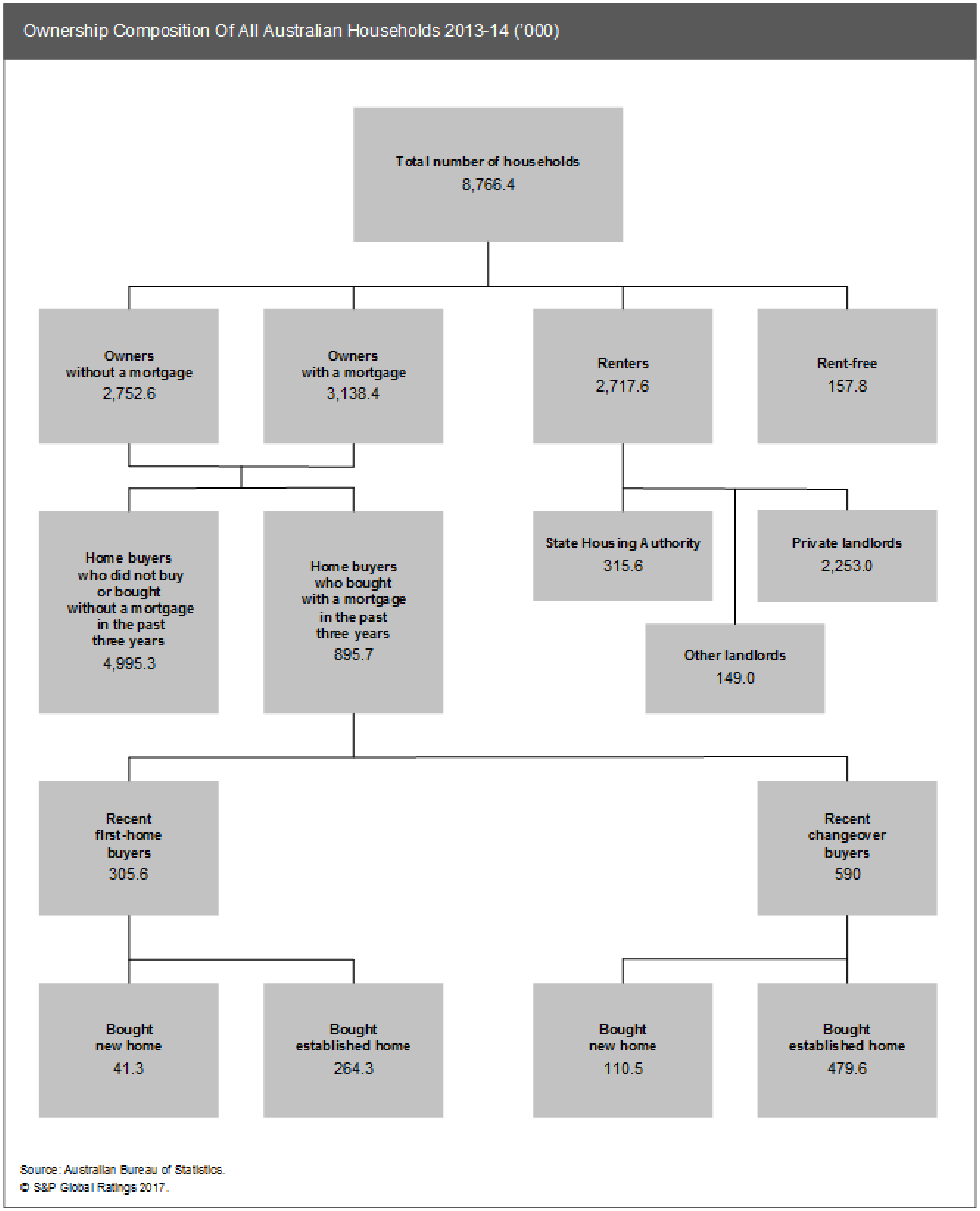
More than 67% of Australian households live in owner-occupied dwellings. Of these homeowners, 46% own their properties outright (31.4% of all households), without a mortgage loan. The proportion of homeowners without a mortgage increased in 2013-2014 compared with the 2011-2012 reporting period, but remains well below the peak of 60% (42.8% of total households) in 1995-1996. The percentage of homeowners with and without mortgages is summarized in chart 12. The latest available data are from the Housing Occupancy and Costs Survey of 2013-2014, produced by the Australian Bureau of Statistics.

Chart 11



Despite a slight rise in the number of homes owned free and clear of mortgages in the most recent data, the level of free-and-clear ownership has been falling since 1996, and this would exacerbate the effects of a severe downturn. The composition of Australian households by home ownership, as determined by the Australian Bureau of Statistics, is summarized in chart 12.

Chart 12


Ownership Composition Of All Australian Households 2013-14 ('000)
Total number of households 8,766.4
Owners without a mortgage 2,752.6
Owners with a mortgage 3,138.4
Renters 2,717.6
Rent-free 157.8
Home buyers who did not buy or bought without a mortgage in the past three years 4,995.3
Home buyers who bought with a mortgage in the past three years 895.7
State Housing Authority 315.6
Private landlords 2,253.0
Other landlords 149.0
Recent first-home buyers 305.6
Recent changeover buyers 590
Bought new home 41.3
Bought established home 264.3
Bought new home 110.5
Bought established home 479.6
Source: Australian Bureau of Statistics.
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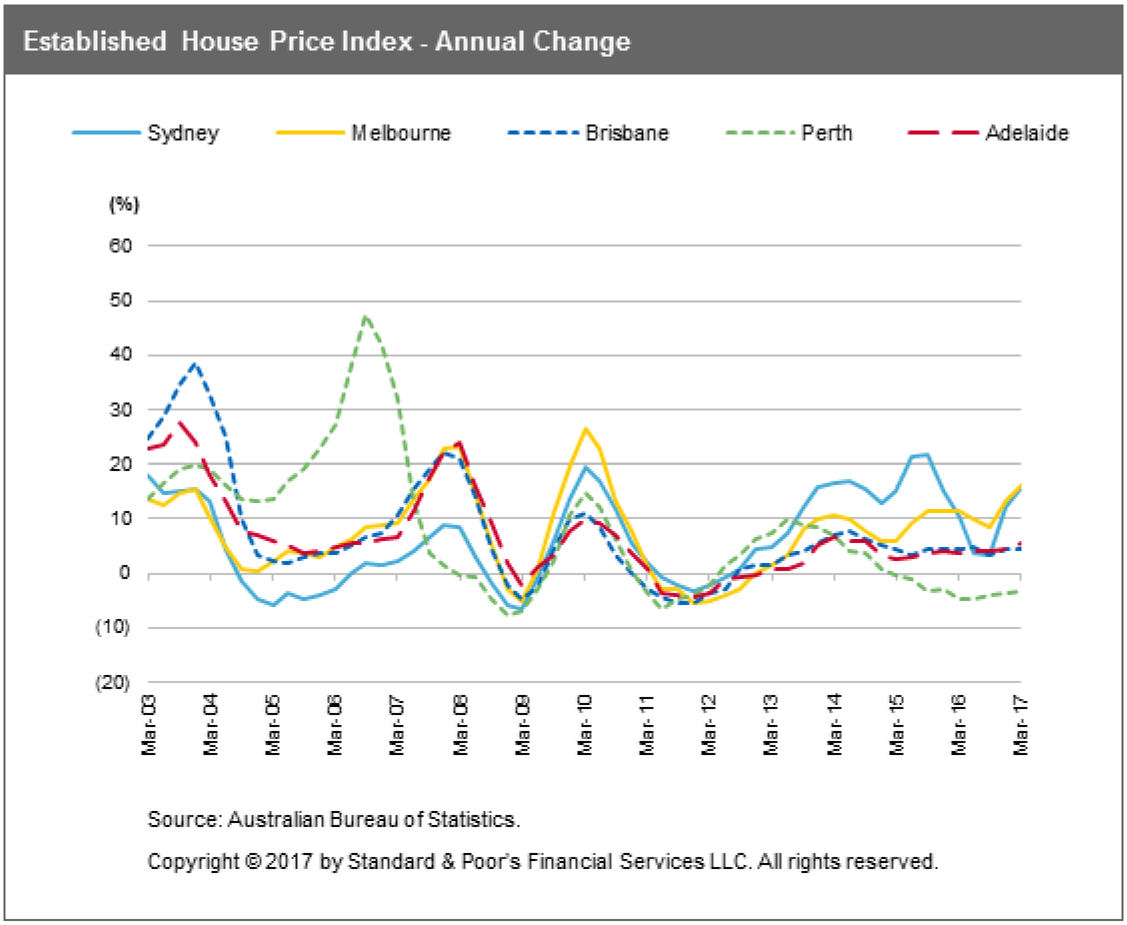
Historical house prices

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.

Chart 13



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 13 maps the annual percentage change in the Australian Bureau of Statistics' Established House Price Index for each capital city. Property prices declined in all capital cities between 2008 and 2009 and again between late 2010 and early 2012. The 2008 decline followed the global financial crisis. Successive interest rate cuts, together with the First Home Owner Grant (FHOG) and changes to the foreign-investment screening arrangements brought into force by the government in early 2009, spurred demand, however, fueling property price growth.

