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SPECIAL COMMENT

A Primer: Comparing Japanese, Australian, Dutch and UK RMBS and Mortgage Markets

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Summary

Following increased interest from Japanese investors in Australian, Dutch and UK residential mortgage-backed securities (RMBS), we have produced this brief primer report to (1) illustrate the key differences between the four markets; and (2) provide a quick reference guide. The guide compares the four markets using a number of factors including collateral characteristics and underwriting, lenders mortgage insurance (LMI), housing, income and population, RMBS performance and RMBS structural features. We will publish a more detailed, in-depth version of this report by the end of the second quarter of 2013.

Key Differences

» **Bullet Repayment Risk:** Dutch and UK interest-only (IO) mortgage loans expose investors to bullet repayment risk because borrowers pay only the interest portion for the entire life of the loan. Conversely, Japanese and Australian IO loans do not expose the borrower to bullet repayment risk because they are typically IO for no more than five years (in Australia) or one year (in Japan) before fully amortising.

» **Third-Party Credit Protection:** LMI mitigates credit risk in Australian and Dutch RMBS. Most Australian RMBS loans have LMI, with the two largest providers being private companies rated A2 and A3, respectively. In the Netherlands, NHG Guarantee, a Aaa-rated government-sponsored entity, provides LMI to loans meeting certain criteria (i.e., typically up to 30% of loans in Dutch RMBS). Unlike Australian LMI, Dutch LMI coverage amortises on an annuity basis. LMI is not used in the UK, while lenders in Japan obtain a guarantee, generally from a subsidiary. In general, rating agencies do not rate subsidiaries.

» **Dynamic Vs. Static Portfolios:** Dutch and UK master trust portfolios change on a regular basis as the seller adds new loans to the portfolio. As such, the portfolio can lose the benefits of more seasoned borrowers building equity[1] in their homes over time. Moreover, while performance criteria and certain other tests mitigate the risk of the new loans deteriorating the overall credit quality of the portfolio, it is possible that individual portfolio characteristics (e.g., geographical concentrations and proportions of high LTV mortgage loans) can change. Typically, new loans are not added to Australian and Japanese portfolios, the static nature of which leaves them more vulnerable than dynamic portfolios to the performance of any one vintage of mortgage loans.

[1] The more equity a borrower has in their home, the less likely they will default.

» **Set-off Risk:** Set-off risk is a more significant risk in Dutch RMBS than the other markets because the tax law encourages the use of IO mortgage loans in combination with repayment vehicles, usually a savings or insurance policy provided by an insurance company. If the insurance company becomes bankrupt, the borrower can set off the value of the policy against the outstanding amount of the mortgage loan (i.e., insurance set-off risk). Over time, this risk increases because the value of the policy increases over time.

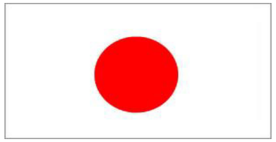
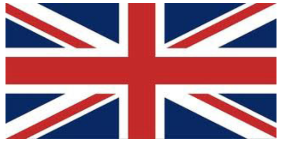
» **Soft Bullets Vs. Straight Pass-Through Notes:** Dutch and UK master trusts issue soft bullets as opposed to the Australian and Japanese standalone structures, which typically issue straight pass-through notes. However, soft bullets are not immune to prepayment or extension risk because they rely on the continued support of the originator. This support includes the refinancing of notes (typical to Dutch structures) and the supply of mortgage loans to the trust (for UK structures), which ensures the generation of sufficient principal to redeem the notes on their scheduled maturity date.

» **Back-up Servicer (BUS) Arrangements:** Australian and Japanese RMBS deals have more certainty in terms of BUS arrangements because they identify from close which entity is legally liable to perform the BUS role. Conversely, Dutch and UK RMBS typically rely on the credit strength of the servicer to avoid the need for a BUS. For lower or non-rated servicers, however, Dutch and UK RMBS put additional arrangements in place, such as (1) pre-appointing a BUS or requiring the appointment of one; or (2) appointing a facilitator, who uses commercially reasonable efforts to find a replacement servicer on "substantially the same terms" as the existing servicer.