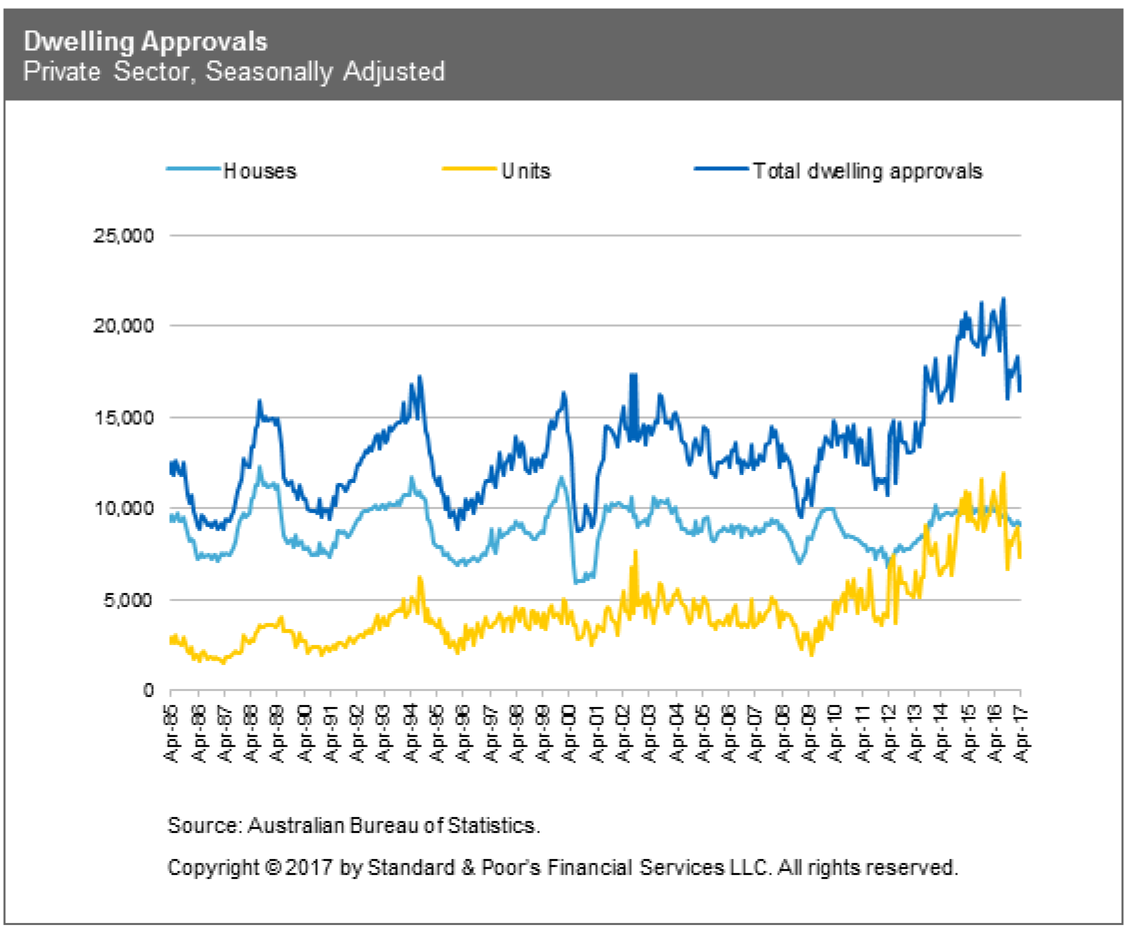
The heightened demand driven by the above measures abated after the measures were changed in 2010, including an increase in the cash rate. The FHOG from the Commonwealth scheme ceased at the start of 2010, though some state-based support continued at a lesser amount for those wishing to build or purchase new homes. The foreign-investment rules also were tightened for residential housing in April 2010. This contributed to a fall in dwelling values in 2010 that was quickly reversed by official interest rates cuts in late 2011.

Recent house price trends and outlook

Residential property prices grew 10.2% year on year in March 2017, according to the Australian Bureau of Statistics. Property price movements vary across the country. Sydney and Melbourne lead the way, with annual growth exceeding 13%. In Perth, property prices were down 3.5% year on year in March. Regulators have introduced macroprudential-style measures, including limits on growth in investor and interest-only lending, to temper frothy property prices. However, we believe the effectiveness of these measures could be counteracted by a lack of housing supply in the more populous capital cities. Furthermore, we believe the impact of regulatory measures on house price trends is often hard to predict.

Building approvals for private-sector housing have been moderately increasing since mid-2012. The growth in approvals for units has been particularly strong (chart 14), but has slowed at a faster rate than for houses in the past 12 months.

Chart 14



In the context of Australian RMBS, the geographic exposure across the entire portfolio to inner-city postcodes 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. Loans with higher LTV ratios are more exposed to changes in property prices. Around 16% of total RMBS loans outstanding have an LTV ratio in excess of 80%.

The Australian Residential Mortgage Loan Market

Banks are the main providers of housing-loan finance to individuals in the Australian market. The standard loan product is a 25- to 30-year, fully amortizing, variable-rate loan, secured by a first-registered mortgage over residential property.

Before the global capital market dislocation, the market could be characterized by:

- A high level of competition;
- Contracting lending margins;
- A very low level of loans in arrears;
- Product innovation;
- Evidence of stabilizing real property prices after a period of rapid increases in the early 2000s;
- The level and rate of refinancing, which remains high; and
- The establishment of a formalized, nonconforming RMBS market in Australia.

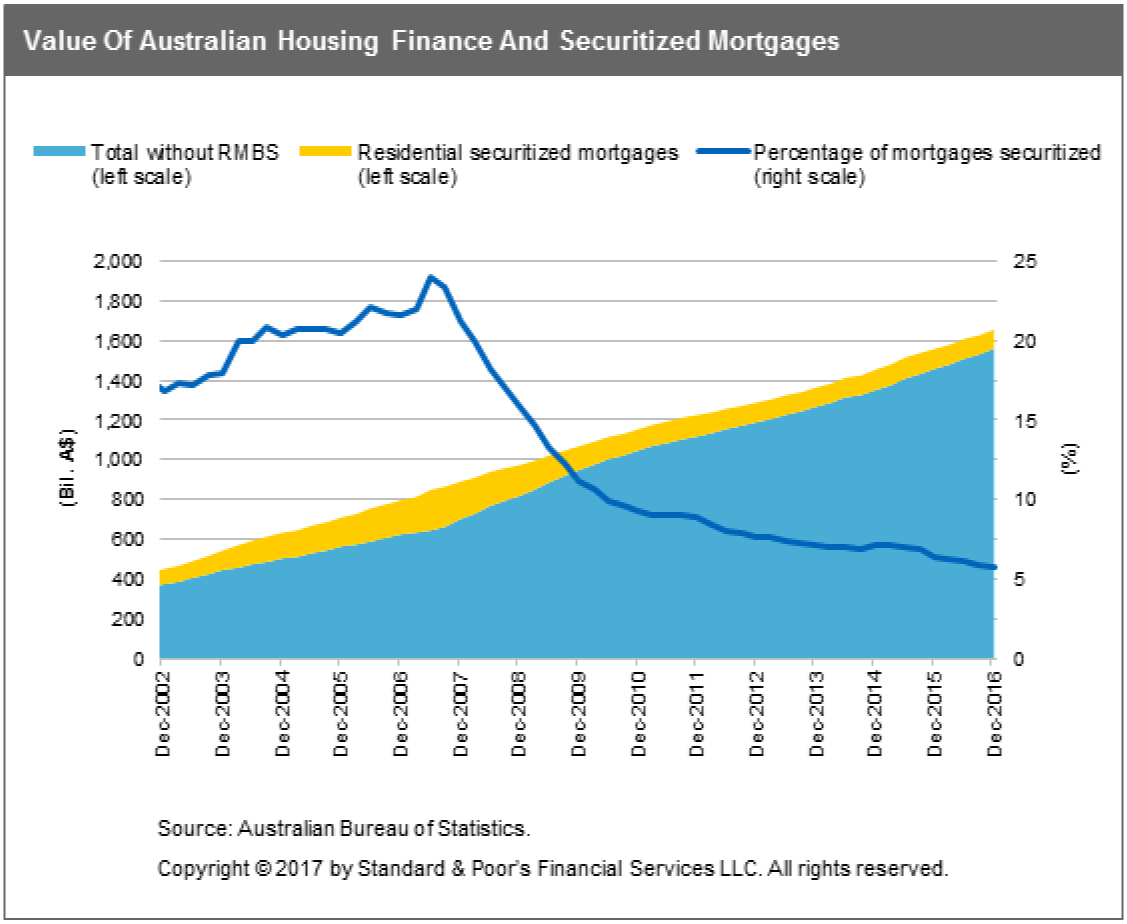
Since the capital market dislocation, the market has seen some marked changes in conditions, including:

- Some lenders that are highly dependent on securitization have significantly reduced origination volumes, while major banks have gained market share.
- The lending margins have increased, reflecting higher costs of funds.
- Credit rationing among lenders has resulted in reduced LTV ratios and less lending for properties in certain geographic locations. In addition, borrowers with adverse credit histories or currently experiencing financial stress find it difficult to refinance.
- The nonconforming and subprime RMBS market contracted rapidly after the financial crisis, but new issuance has picked up again in recent years.

Size of the market

There are now more than A$1.56 trillion worth of home loans outstanding in Australia, of which about 5.8% 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 15 shows the value of Australian housing finance--securitized and nonsecuritized--and the percentage of loans securitized from 1990 to 2016.

Chart 15



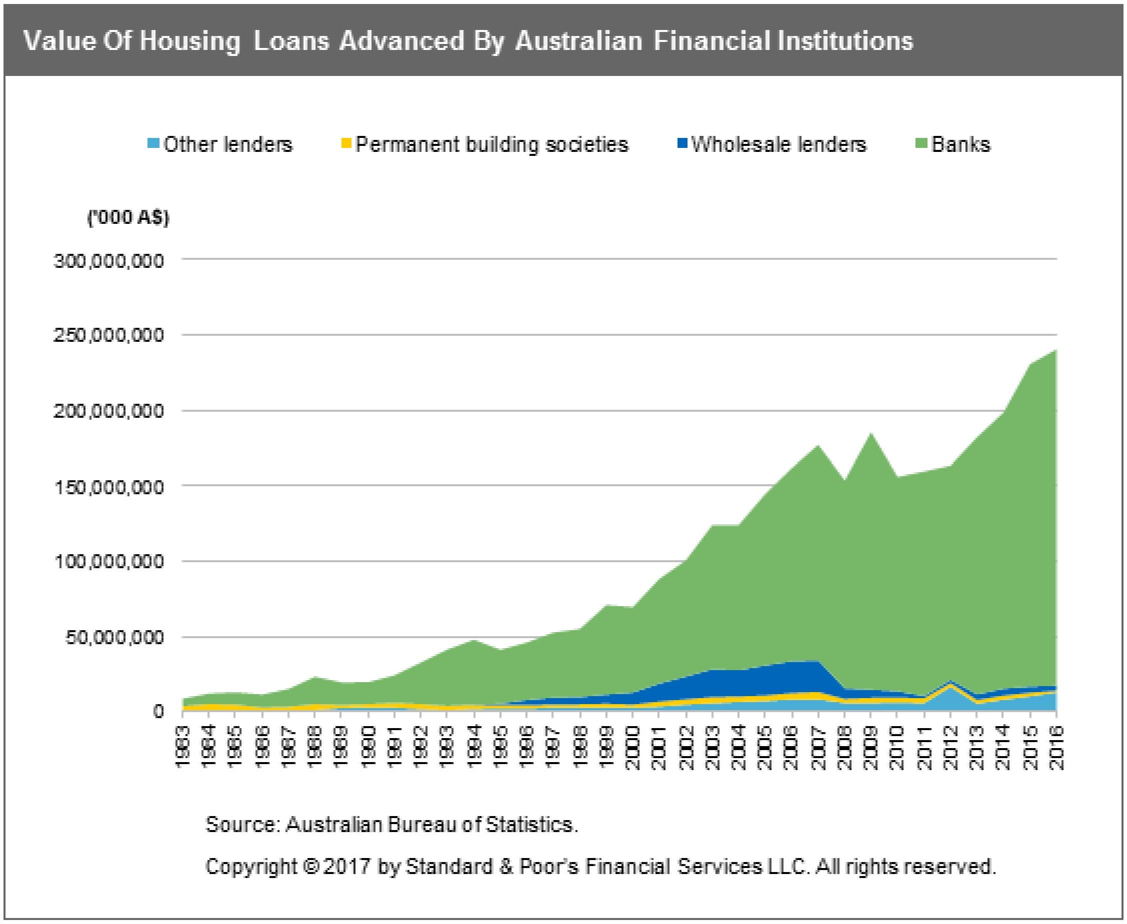
Value Of Australian Housing Finance And Securitized Mortgages

Source: Australian Bureau of Statistics.

Lenders

Chart 16 shows the proportion of loans advanced by lender type from 1984 to 2016.

Chart 16



Banks continue to be the main providers of housing finance in Australia. After falling to 77% in 2002, banks now account for 93% of housing finance commitments. Wholesale lenders' share declined to 0.88% in 2011 before rising to 1.70% in 2015, due to their limited ability to fund new mortgages as a result of restricted funding.

The four large commercial banks dominate Australia's banking sector, collectively accounting for about 80% of residential lending. Regional banks, other small 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.

Before the global economic slowdown, nonbank lenders accounted for a significant proportion of new advances, up from a negligible amount a decade earlier. The nonbank sector, mainly comprising prime lenders, began to include specialist nonconforming, subprime, and high LTV ratio lenders in the 2000s. As a result of the growth in the nonbank sector, competition increased, consequently driving down interest margins across the housing-loan sector. Growth in the nonbank sector slowed abruptly due to the global economic downturn, which reduced access to funding and increased the cost of funds. Consequently, nonbank originators have reduced their origination volumes, and some have revised their business models to depend less on securitization.

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. Brokers in Australia have access to a wide range of products from different lenders, usually assist borrowers with the application process, and liaise with lenders about required information and approval decisions. The emergence and influence of mortgage brokers led to substantial changes in the residential mortgage market. Although it is difficult to accurately quantify, around 40% of new loans were sourced through brokers before the capital market dislocation, with some lenders significantly more reliant on this distribution channel. Credit rationing by lenders due to the economic slowdown saw a material reduction in broker-sourced origination. According to Australian Prudential Regulatory Authority (APRA) data, third-party-originated loans make up around 48% of new housing loan approvals by authorized deposit-taking institutions (ADIs) as of March 2017, up from 42% in March 2008. APRA regulates banks, building societies, and credit unions.

Loan lifecycle

A typical Australian housing loan will follow a similar course during its life cycle. Broadly, the stages of a typical loan would include:

- Loan application by borrower--this could be made directly by the borrower to the lender, or could be via a third party channel such as a mortgage broker.
- Verification--the information provided on the loan application is checked to verify the accuracy of the information including but not limited to the borrowers identification, credit history, savings history, and income.
- Loan approval--the application is then sent to credit officers with delegated lending authorities for assessment of the application according to the lenders' lending policies. The approval process can be centralized or decentralized, and may incorporate automated credit decisioning if certain criteria are met. If a loan requires mortgage insurance, it is typically referred to the insurance provider for approval, unless the lender has a delegated underwriting authority from the insurer.
- Letter of offer--upon final approval, an indicative letter may be issued to the borrower with a final offer conditional on satisfactory valuation of the security property and that general insurance is taken on the security property by the borrower.
- Valuation--the lender will obtain a valuation of the property.
- Settlement--if conditions are met and the borrower accepts the letter of offer, the lender settles funds and lodges titles at the Land and Title Office.
- Servicing--the ongoing maintenance typically includes but is not limited to borrower information updates, redraws, top-ups, and interest rate adjustments depending on the loan features. If a loan is fully repaid or refinanced, then the loan is discharged.

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:

- Loan in arrears: If a loan falls into arrears, then the servicing of the loan will also include contacting the borrower to discuss payment or alternatives, for example, short-term assistance through a hardship relief program.
- Mortgage in possession: If arrears cannot be rectified, then the lender may issue a statutory notice or statement of claim, and apply to the Supreme Court for judgment and eviction. The lender will through its agent take possession, obtain an updated valuation, market and sell the property.
- Realization of property: Maintenance work may be required prior to marketing of the property, and proceeds of the sale would be applied to any fees and expenses associated with taking possession and selling the property, and the

repayment of outstanding interest and principal due on the loan.

- Mortgage insurance: For insured loans, a claim is lodged for outstanding amounts not covered by the property sale proceeds. For loans where mortgage insurance applies, the mortgage insurer is kept informed throughout the realization process.

In general, the time period from a loan falling into arrears to realization of the security property through sale can take 8-12 months on average. However, this can depend on the property location and market conditions prevailing at the time. Other factors that may extend this process may be legal disputes or disputes relating to hardship programs.

Underwriting standards

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. The standards mainly focus on establishing a borrower's capacity and willingness to pay, and the quality and value of the underlying security. The mild stress experience in Australia through 2008 and 2009 has tested some newer products, including low-documentation (low-doc) loans as well as lending to nonconforming borrowers, though these products represent less than 2% of securitized loans rated by S&P Global Ratings, and overall loss experience remains low.

Borrower income and serviceability

Australian lenders generally verify a borrower's income by using a number of standard methods, such as sighting two recent pay slips, reviewing bank statements for regular cash flows, or by obtaining a letter from the borrower's employer. Self-employed borrowers tend to provide tax-assessment notices and returns and financial statements as proof of income, and are generally required to have been in business for a minimum period of two years. The exception is for "reduced-documentation" or low-doc products, for which borrowers usually declare their income to the lender without full verification of the borrowers' income from traditional source documents. However, the standard for low-doc verification was broadly raised after the financial crisis, with the introduction of the responsible lending conduct obligations of the National Consumer Credit Protection (NCPP) Act. Reduced-documentation products are described in further detail in the Reduced-Documentation Loans section.

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, strong property price growth, and low interest rates. Current guidance includes the use of interest-rate buffers and floors in mortgage serviceability assessments, in addition to applying specific haircuts to nonsalary and rental income. There is also specific guidance on the calculation of living expenses to ensure the expenses included in the debt-serviceability calculations reflect a borrower's actual expenses. Based on our observations, most lenders in the securitization space use an interest-rate buffer, in addition to an interest-rate floor. These lenders also will typically apply a minimum net surplus income ratio of 1:1 (i.e., net monthly income less living expenses and debt repayments equal zero).

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 for loans at certain LTV ratio levels), S&P Global Ratings believes that the majority of borrowers have demonstrated a regular savings pattern.

Credit reporting

The ability to access the historical credit performance of a borrower is generally an integral part of the decision to extend credit. Veda is the primary credit-reporting agency in Australia. Equifax Inc., a global leader in information solutions, acquired Veda in February 2016. 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. Most subscribers, particularly credit providers, provide the required information to the agency, though delays may occur and defaults may not be notified until outstanding accounts exceed 120 days, or when legal action to recover the debt has been undertaken. Therefore, borrowers who are irregular for up to 120 days may not be captured by the agency.

In Australia, the Privacy Act regulates the use of consumer credit information. The Act prevents a credit provider from disclosing the satisfactory credit performance of a borrower to a credit-reporting agency. As a consequence, Australia has a negative credit-reporting environment, where the information available from an agency is confined to credit enquiries made by prospective borrowers, defaulting accounts, court judgments, or bankruptcies.

The government on May 23, 2012, introduced a bill to parliament to amend the Privacy Act. Reforms subsequently have been made, regulated by the new Part IIIA of the Privacy Act, and a Credit Reporting Code of Conduct coming into effect in March 2014. The reforms are broadly designed to:

- Increase the transparency and accountability of credit providers and credit-reporting agencies in their dissemination, use, and the accuracy of information collected on individuals.
- Make it easier for individuals to access and correct their credit reporting information; and
- Give new enforcement powers to the privacy commissioner to further investigate complaints about a credit reporting dispute.