» The Quick Reference Guide below allows for easy side-by-side comparison of the following different market features:

- Collateral Characteristics and Underwriting
- Lenders Mortgage Insurance (LMI), Guarantor and National Mortgage Guarantee (NHG)
- Housing
- Income and Population
- RMBS Performance
- RMBS Structural Features

Quick Reference Guide[2]

Collateral Characteristics & Underwriting	Japan 	Australia 	Netherlands[3] 	UK 
Typical Mortgage Loan	35 years, amortising	25 – 30 years, amortising	30 years interest-only (IO), plus indirect amortisation via a repayment vehicle.	25 years, amortising
Max Maturity	By age: 80 years	Case-by-case basis	30 years (no specific age limit)	40 years, usually by age 70–75 years
Typical Repayment Type	Annuity	Annuity	IO mortgage loans are often combined with payments into bank savings/life insurance vehicles attached to different mortgage loan parts. Pure IO mortgage loans with no repayment policy represent approximately 56% of all outstanding mortgage loans.[4]	Annuity, plus around 45% IO
Typical Interest Rate	Variable around 1% 25-year fixed around 2%-3%	Variable Around 6.45%[5]	Fixed, subject to reset typically at 2, 5, 7 or 10 years Around 5%	Variable and 2- to 3-year fixed, reverting to a lender-standard variable rate Around 3.5%
Owner Occupied	Max 100% LTV 80% - 95% LTV is typical at origination 200%-300% LTV refinancing is possible No risk-based pricing Full recourse	Max 95% LTV[6] 70% LTV is typical at origination No risk-based pricing Full recourse	Max LTMV 105%[7] 95% LTV is typical at origination No risk-based pricing Full recourse	Max 95% LTV 70% LTV is typical at origination Risk-based pricing (LTV) Full recourse
Investment Mortgage Loans	Less than 2% Non-banks No cross collateralisation Full recourse Max 95% LTV Typically, interest premium of 1% over interest rates for mortgage loans on a primary residence	33%[8] Mainstream lenders followed by non-banks Cross collateralised with owner occupied Full recourse Max 90 % LTV No interest premium	Not an established product	12.7%[9] Non-banks followed by mainstream lenders No cross collateralisation Full recourse Max 75% - 80% LTV currently Interest premium of around 2%

2 Unless otherwise noted, this guide makes reference to Moody's data, which we compute from rated transactions or using data from lenders.

3 The Code of Conduct governing mortgage loans changed considerably in January 2013, but since these new rules only affect new mortgage loans originated after this date we have described the practices governing the collateral of outstanding transactions.

4 DNB Financial Stability Overview, April 2011, from outstanding mortgage loans at Q2 2010

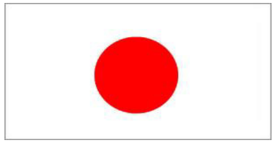
5 Indicator Lending Rates, *Reserve Bank of Australia*, spreadsheet http://www.rba.gov.au/statistics/tables/xls/f05hist.xls?accessed=2013-02-25-13-19-05 (Colum k) as at January 2013

6 LTV: Loan-to-value (ratio)

7 Dutch Code of Conduct, Dutch Financial Supervision Act (*Tijdelijke Regeling Hypothecair krediet*)

8 Monthly Banking Statistics, *ARPA* http://www.apra.gov.au/adi/Publications/Pages/monthly-banking-statistics.aspx

9 FSA Q2 2012

Collateral Characteristics & Underwriting	Japan 	Australia 	Netherlands 	UK 
Redraws	No	Common feature Not subject to updated credit checks	Not common	Less common than before credit crunch Available subject to passing updated credit checks
Foreclosure Time (from first missed payment)	6-18 months after default	9-12 months	6-12 months	12 months
Serviceability Measure	Debt-to-income ratio less than 35% to 45%	Net service ratio (NSR) >1 NSR = (Net Income – Living Expenses) / Total Outgoings	4x-5x income multiple 25%-35% debt to income	Income multiples <4 Debt-to-income thresholds depending on lender and credit scorecard
Interest Rate Stress	Around 4%	Standard variable rate: +1.5%-2%	5.3% [10]	Around 6% -7%
Credit Bureau Information	Positive and negative information retained	Only negative information retained	Positive and negative information retained	Positive and negative information retained
Key Lending Regulations	Money-Lending Business Control and Regulation Law, 2009	National Consumer Credit Protection (NCCP) 1996	National Instituut voor Budgetvoorlichting (NIBUD): Code of Conduct for lenders, Stichting Autoriteit Financiële Markten (AFM)	Mortgages and Home Finance: Conduct of Business Sourcebook (MCOB), FSA 2007
Market Share of New Lending	3 Mega Banks (around 19%) **Mega Banks** — **Market Share**[11] Bank of Tokyo-Mitsubishi UFJ (Aa3) 7.2% Sumitomo Mitsui Banking (Aa3) 6.3% Mizuho Bank (A1) 5.7% (Market share of outstanding mortgage amounts) Some US securities firms exited around 2008	Big 4 (around 85%) **Lender** — **Market Share**[12] CBA (Aa2) 27.4% WBC (Aa2) 25.7% NAB (Aa2) 16.8% ANZ (Aa2) 15.3%.	Top 3 (around 80%) **Lender** — **Market Share** Rabobank Nederland (Aa2) 33% ABN AMRO Bank N.V. (A2) 25% ING Bank N.V. (A2) 22%	Top 6 (80.7%) **Lender** — **Market Share**[13] Lloyds Banking Group (A3) 19.9% Santander (A2) 16.8% Barclays (A2) 12.1% Nationwide BS(A2) 12.1% Royal Bank of Scotland (A3) 10.4% HSBC Bank(Aa3) 9.4%
Broker Originations	0%	About 40%[14]	About 40%[15]	50%