The amended Privacy Act and the new Credit Reporting code have moved Australia from a negative credit-reporting environment to a new comprehensive credit-reporting environment, in line with many other Organization for Economic Cooperation and Development (OECD) countries. However, it is likely to take some time to develop robust, positive credit-reporting systems in Australia. Veda has already introduced a VedaScore ranking--a number between one and 1,200--that summarizes where an individual stands on their credit history at a specific point in time. The higher the VedaScore, the better is an individual's credit worthiness. Over a longer term, this will aid lenders' underwriting processes.

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. Electronic 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. S&P Global Ratings believes that the methods under the "no valuation" policy approach are less precise than a full valuation, leading to less certainty concerning the realizable value of the security property.

Nonconforming lenders generally require full valuations from a registered valuer and, in some cases, obtain a second or "check" valuation for a sample of loans on more specialized properties.

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.

Since the global financial crisis, a number of servicer transitions have occurred, following the exit of some lenders from this market sector, particularly in the nonconforming sector.

The servicer transitions that have occurred in some nonconforming transactions have not led to any deterioration in the performance of these transactions. Instead, we have observed that the transitions have typically led to the stabilization of the transaction's performance. In our operational reviews of replacement servicers to date, we have observed that the transition to new servicers has been managed well, with minimal disruption to existing processes and an orderly migration to new servicing platforms. Furthermore, nonconforming lenders have sought to diversify their business revenue, given the downturn in origination volumes after the financial crisis, and there has been no shortage of quality back-up servicers willing to assume responsibility for the servicing and special servicing of nonconforming portfolios when incumbent servicers are removed.

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. Out of eight residential servicers with S&P Global Ratings public rankings, 75% are ranked STRONG and 25% 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). However, a few lenders insure through captive insurers that are rated lower than the 'AA' category or are unrated. The underwriting and servicing standards imposed by the mortgage insurers have 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.

The prevalence of LMI in Australian RMBS transactions has declined in recent years. This is because investors are sensitive about the RMBS market's over-reliance on LMI providers, given the concentration toward QBE and Genworth Australia. This sensitivity has partly contributed to a reduction in the use of LMI in more recent transactions. For the 2017 vintage, for example, LMI exposure is just under 39% in terms of pool coverage versus 100% for the 2007 vintage.

Claims adjustments occurred during the 2008 and 2009 stress period because of misrepresentation; illegitimate claims, such as penalty interest; excessive property maintenance costs; and very limited cases of claim reduction due to borrower- or broker-related fraud. The cases remained low overall, however.

S&P Global Ratings revised its methodology for assessing LMI as a form of credit enhancement in global RMBS, global covered bonds, and debt ratings in the U.S. municipal housing sector, and this became effective on Feb. 2, 2015 (see "Methodology For Assessing Mortgage Insurance And Similar Guarantees And Supports In Structured And Public Sector Finance And Covered Bonds," published Dec. 7, 2014).

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. Reduced-documentation loans and reverse mortgages are available. However, these newer products have lost their popularity because funding has become more challenging for mortgage originators, who have generally reduced their origination and tightened lending standards.

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.

Interest-rate options

Borrowers generally have a choice of interest-rate options, depending on the loan product in question. Common options include:

- Fixing the interest rate. This is usually done for a period of up to five years, though some lenders do offer fixed rates for longer periods. From the fixed-rate expiry date, the standard variable rate applies, unless the borrower elects to refix at the then-current rate for a further period. It is common practice in Australia for lenders to charge full economic break costs in relation to fixed-rate loans if a loan is repaid during the fixed-rate period.
- Discounting the interest rate for a period of up to one year at the commencement of the loan, before reverting to the standard variable rate. These rates are known as "honeymoon," "discount," or "teaser" rates.
- Selecting a "split rate," whereby the borrower may separate a loan into two or more accounts, and the rate on each account may be either fixed or variable, or principal and interest, or interest only.

Interest rates tend to vary among loan products, with higher rates for products with more features, investment-purpose loans, line-of-credit loans, nonconforming loans, and reduced documentation or low-doc loans.

Repayment options

Borrowers usually have the option to make principal and interest repayments, or to select an interest-only period, usually for up to 10 years. After an interest-only term, the scheduled repayments are adjusted to ensure that the loan fully amortizes over the remaining term of the loan. A small number of lenders offer "bullet" repayment loans, under which a borrower is required to repay either all or a significant portion of the principal on the loan maturity date.

In Australian RMBS transactions, loans with an interest-only period make up around 25% of total prime loans outstanding. Across the broader ADI market, the figure is around 39%. Interest-only periods are more common for property investment loans; interest repayments for investor loans are tax deductible. In Australian RMBS transactions, around 51% of investor loans have an interest-only period compared with 14% for owner-occupier loans. Around 30% of the loans underlying Australian RMBS transactions are to property investors.

Borrowers are usually able to prepay their loans in full or in part without significant penalties from lenders.

Loan purposes

Borrowers in Australia use the proceeds of residential mortgage loans for a variety of purposes. The most common reason is to purchase residential properties, either for owner-occupation or investment purposes. The second most common reason for taking out a loan is to refinance an existing housing loan. Other common reasons include debt consolidation, using equity in property to release cash for investments and consumer purposes, and housing construction. For low-doc loans, it is a cost-effective means for some borrowers to obtain funding for their small businesses.

Property occupancy

Housing loans can be secured for properties used for owner occupancy or investment. In Australia, loans secured for investment properties have performed no worse than loans secured for owner-occupied properties. Historical lenders' data suggest that investor loans have performed better than owner-occupied property loans. However, we have seen evidence that borrowers globally in times of stress are more likely to default on loans for an investment property than their primary place of residence.

Redraws, payment holidays, and further advances

Repayments on standard housing loans are set at amounts that will fully amortize the outstanding balance during the term of the loan. Borrowers may make additional payments at any time to reduce the expected life of the loan. Most variable-rate housing loans include redraw facilities that permit borrowers to redraw, for any purpose, any funds paid ahead of the scheduled amortized balance of the loan. Many institutions allow borrowers to make redraws indirectly by taking a "payment holiday," whereby loan repayments are capitalized to the account until the current balance equals the scheduled balance. At this point the borrower must resume making payments. The repayments, term, and scheduled amortization curve of the loan are unaffected by redraws and payment holidays.

A further advance allows a borrower to request additional funds through a variation of the mortgage. The lender undertakes a new credit assessment at the time of the further advance. Historically, an originator has often decided to remove a loan from a securitized pool when the further advance increases the total amount drawn beyond the scheduled amortized balance of the original loan. More recently, however, many issuers have begun to accommodate further advances within the transaction structure.

Line-of-credit loans

Line-of-credit or home-equity loans have been a feature of the Australian lending landscape for some time. Under these loans, borrowers receive a line of credit secured against their homes. The limit is generally fixed, though it may be structured to amortize over a nominated term. Borrowers often have transactional access to the account, to draw up and down against the limit as they please. The interest-rate options are similar to those available under a standard housing loan, though repayments may be irregular because the loan operates like a revolving credit facility.

Interest-offset accounts

Housing loans offered by deposit-taking institutions, such as banks, often provide an interest-offset account directly linked to the loan. An interest-offset account is a noninterest-bearing deposit account held by the lender. 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 the interest payable on the loan account.

In RMBS deals, the seller usually pays the interest-offset amount into the trust during each payment period. When this arrangement is not in place, increased liquidity support and interest-rate mechanisms, such as basis-swap or threshold mechanisms, are used to mitigate against liquidity and yield risks.

About 45% of ADIs' residential property exposures are loans with offset facilities, according to APRA statistics.

Reduced-documentation loans

Reduced-documentation loans--also known as low-doc, stated income, or partially verified loans--have been designed primarily for self-employed borrowers. With low-doc loans, the usual savings and income-verification requirements are relaxed. Most originators of reduced-documentation loans use a signed income declaration from the borrower when calculating loan serviceability. Historically, some only required a signed statement from the borrower, stating that the borrower could afford the loan repayments. More recently, however, changes in 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, 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. About 1.5% of ADIs' residential property exposures are low-documentation loans, according to APRA statistics.

Nonconforming loans

Nonconforming loans are residential mortgage loans that would not typically qualify for a loan from a traditional prime lender and are generally not eligible to be covered by LMI. Nonconforming loans may include low-documentation loans and subprime loans. Subprime loans are loans to borrowers with adverse credit histories. The nonconforming and subprime lenders (specialist lenders) generally impose more robust underwriting standards and processes, reflecting the added risks associated with this specialized market.

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, but the aging of the Australian population is increasing interest in reverse-mortgage loans. Less than 1% of ADIs' residential property exposures are reverse mortgages, according to APRA statistics.

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

Construction loans

Investors in Australian RMBS have limited exposure to loans that fund the construction of individual houses as these loans have been included in very few RMBS transactions. Historically, the risks introduced by these loans, which include the possibility of cost overruns, builders' time delays, and builder defaults resulted in the assets being excluded from RMBS transactions by arrangers. S&P Global Ratings considers applying additional stresses when assigning assumed losses to factor in the increased risk.

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.

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 deal structures 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: Recent 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 the Australian Securities and Investments Commission (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

Many regulatory developments worldwide have had an impact on securitization since the financial crisis. Securitization issuance levels have been affected globally by changes to regulations, particularly those regarding banks' regulatory capital requirements and how this applies to securitization exposures.

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.

The International Organization of Securities Commission and Basel Committee on Banking Supervision issued the criteria for identifying simple, transparent, and comparable securitizations in July 2015. The 14 criteria in this framework are summarized under the categories asset risk, structural risk, and fiduciary and servicer risk.

The Basel Committee on Banking Supervision in December 2014 published revised standards on the capital treatment of banks' exposures to securitizations.

The Basel Committee in July 2016 published an updated standard for the regulatory capital treatment of securitization exposures that includes the regulatory capital treatment for simple, transparent, and comparable (STC) securitization. The updated Basel standard sets out additional criteria for differentiating the capital treatment of STC securitization from that of other securitization transactions.

The Basel III securitization framework is scheduled to come into effect on Jan. 1, 2018.

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 will become 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.

Recent regulatory initiatives in the Australian mortgage and RMBS markets

A number of additional regulatory and market developments locally also affect securitization, including:

- RBA data reporting requirements: The RBA announced in October 2012 that it would require detailed transaction-related data, including loan-level data on the underlying assets in relation to RMBS eligible for its purchase. This initiative is designed to increase transparency, standardization of data, and greater regulatory consistency to enable more enhanced analysis of securitization transactions. This requirement became effective in July 2015.
- Dodd Frank 17g-5 and 17g-7: Exemptions for both rules may apply to Australian issuance. Rule 17g-5, requiring certain disclosures on a password-protected website, has exempted "non-U.S. transactions" since its inception. The current exemption runs until Dec. 2, 2017. Rule 17g-7 requires certain disclosures in relation to representations, warranties, and enforcement mechanisms available to investors. Dodd-Frank provides an exemption to non-U.S. issuers or obligors when the transaction is outside the U.S.
- APRA announced on July 20, 2015, that the average internal ratings-based mortgage risk weights will be increased to at least 25% from 16% on July 1, 2016. This will narrow the gap between the mortgage risk-weight differences adopted by banks using the IRB approach and those using standardized risk weights.
- The implementation of the net stable funding and liquidity commitment ratios and the quantitative requirements of the Basel III liquidity framework aimed at improving the short-term resilience of a bank's liquidity profile: In Australia, these ratios are applicable to larger and more complex ADIs and affect the level of RMBS holdings these banks can have on their balance sheets.
- Increased regulatory focus on prudential lending standards: Australian financial regulators have increased their regulatory focus on sound lending practices since 2014.

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/Negative/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.

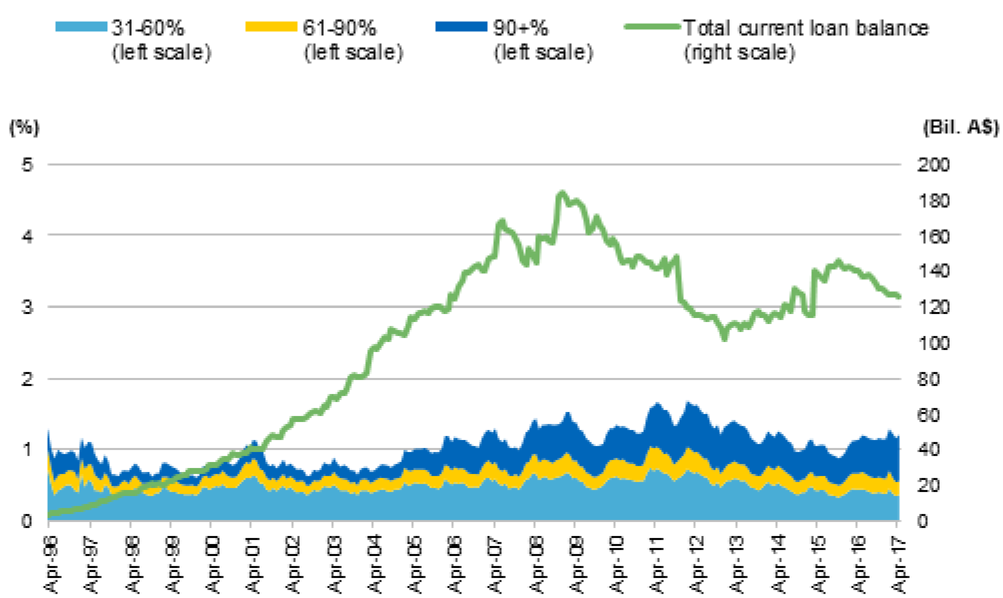
Performance Of Australian RMBS

Performance of Australian residential mortgage loans

Australian RMBS continue to perform well, with very 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). Leading indicators showed deterioration in loan performance, such as claims on mortgage insurers, and reported arrears increased between 2007 and 2012, compared with earlier periods, when arrears remained largely below 1%. While arrears increased during the 2007-2009 economic slowdown, the overall level remained low, at less than 2%. Arrears decreased significantly between January 2009 and December 2009 as a result of the expansionary monetary policy and fiscal stimuli. The number of mortgages more than 30 days in arrears then started to rise, peaking at 1.69% in January 2012 before falling to a post-financial crisis low of 0.88% in October 2015, reflecting lower interest rates. In the past 12 months, arrears have been increasing from the low levels recorded in 2014 and 2015, but remain low. We expect arrears to increase incrementally from the low levels observed in 2015, provided employment conditions remain relatively stable.

Chart 17a

Australian RMBS Prime SPIN
Performance History



Source: S&P Global Ratings.

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 (chart 17b and 17c). 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 resulted in arrears generally improving in this sector compared with the highs recorded after the 2008 financial crisis.

Low-doc and nonconforming loans now form a small part of total RMBS loans outstanding, at just under 2%. This means that any deterioration in low-doc or nonconforming arrears due to subdued economic conditions and tighter lending standards would not have enough substance to create systemic problems.

Chart 17b

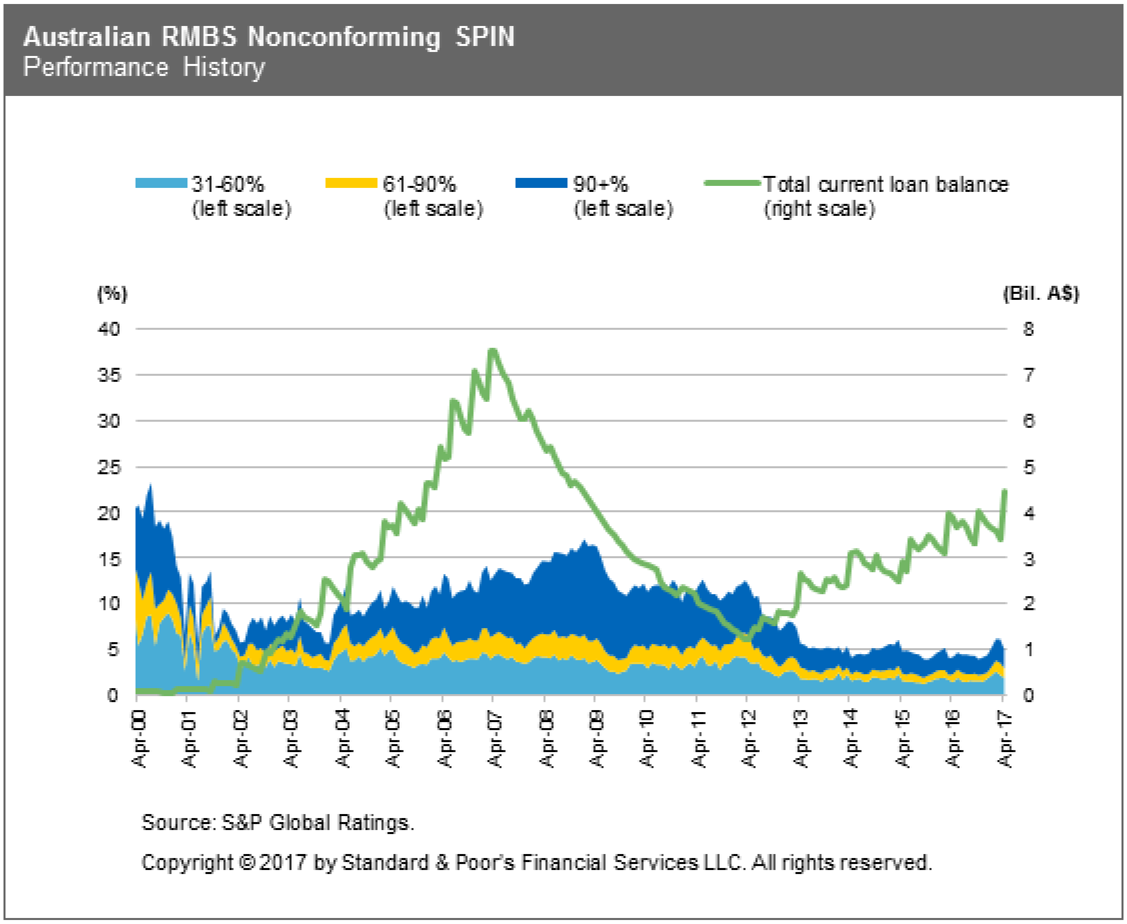
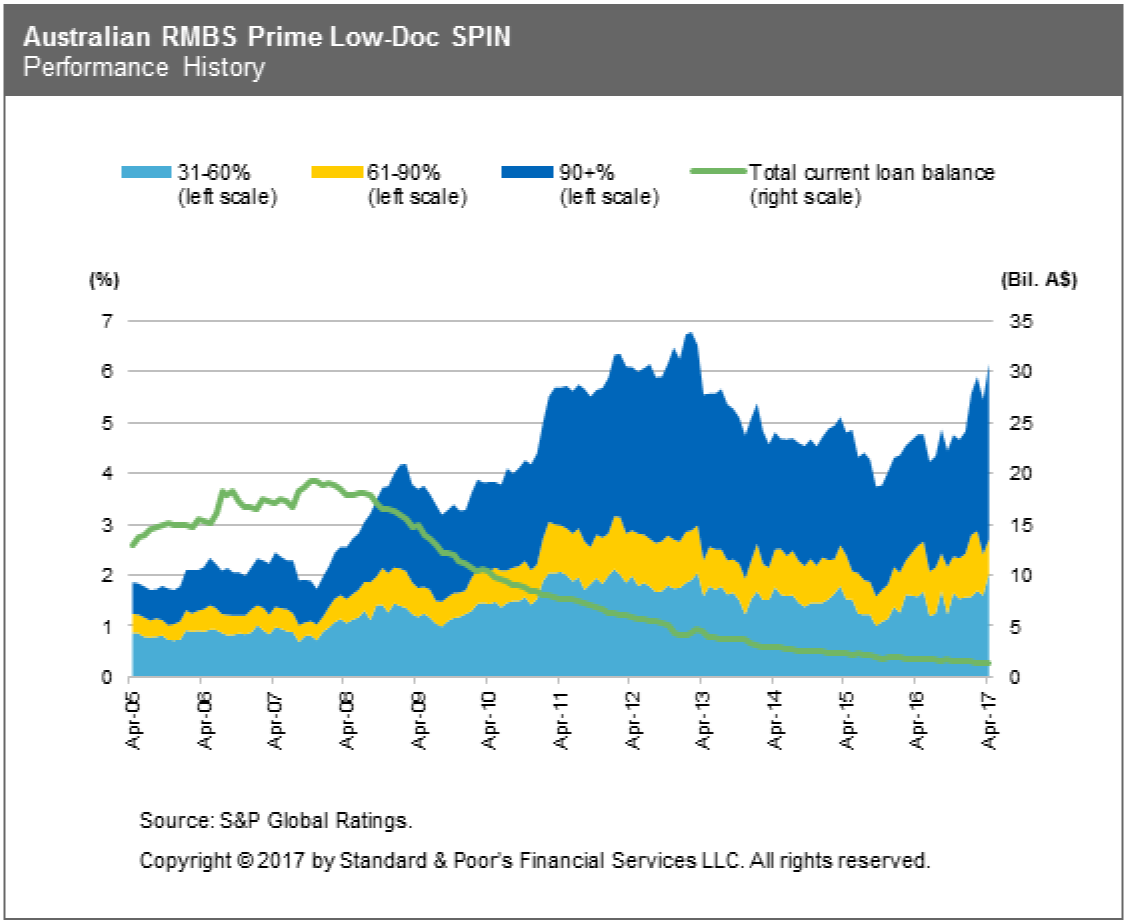