10 Dutch Banking Association, www.nvb.nl

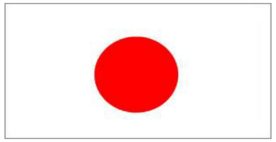
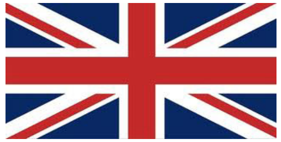
11 Bank Financial Statements, *Japan Housing Finance Agency*.

12 Monthly Banking Statistics, *APRA*, issued 31 January 2013.

13 Market share as at 2011

14 Broker loans accounted for 42% of total mortgage loans originated during the first quarter of 2012. See Mortgage Brokers Continue to Grow – Lifting Market Share and Volume, *Mortgage & Finance Association of Australia*, 16 May 2012 http://www.mfaa.com.au/default.asp?artid=2848

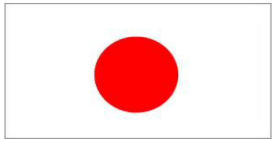
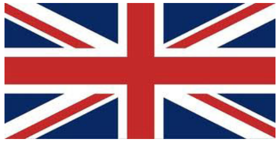
15 AFM Consumentenmonitor, June 2012

Lenders Mortgage Insurance (LMI), Guarantor and National Mortgage Guarantee (NHG)	Japan 	Australia 	Netherlands 	UK 
LMI or Guarantor	Guarantees widely used	LMI widely used	NHG guarantee widely used NHG origination is approximately 21%[16] of the total debt	No significant use of LMI
Premium	Based on mortgage amounts outstanding Monthly instalments or upfront lump sum	Based on LTV and mortgage amount Upfront lump sum	Borrower pays 0.85%[17] of total mortgage upfront to the guarantor	N/A
Providers	Bank subsidiary Typically not rated by any rating agencies	Two independent mono-lines Rated (A2) and (A3), respectively	One government entity Homeownership Guarantee Fund (known as Stichting Waarborgfonds Eigen Woningen (WEW)) Rated (Aaa)	N/A
Possibility of Claim Reductions	No	Yes	Yes. However, provisions in the transaction documentation require the seller to repurchase loans if NHG criteria are not met.	N/A
Credit Implications	We consider the mortgage guarantee in our rating analysis. However, the structure of many deals provides sufficient unrated junior note subordination for the senior notes to obtain Aaa(sf)-rated credit quality without any benefit from the guarantee.	Senior notes require less subordination to obtain a Aaa(sf) rating. If the deal has structured credit protection in addition to non-retainable excess spread, the rating of the junior note will correspond to the Insurance Financial Strength (IFSR) of the lowest-rated mortgage insurer in the transaction. Otherwise, we are likely to rate the junior note between Ba1(sf) – B3(sf) depending on collateral quality and the mortgage insurer's likely claim reductions.[18]	Less subordination Our analysis incorporates (1) the mismatch between the annuity amortisation of the guarantee and the actual amortisation of the loan; and (2) the rescission rate (in case there is no full payout by Stichting Waarborgfonds Eigen Woningen (WEW)).	N/A

16 Approximation ultimo 2011, based on total NHG loans (EUR140.7 billion) and total mortgage debt (EUR670 billion) (sources: NHG, CBS).

17 As per January 2013 (source: NHG)

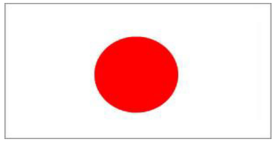
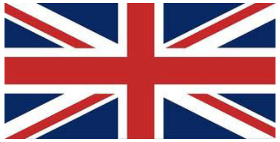
18 See Approach for Evaluating Lender's Mortgage Insurance in Australian RMBS, 19 October 2012.