Australian RMBS Nonconforming SPIN
Performance History
31-60% (left scale)
61-90% (left scale)
90+% (left scale)
Total current loan balance (right scale)
(%)
(Bil. A$)
40
35
30
25
20
15
10
5
0
8
7
6
5
4
3
2
1
0
Apr-00
Apr-01
Apr-02
Apr-03
Apr-04
Apr-05
Apr-06
Apr-07
Apr-08
Apr-09
Apr-10
Apr-11
Apr-12
Apr-13
Apr-14
Apr-15
Apr-16
Apr-17
Source: S&P Global Ratings.

Chart 17c



S&P Global Ratings each month publishes a suite of arrears charts, which are available at http://www.sfsurveillance.com.au.

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.

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 tends to be 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. The nature of missed-payments reporting can be a leading indicator of potential future losses. Under this approach, a loan is in arrears the day a payment is missed, regardless of whether the borrower is ahead of his or her scheduled loan balance by virtue of having made early repayments.

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.

There is a wide range of lending products, and the reporting of arrears figures can vary across participants. Investors should be aware that while S&P Global Ratings desires consistency in the reporting of arrears amounts, differences in measuring balances in arrears may result in a degree of incomparability between issuers.

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 18a and chart 18b show the cumulative gross loss experiences by vintage.

Chart 18a

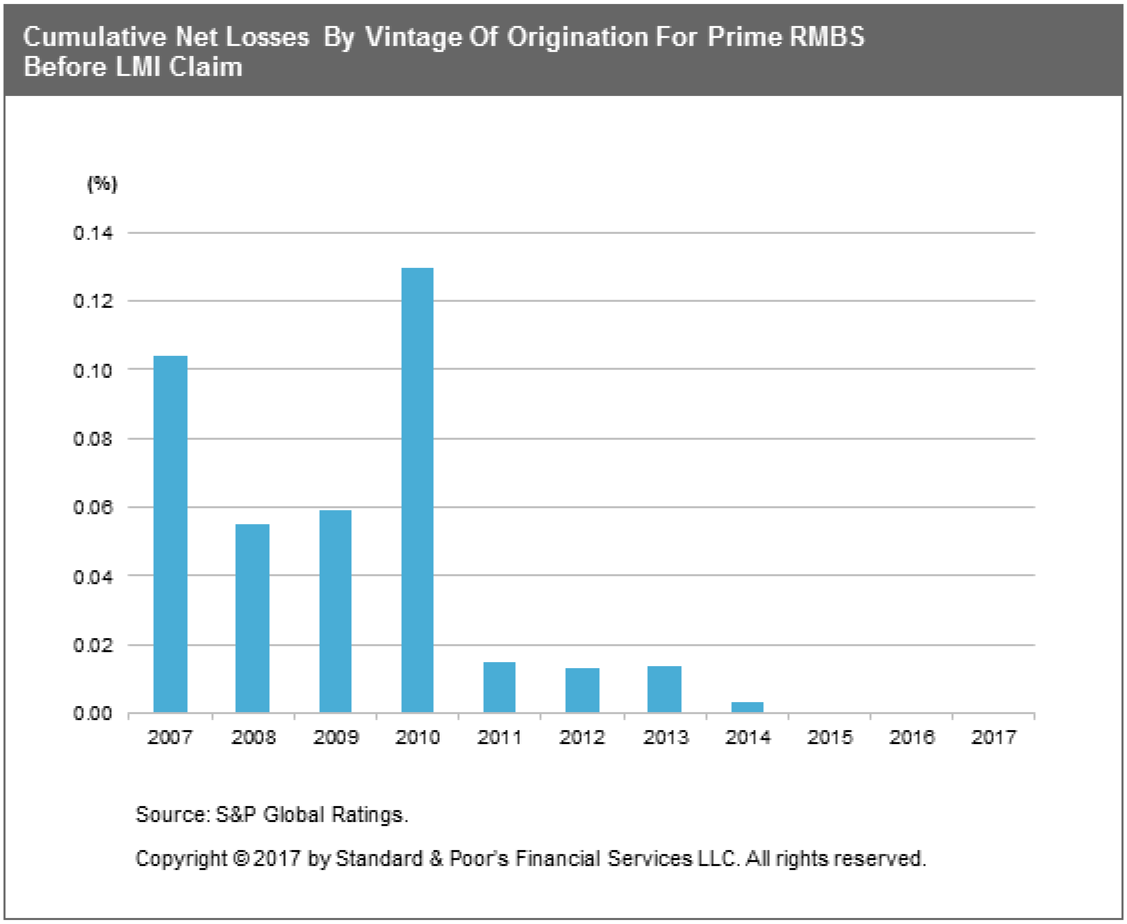

Cumulative Net Losses By Vintage Of Origination For Prime RMBS Before LMI Claim
(%)
0.14
0.12
0.10
0.08
0.06
0.04
0.02
0.00
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
Source: S&P Global Ratings.
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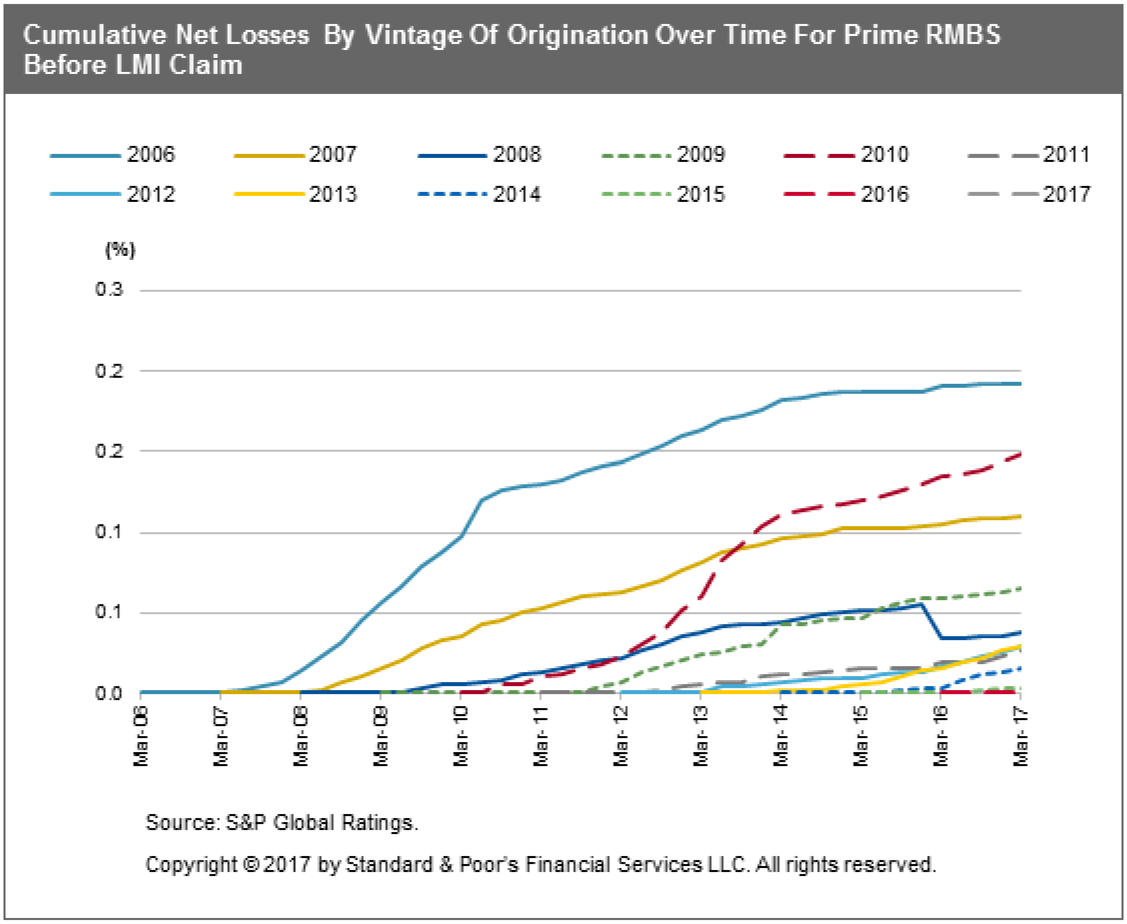
Chart 18b

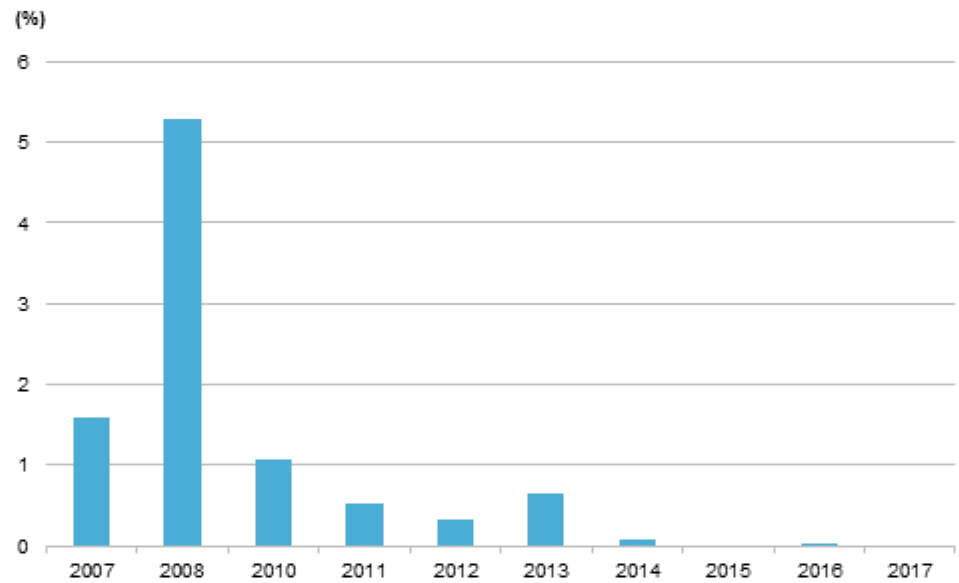


The absolute level of gross losses on loans in Australian prime RMBS pools has been extremely low compared with the volume of loans that have been securitized. The 2010 vintage has seen a spike in the level of losses compared with similar vintages, though at 0.15% it is still low and is due to a single low-doc transaction representing 66% of the total absolute losses in this vintage. The loss amount has been covered by LMI and excess spread.

Chart 18c and chart 18d show the cumulative gross loss experience by vintage for nonconforming transactions.

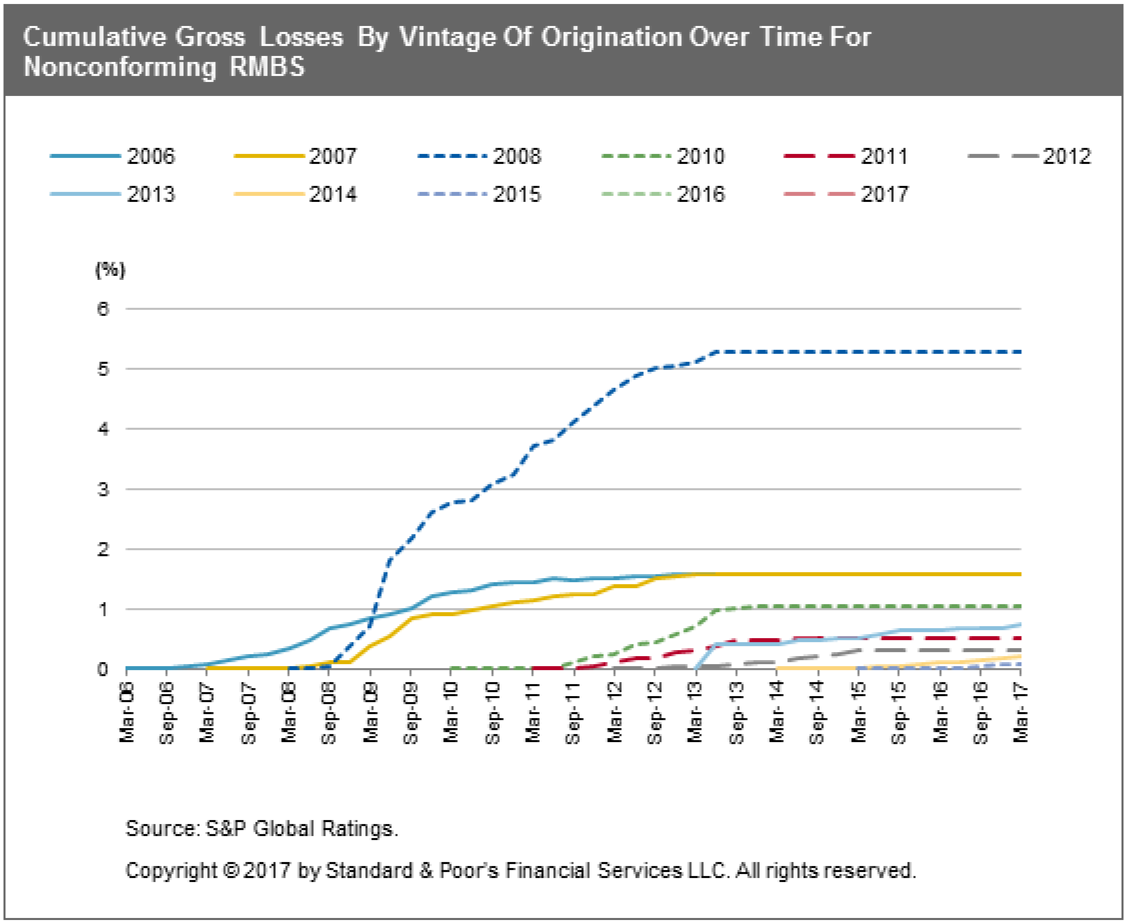
Chart 18c

Cumulative Gross Losses By Vintage Of Origination For Nonconforming RMBS Before LMI Claim



Source: S&P Global Ratings.

Chart 18d



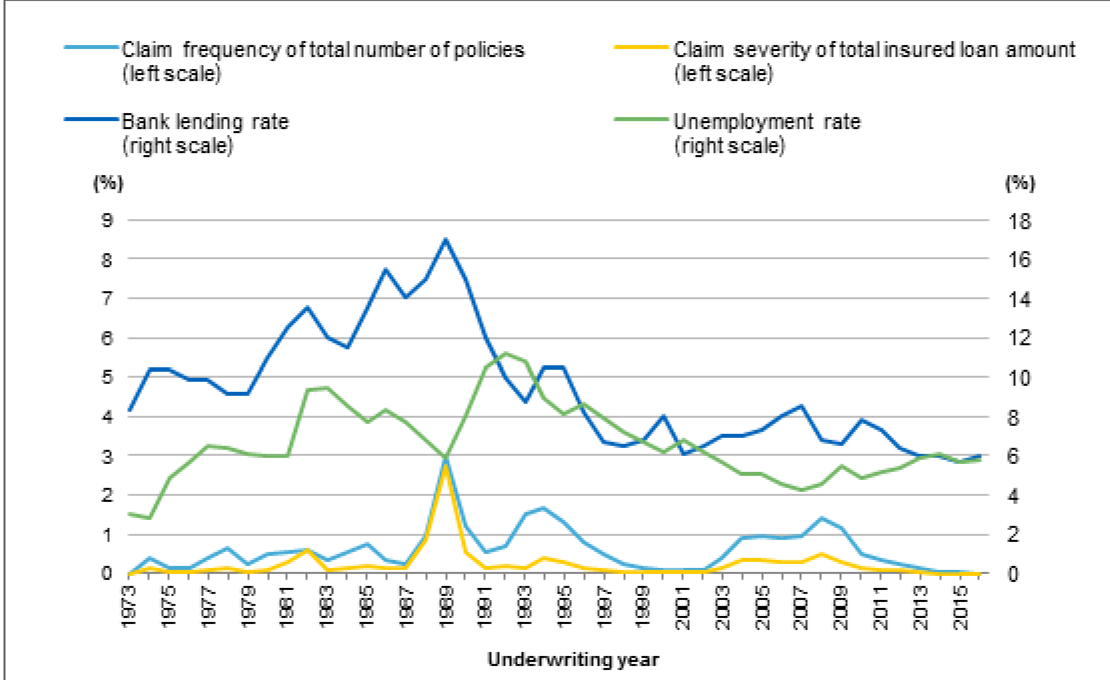
Although higher than before the downturn, the loss experience remained low through the 2007-2009 economic slowdown. Cumulative losses on nonconforming loans have stabilized during the past three years for all pre-2009 vintages. The tightening of lending practices by a majority of lenders has created greater opportunities for nonconforming originators.

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 16 years. However, this represents a relatively stable economic period.

Chart 19

Australian LMI Mortgage Default Experience In The Context Of Macroeconomic Conditions



Source: QBE Lenders' Morgage Insurance Ltd., Genworth Mortgage Insurance Corp., S&P Global Ratings, and Australian Bureau of Statistics.