Housing	Japan 	Australia 	Netherlands 	UK 
House Prices	**Declining Prices** Residential land prices in Japan rose dramatically in the late 1980s (during the bubble era), before plunging in the early 1990s. Prices have since declined consistently over a prolonged period. The current index level is the same as in the early 1980s. Lenders originated the majority of residential mortgage loans backing Japanese RMBS after 2000, when land prices had fallen to low levels after peaking in 1990.	**Steady Prices** House prices remain steady, with the current housing shortage supporting prices. Low unemployment and interest rate cuts by the Reserve Bank of Australia will also support prices. The recent slowdown in prices and the lower borrowing costs have improved affordability (RP-Data Rismark's house price-to-income ratio is at its lowest level since March 2003).	**Declining Prices** House prices in the Netherlands have been on a downward trend since the mid-2008. According to the Nederlandse Vereniging van Makelaars (NVM) index, the current peak-to-trough decline is approximately 16.7%.[19]	**Stabilising** UK house prices have generally been flat for the past couple of years and this remains our outlook for 2013. While weak demand will weigh on property prices, tight supply will prevent any sustained fall in prices. Demand will remain weak as households face a number of pressures, including continued job insecurity, squeezed finances and tight credit conditions.
Housing Bubbles	**1990** Land prices rose dramatically during the "bubble economy" of the late 1980s. When the bubble burst, prices plunged and have continued to decline to the present. Current prices are at the same level as in the early 1980s. The value of a new home declines sharply right after the first purchase, as buyers prefer to buy brand new properties rather than second-hand ones.	**2003-04** Australia's housing boom (2001–04) ended three years before the global credit crisis, giving the market time to adjust . Australian policymakers made a deliberate effort to deflate the housing bubble through monetary policy tightening, which resulted in a soft landing. When the 2007 crisis hit, house prices held up well because policymakers lowered interest rates.	**2007** House prices in the Netherlands grew strongly in the 1995-2007 period, as economic conditions and debt availability improved. Since the start of the financial crisis, house prices have declined by approximately 16.7%.[20]	**2007** House prices grew strongly in the 2000–07 period, reflecting strong economic conditions and easy access to credit, with prices rising by an average of 12.3% on an annualised basis.[21] Prices fell by around 20% between Q3 2007 and Q1 2009, but have since recovered slightly, rising by an average 1.3% annually since the trough in Q1 2009, as a result of tight supply and low interest rates.

19 Nederlandse Vereniging voor Makelaars (NVM), Q3 2012

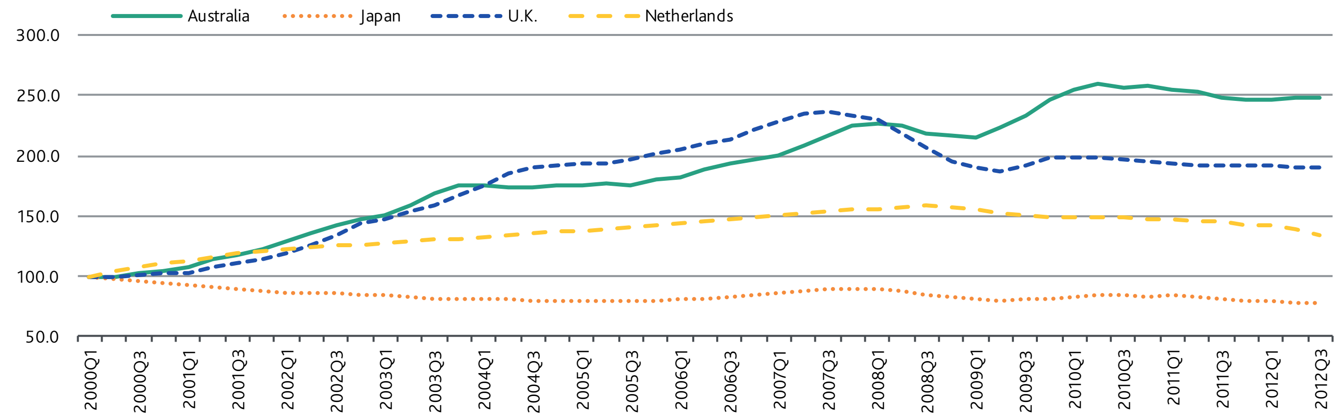
20 NVM

21 As computed by Moody's from the Lloyds Banking Group and Nationwide house prices indices.

	Japan	Australia	Netherlands	UK
Housing				

Quarterly House Price Growth

House Price Index



Source: Australian Bureau of Statistics (ABS): House Price Index, Halifax Bank of Scotland (HBOS) Tokyo Stock Exchange, Inc.; Moody's Analytics Adjusted, Statistics Netherlands

	Japan	Australia	Netherlands	UK
Housing Supply	**Balanced Demand/Supply** Housing demand declined after the 11 March 2011 earthquake, but recovered thereafter. Housing supply and demand are currently reasonably balanced.	**Undersupply** There is a cumulative undersupply of 228,000 dwellings nationally. The most acute shortage is in New South Wales with a shortage of 89,000 dwellings.[22]	**Undersupply** Historically, there has been a structural housing shortage in the Netherlands. When comparing the number of households with the housing stock there is a shortage of supply.[23] In addition, the vacancy rate is approximately 2%.[24]	**Undersupply** Housing supply in the UK is very tight. There was a long-term housing surplus up to 2008, with 3% more houses than households.[25] In recent years, the annual increase in the housing stock has fallen to almost half the long-term average. Housing starts also remain subdued and we believe the number of completions in 2013 will remain broadly similar to the number in 2012.[26]

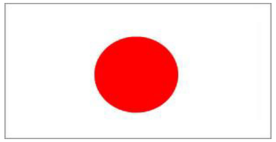
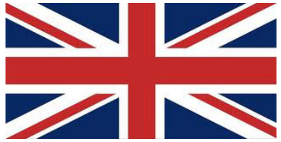
22 Housing Supply and Affordability Key Indicators 2012, *National Housing Supply Council*, http://www.nhsc.org.au/content/publications/housing_supply_affordability/downloads/housing_supply_affordability_report.pdf

23 Number of households from Eurostat (7.3 million) versus number of dwellings from Hypostat 2010 (7.2 million)

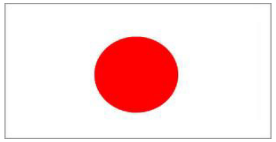
24 Housing Statistics in the European Union 2010, *The Hague: Ministry of the Interior and Kingdom Relations*

25 Department for Communities and Local Government

26 See Tight UK Housing Supply Is Credit Positive for UK RMBS (published 05 September 2011) for more details on the demand/supply dynamics in the UK.

Housing	Japan 	Australia 	Netherlands 	UK 
Tax Benefits	Investment Properties Property investors can deduct mortgage interest payments from their taxable income. Owner Occupied Homes bought during the 2009-13 period enjoy temporary tax cuts introduced to stimulate the economy. Eligible buyers obtain 1% or 1.2% income tax reductions for the year-end outstanding amount of a residential mortgage for a period of 10 years. The maximum tax reduction allowed is JPY6 million in total.	Investment Properties Only Mortgage interest can be offset against rental income for investment properties but is not deductable for owner-occupied properties.	Owner Occupied Generous tax deductibility on mortgage loan interest payments (subject to conditions) Since 2001, the government has limited mortgage tax deductibility to mortgage loans on the borrower's main residence for periods of up to 30 years, with the top tax rate being 52%. Recent changes will gradually reduce the tax deductibility for borrowers in the highest tax bracket starting in 2014.[27]	Investment Properties Only Mortgage interest can be offset against rental income for investment properties, but is not deductable for owner-occupied properties.

[27] See Dutch RMBS: New Coalition's Proposed Agreement Reduces Leverage While Affordability Remains Largely Unaffected, 14 November 2012.

Income and Population	Japan 	Australia 	Netherlands 	UK 
Average Annual Income	Males approx. ¥5,038,000 Females approx. ¥ 2,679,000[28]	Males $79,139 Females $62,556[29]	€33,000[30] gross	Males £33,168 Females £20,065[31]
Progressive Income Tax Scales	**Income** / **Tax Rate** ¥0-¥1.95 million — 5% ¥1.95-¥3.3 million — 10% ¥3.3-¥6.95 million — 20% ¥6.95-¥9 million — 23% ¥9-¥18 million — 33% >¥18 million — 40% The government requires all employees to take up welfare pension insurance, unemployment insurance and healthcare insurance	**Income** / **Tax Rate**[32] 0 - $18,200 — Nil $18,201 - $37,000 — 19% $37,001 - $80,000 — 32.5% $80,001 - $180,000 — 37% >$180,001 plus — 45% Effective 1 July 2012	**Income** / **Tax Rate**[33] €0 - €19,645 — 37% €19,646 - €33,363 — 42% €33,364 - €55,991 — 42% >€55,992 — 52%	**Income*** / **Tax Rate**[34] £0-£34,370 — 20% £34,370-£150,000 — 40% >£150,000 — 50% The top tax rate will fall to 45% from April 2013, when the government performs their annual update of the tax bands. *There is also a tax-free allowance of £8,105, which is less for those earning above £100,000.
Population (millions)	126.8	22.7[35]	16.8[36]	63.2[37]
Population Growth Rate	-0.242%	1.6%[38]	0.25%[39]	0.7%[40]