Notable periods in chart 19:

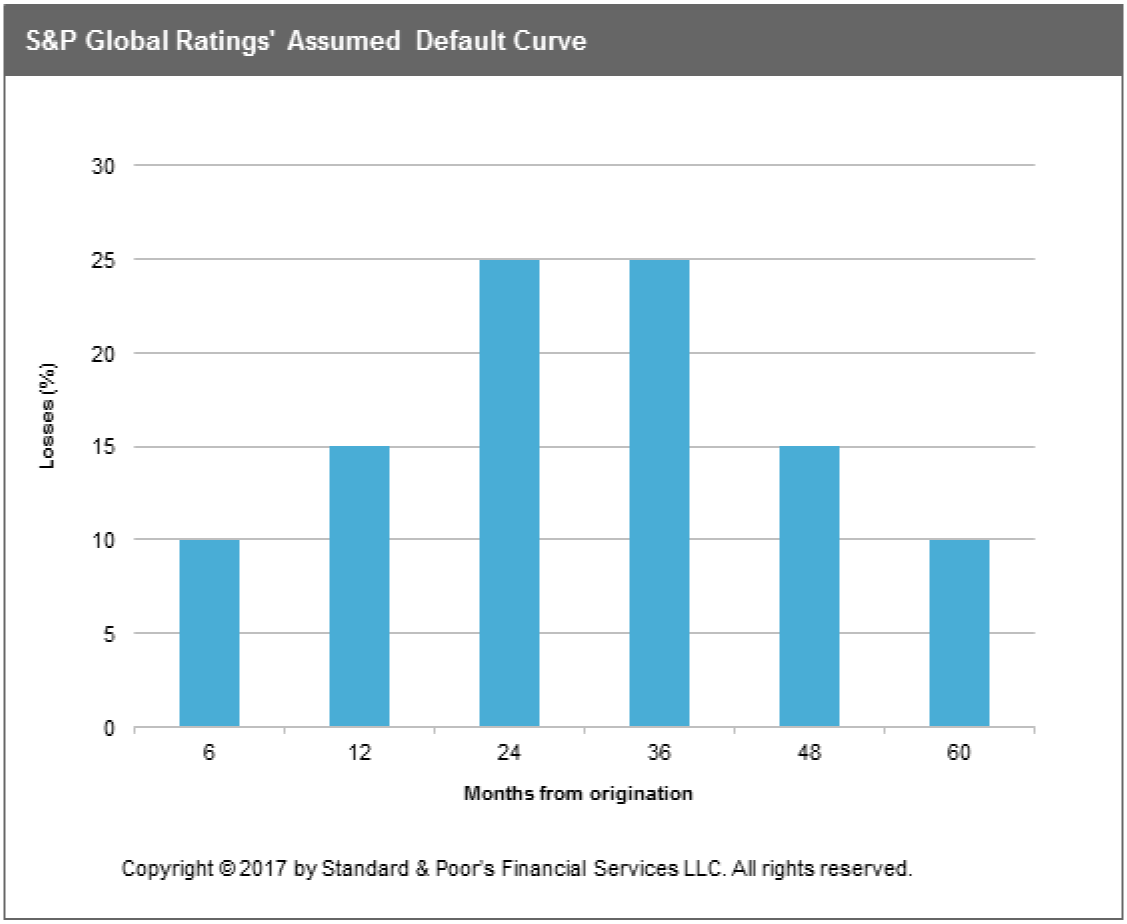
- Loans underwritten in 1973, 1980, and 1986 immediately precede sharp lending-rate rises.
- Loans written after 1989 experienced long periods of decreases in lending rates, with moderate rises along the way.
- Property prices spiked in 1987, followed by a correction in 1989, coupled with record-high interest rates. Property prices have increased since 1989. A long period of falling lending rates began in 1996 and property prices rose exponentially, with corrections in 2004, 2008, and 2012.
- Australia experienced two recessions during these periods: the first in the early 1980s, followed by another in the early 1990s.
- The stock market crashed in October 1987. We have observed more price volatility in the past decade.

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 19 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 20.

Chart 20



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 subprime 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."

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. The prepayment rates have risen again in more recent years. This could partly reflect a higher proportion of better-quality borrowers in the more recent vintages of nonconforming transactions who have greater prospects of refinancing.

Evidence of prepayment rate ramp behavior

There is strong evidence that the prepayment rate for RMBS pools increases in the first year or two after issuance, before reaching a plateau. S&P Global Ratings produces data showing the weighted-average annualized quarterly prepayment rate (SPPI) on rated RMBS deals by seasoning. Based on our data, strong increases (ramps) in prepayment rates occur during the first two years of a deal, with a slight increase during the third year, before flattening out at a quarterly prepayment rate of between 20% and 30%.

Chart 21

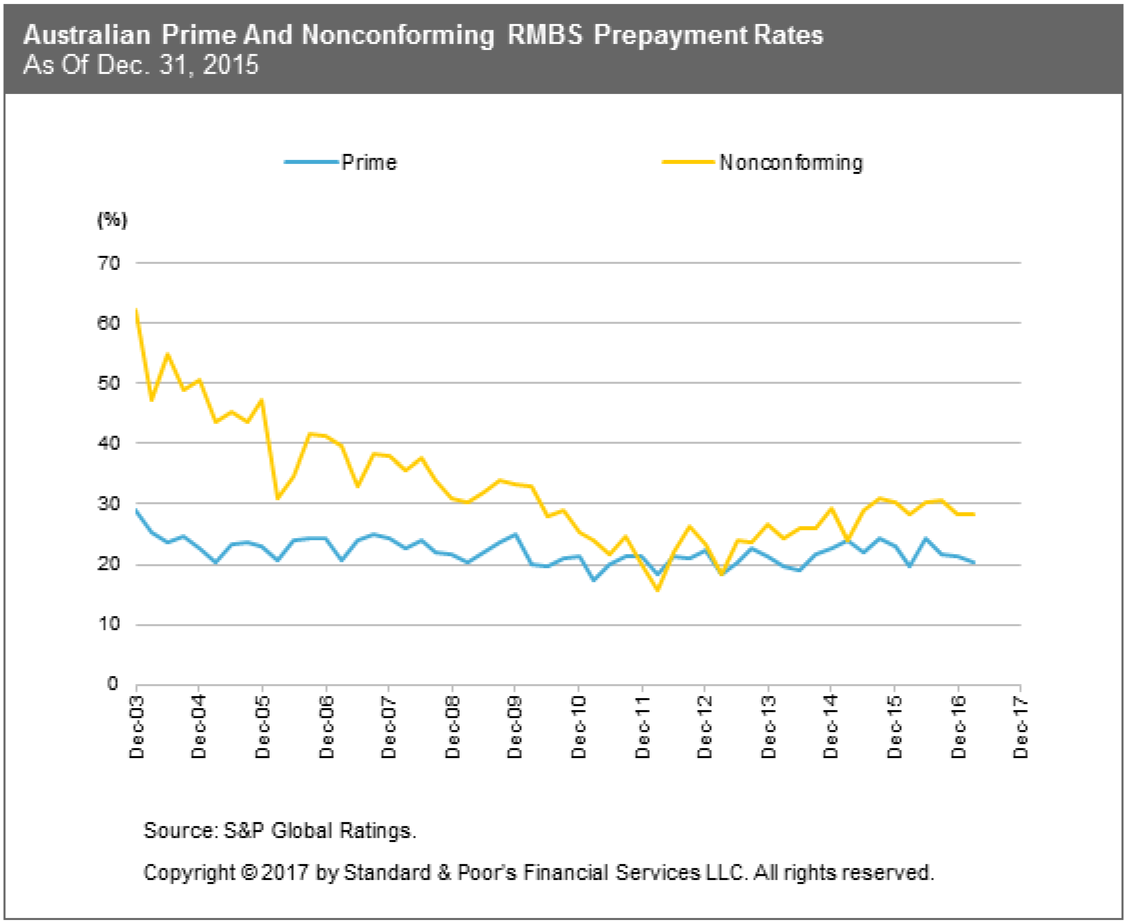


Chart 21 shows the prepayment rate over time. Prime prepayment rates have settled at approximately 23% in recent times, close to the average seen during the past decade. Nonconforming prepayment rates meanwhile have increased in the past 12 months to slightly more than 30%. The average for the past decade has been around 28%. The higher prepayment activity in the nonconforming sector could be due to the more competitive interest-rate environment and available refinance opportunities. Borrowers in more recent nonconforming transactions include near-prime as well as more traditional subprime borrowers. After establishing a favorable payment history, higher credit-quality borrowers are more likely to refinance with another lender to take advantage of more competitive interest rates.

S&P Global Ratings' quarterly report "RMBS Performance Watch: Australia and New Zealand" contains the most recent SPPI by deal seasoning.

Related Criteria And Research

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: Assumptions: Australian RMBS Postcode Classification Assumptions, July 10, 2013

- Criteria: Australian RMBS Rating Methodology And Assumptions, Sept. 1, 2011

Related Research

- Asia-Pacific Economic Snapshots – June 2017, June 21, 2017
- Credit Conditions: Asia-Pacific Credit Conditions Q3 2017: Likely To Improve If Market Sentiment Holds, June 19, 2017
- Australian RMBS Sponsored By Major Banks: Stable Performance Supports Rating Stability, June 5, 2017
- Ratings On 23 Australian Financial Institutions Lowered On Buildup Of Economic Imbalances, May 21, 2017
- What's Behind Today's Downgrades Of 23 Australian Financial Institutions, May 22, 2017
- Research Update: Australia Ratings Affirmed At 'AAA/A-1+'; Outlook Remains Negative, May 16, 2017
- Australia And New Zealand Structured Finance Scenario And Sensitivity Analysis: Understanding The Effects Of Macroeconomic Factors On Credit Quality, April 17, 2017
- Australian RMBS Originated By Other Banks: Strong Collateral Quality Supports Rating Stability, March 19, 2017
- Australian RMBS: Investment Loan Exposures And Potential Risks, June 9, 2016
- Macroprudential Measures And Prudent Lending Practices, June 16, 2015
- RMBS Performance Watch: Australia and New Zealand, published quarterly

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. http://www.abs.gov.au