[28] National Tax Agency, FY 2011

[29] Australian Bureau of Statistics, Average Weekly Earnings (Full Time Adult Total Earnings x 52) as at February 2012

[30] As of 2012, source http://www.gemiddeld-inkomen.nl

[31] ONS, 2012

[32] Australian Taxation Office, http://www.ato.gov.au/individuals/PrintFriendly.aspx?ms=individuals&doc=/content/12333.htm

[33] http://www.belastingdienst.nl/wps/wcm/connect/bldcontentnl/belastingdienst/prive/inkomstenbelasting/nieuw_in_2013/boxen_en_tarieven_2013/overzicht_tarieven_en_schijven/u_hebt_in_2013_de_aow_leeftijd_nog_niet_bereikt

[34] HM Revenue & Customs

[35] Australian Bureau of Statistics, http://www.abs.gov.au/ausstats/abs@.nsf/mf/3101.0 as at June 2012

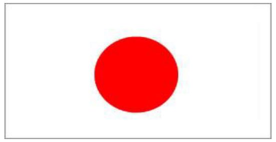
[36] Centraal Bureau voor de Statistiek (CBS)

[37] CBS

[38] Australian Bureau of Statistics, http://www.abs.gov.au/ausstats/abs@.nsf/mf/3101.0 as at June 2012.

[39] CBS (Jan 2012 - 2013)

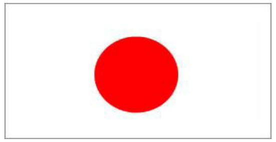
[40] ONS

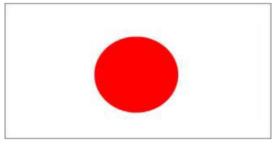
RMBS Performance	Japan 	Australia 	Netherlands 	UK 
Current 90+ Day Delinquencies	0.14%	0.57%	N/A (0.76% based on 60+ day)	1.82%
Worst-Performing Vintages	**2007 & 2008 vintages** Some deals in the 2007 and 2008 vintages have performed worse than initially expected. The mortgage loans backing those deals were originated under relatively loose lending criteria.	**2004 & 2005 vintages** The 2004 and 2005 vintages are the worst performing, as lending standards were looser during this period. Nevertheless, the 2004 vintage, which has the highest losses to date, has only incurred 37 basis points (bps)of loss (pre-LMI).	**No variations**	**2006 & 2007 vintages** While the 2006 and 2007 vintages had the weakest underwriting and highest LTVs, there has not been a significant variation in their performance due to low interest rates.
Delinquency Outlooks	**Stable** RMBS performance remains stable on the back of continued buybacks and the relatively high credit quality of borrowers. Most borrowers in the underlying pools are resistant to the economic downturn, as they are permanent, full-time employees of medium-sized or large companies. Such companies rarely lay off permanent employees, even during recessions. The typical borrower has a low debt-to-income ratio of around 25%. Borrowers' annual salaries are sufficient to make mortgage payments, despite the possibility of reduced bonuses.	**Stable** Delinquencies will not rise substantially in 2013 because the low interest rate environment and moderate economic growth will offset unemployment and underemployment in certain sectors of the economy, such as retail and tourism.	**Stable** Performance in this sector has been stable for the past year, mainly because of low interest rates and a broadly stable unemployment rate amongst homeowners. Generous unemployment benefits will continue to help borrowers avoid payment shock following loss of employment.	**Stable** Performance in this sector has been stable for the past year, mainly because of low interest rates and a stable unemployment rate amongst homeowners. Interest rates will remain low in 2013 and unemployment will remain broadly flat at 7.9% in 2013 compared with its current level of 7.8%. Prime borrowers can better cope with job loss than non-conforming borrowers because lenders are often willing to offer alternatives. For example, lenders allow prime borrowers to reduce their monthly repayments by temporarily switching from a capital repayment to an IO mortgage.
Downgrade Drivers	**Guarantor/Seller Downgrades & Performance** Counterparty downgrades (i.e., guarantors and sellers) have triggered a significant number of rating downgrades in RMBS transactions. Poor collateral performance has led to only nine rating downgrades in four transactions.	**LMI Downgrades** Mortgage insurer downgrades and new rating methodology for evaluating LMI in Australian RMBS has led to RMBS downgrades predominantly to junior notes.[41] Poor mortgage performance has not resulted in mortgage downgrades. Moreover, there have been no charge-offs on any of the notes that we rate.	**Methodology & Performance** NHG methodology updates[42] (introduced in 2009) and counterparty risk (whereby an originator bankruptcy led to due care claims)[43] were the primary drivers of RMBS downgrades.	**Methodology & Performance** We have not downgraded any notes issued by master trusts. However, we did downgrade non-investment grade notes issued to sell credit protection on the Granite reserve fund, as a result of worse-than-expected collateral performance.

41 See Moody's concludes review of Australian RMBS, 6 February 2013.

42 See Moody's Updated Approach to NHG Mortgages in Rating Dutch RMBS, 17 March 2009.

43 See DSB: One Year After the Bank's Default, 21 December 2010.

RMBS Structural Features	Japan	Australia	Netherlands	UK
				
Structure	Standalone, pass through	Standalone, pass through	Standalone, pass through and some master trust	Master trust with some standalone
Note Amortisation	Sequential pass through only	Sequential pass through, with allowance for pro rata of principal	Sequential pass through, soft bullet (master trusts)	Soft and hard bullet, scheduled amortisation and pass through
Legal Final	37 years	31 -32 years	30-40 years	30–50 years
Portfolio	Static (standalone)	Static (standalone)	Dynamic (master trusts) Static with some dynamic (standalone)	Dynamic (master trusts) Static (standalone)
Cash Flows	Cash flows received from mortgage loans are initially for investors. Cash flow waterfalls allow for excess spread trapping. Seller/originator receives excess cash via coupon payment on subordinated tranche. Some deals have subordinated/mezzanine note dividend suspension triggers, whereby asset trustee allocates the dividend as a principal payment to senior notes.	All cash flows received from mortgage loans are for investors. Cash flow waterfalls allow for pro rata principal payments between senior and junior notes, subject to certain conditions. Trapping of excess spread is not common. Trust income unit holder (sponsor) receives excess cash.	All cash flows received from mortgage loans are for investors. Standalone deals have a senior subordinated priority structure. Typically, the swap structure guarantees net excess spread (after costs).	Master trust: Cash flows are allocated between the seller and funding share. Cash flow waterfalls follow a complex system of rules governing payment waterfalls, as the cash manger allocates cash distributed from the trust to pay different notes depending on the redemption dates and triggers. Delinquencies and payment rates affect cash flow rules. Standalone deals: Generally, time subordinated class A notes rank senior to subordinated Z notes, which rank below the reserve fund.
Set-Off Risk	Deposit set-off risk mitigated by deposit insurance, cash reserves and additional credit enhancement	Deposit set-off risk mitigated by waiver of set-off in mortgage documents and breaking of mutuality.	Few deals have deposit set-off risk because mortgage provider is typically a separately incorporated entity from the deposit taking institution. Currently insurance policy set-off is a greater risk but will be reduced over time as government policies phase out interest only loans coupled with insurance policies. Set off risk is incorporated into our cash flow modelling when determining the credit rating of the notes.	The size of the minimum seller share in master trust incorporates a component to mitigate deposit set-off risk taking into account the level of deposits by the originator.
Ongoing Reliance on Originator	**Medium** The employment of additional subordination with junior notes (rather than swaps) mitigates interest rate mismatches.	**Medium** The originator is also the sponsor, who will typically service the pool, perform cash management, and provide swaps and bank accounts	**Medium** The originator is also the sponsor, who will typically service the pool, perform cash management, and provide swaps, liquidity and bank accounts Master trust deals also rely on the originator to make timely principal payments by refinancing notes or repurchasing portions of the pool.	**High** Same as Australian and Dutch RMBS, with additional reliance on the originator (in the case of master trust deals) to continually add mortgage loans to ensure that a non-asset trigger is not hit. The addition of new mortgage loans mitigates extension risk on notes that have a scheduled maturity date.

RMBS Structural Features	Japan 	Australia 	Netherlands 	UK 
Back-up Servicer (BUS) Arrangements	Under trust law, the asset trustee is responsible for the servicing role, which it then outsources to the servicer. If the servicer needs replacing, the asset trustee is obliged to service the portfolio or look for a substitute servicer. Many deals issued by regional banks appoint a BUS at closing, while Aa-rated deals issued by major banks do not.	In all deals, even those of highly rated banks, the trustee is the legal BUS. However, it has the right to outsource the servicing role to a third party. Increasingly, we are witnessing "warm" back-up arrangements.	Dutch RMBS transactions rely on the credit strength of the servicer. Deals often have (1) a BUS replacement trigger, (2) a BUS facilitator, and/or (3) a third-party cash manager. The facilitator, if appointed, is responsible for finding a replacement servicer.	UK RMBS master trusts rely on the credit strength of the servicer. Standalone deals often have either a BUS or a BUS facilitator, which, if appointed, is responsible for finding a replacement servicer.
Tranches Currently Issued	**Two or three** One or two senior, Aaa (sf) One junior, (NR)	**Two or three** One or two senior, Aaa (sf) Possibly one mezzanine, Aaa (sf)–A1 (sf)[44] One junior, A2(sf)–B2(sf), but typically Ba1[45]	**Generally several** One or two senior, Aaa (sf) Two to five mezzanine and junior tranches, (Aa1(sf) – Baa3(sf))	**Generally several** Aaa (sf) with different maturities and currencies One junior, (NR)
Junior Notes	Bear no interest (only excess spread) Always held by the originator 5%-8% of the structure	Bear interest May be sold to investors 1%-2% of the structure	Bear interest Retained by seller at closing Around 5%-8% of the structure including mezzanine notes	Bear interest, but interest payable ranks junior to the reserve fund replenishment Retained by seller at closing Around 10%-15% of the structure
Trends	**Return to simple structures** A number of complexly structured deals appeared in the 2007-08 period, but almost all the deals thereafter had very simple structures.	**Increased subordination** Subordination in senior notes is increasing, to decrease dependence on the credit quality of the lenders mortgage insurers.	**Decreasing reliance on excess spread via the swap** The number of transactions in which the swap doesn't guarantee a net excess margin have risen. **Mixed pools** The number of pools made up of both NHG and non-NHG loans have increased. Prior to this rise, there was a clear separation between NHG and non-NHG pools.	**Less issuance, simpler structures** Overall issuance has fallen due to the Funding for Lending Scheme (FLS). Issuance of rated mezzanine notes is limited, while there has been some issuance of hard bullet notes. Issuers have removed yield reserves from trusts and servicers have increased minimum trust yields.

[44] These are current outstanding ratings. The initial ratings are typically Aaa(sf)–A1(sf). The differences are due to methodology changes regarding lenders mortgage insurance. See Approach for Evaluating Lenders Mortgage Insurance in Australian RMBS, 19 October 2012

[45] These are current outstanding ratings. Initial ratings are typically A1(sf) – A3(sf). Differences due to methodology change regarding lenders mortgage insurance. See Approach for Evaluating Lenders Mortgage Insurance in Australian RMBS, 19 October 2012

Moody's Related Research

For a more detailed explanation of Moody's approach to this type of transaction as well as similar transactions please refer to the following reports:

» Japanese Delinquencies of RMBS are More Highly Correlated with Self-Employed Borrower Status than High LTV Ratios, July 2012 (SF291327)

» Australian RMBS compared to US, UK & Spain, October 2009 (SF181855)

» Approach for Incorporating Lender's Mortgage Insurance in Australian RMBS, October 2012 (SF303936)

» NHG Mortgages in Dutch RMBS: Key Features and Moody's Rating Approach, June 2005 (SF57858)

» Dutch RMBS: New Coalition's Proposed Agreement Reduces Leverage While Affordability Remains Largely Unaffected, November 2012 (SF305504)

» Moody's Updated Methodology for Set-off in Dutch RMBS, November 2009 (SF179373)

» Moody's Updated Approach to NHG Mortgages in Rating Dutch RMBS, March 2009 (SF157265)

» Approach to Quantifying Set-off Risk for Securitisation and Covered Bonds Transactions Originated by UK Deposit-Taking Institutions, May 2012 (SF265743)

» UK Mortgages: Performance Will Continue to Improve in 2013, January 2013 (SF308124)

» Moody's: New FSA MMR rules will benefit UK prime RMBS in long term, November 2012 (SF305091)

» UK RMBS Master Trusts: Extension Risk Remains Significant due to Low Principal Payment Rates, May 2012 (SF283721)

» Moody's Approach to Quantifying Set-off Risk for Securitisation and Covered Bonds Transactions Originated by UK Deposit-Taking Institutions, May 2012 (SF265743)

» The Role of Back-up Servicer Facilitators in European ABS and RMBS Explained, March 2012 (SF279875)

» Global Structured Finance Operational Risk Guidelines: Moody's Approach to Analysing Performance Disruption Risk, June 2011 (SF241345)

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

Moody's publishes a weekly summary of structured finance credit, ratings and methodologies, available to all registered users of our website, at www.moodys.com/SFQuickCheck.

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