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Residential Mortgage Obligations in New Zealand

Highlights

This paper aims to explain the proposed and under consultation Residential Mortgage Obligations (RMO) Framework which the Reserve Bank of New Zealand (RBNZ) thinks is the answer to improve the depth of capital markets and economic stability for New Zealand's economy. This paper starts with the raison d'être for RMO framework introduction and why the RBNZ is proactively driving its implementation. The paper then delves into what the framework is about, and then bulk of the paper aims to present to the market participants, the "how" of the RMO framework. This "how" section is the heart of the paper and explores the typical RMO term sheet, credit structure and support mechanisms, collateral and operational framework, cash flow waterfall (Interest, Principal and enforcement), data requirements for implementation, and RMO Valuation method that works on the principles of expected loss. The paper then presents the view of market participants, specifically issuers (banks) and investors, through the consultation process undertaken in 2018. While the paper aims to present the most recent developments in the exercise for adoption of the framework, another consultation is under way which expects to improve upon the original framework and increase the probability of its acceptance sooner by all market participants.

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Introduction

Liquidity and depth of the market is important for any economy's stability and for effective implementation of the central bank'smonetary policy. In November 2017, the RBNZ published the results of its review of mortgage bond collateral standards and sought feedback on the terms under which it accepts mortgage bonds and proposed a new standard, RMO. This process allowed the RBNZ to gain insights from data delivered on the mortgage books held by key players and to develop options to resolve the key issues as related to:

- the quality of mortgage loans and pools acceptable under the RMO framework
- the level of subordination and risk retention required to protect RMO from losses
- the flexibility Issuers would have in regard to tranche structuresand note classes
- the repo-eligibility, pre-approval and pre-positioning process when utilising RMO
- the disclosure requirements and processes for supply of Loan Level Data (LLD)
- the operational requirements for parties that contribute to a RMO transaction
- the level of standardisation and comparability of legal documentations supplied
- the period required for transition and to encourage development of a market in RMO

The new mortgage bond standard aims to:

1. reduce contingency risks for RBNZ as a lender of last resort and ensure financial intermediaries supply sufficient high quality and liquid assets (HQLA)
2. provide Issuers and Investors with an additional funding and investment instrument, supporting the development of deeper capital markets

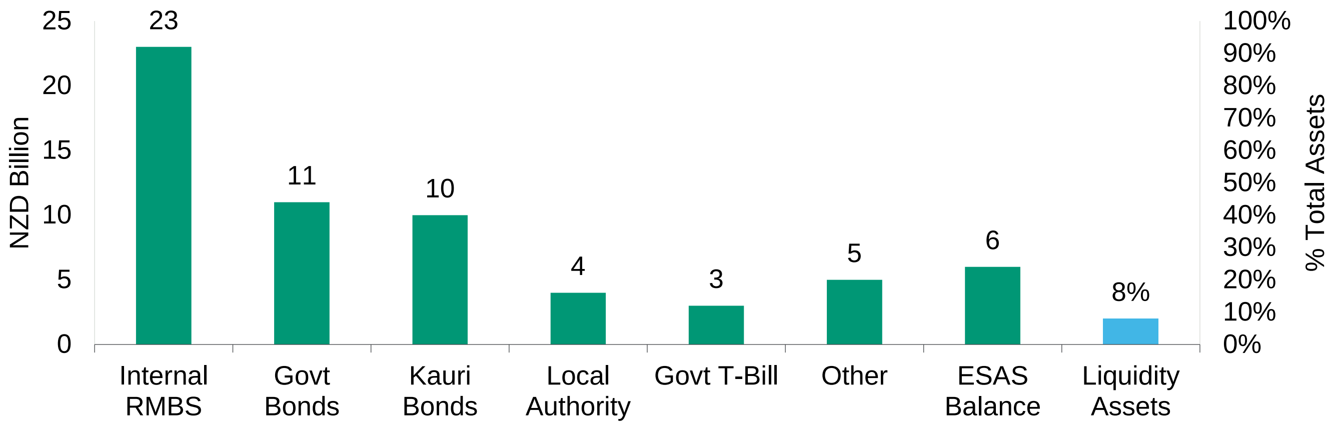
The RBNZ believes that a viable mortgage bond framework should set the highest possible reference standard for domestic markets in terms of the quality of the underlying portfolios, the safety and liquidity of the financial instruments issued, and their reliability and versatility across most domestic liquidity and funding operations.

RMOs - Why?

The starting point for the RBNZ when electing to launch the consultation process was what it perceived as a shortage of liquidity for all participants in the New Zealand debt market. The shallow pool of assets on issue meant limited investment options, a high marginal propensity for the local financial sector to fund in offshore wholesale markets—an option regulators, including the RBNZ, view as inherently less stable—and a shortage of liquidity collateral for the local regulatory system. The first goal of the RBNZ, therefore, was to help create a new, standardised instrument that satisfied its own preferences for the repo and liquid-assets regimes as well as being suitable for issuers and third-party investors.

Through this RMO program introduction, it is clear that the RBNZ does not want an ad hoc market to develop for mortgage loan securitization but a structured model that is guided by standards proposed and under discussion with major banks and market participants.

The RBNZ's concern was that New Zealand's capital market, given its depth, would not have the credit-analysis skills to deal with infrequent issuance of a non-standardized mortgage backed product. Thus, by establishing a simple, transparent and comparable model as eligible collateral for the domestic-market operations regime, the RBNZ hopes to help develop an asset class suitable for the local funds.



Source: RBNZ (31.08.2017)

The RBNZ explicitly proposes its new mortgage bonds as a replacement for internal RMBS as a regulatory liquid asset. The RBNZ believes internal RMBS should cease to play a prominent role as collateral in its operations. As eligible counterparties use internal RMBS for regulatory liquidity purposes, the introduction of RMO would need to be complemented by rules phasing out internal RMBS. RBNZ data reveal that internal RMBS form by far the largest single component of New Zealand's primary liquid-asset base, with more than twice as much internal securitisation held by banks than either New Zealand government bonds or high- grade Kauri issuance.

While banks might not rush to issue RMOs under their own steam, the impending removal of what has clearly become the preferred regulatory liquid asset—with NZD23 billion (USD15.7 billion) in the system—could theoretically effectively compel the banks to use RMOs as a substitute for internal RMBS.

The consultation document also states that the RBNZ views covered bonds as acceptable but sub-optimal collateral and certainly unsuitable to replace internal RMBS. Negative aspects of the covered-bond asset class include limited issuance volume and trading liquidity in New Zealand, structures tailored to offshore investor needs that entail cross-border risks, and the relatively high quantity of assets that need to be encumbered to achieve sufficient over- collateralisation.

RMOs - What?

The standard is primarily tailored to address the specific situation in the New Zealand markets. However, a wider offshore market acceptance for the securities issued also requires that the standard broadly aligns with international guidelines by the International Organisation of Securities Commissions (IOSCO) and the Basel Committee on Banking Supervision (BIS) or the Australian Prudential Regulation Authority (APRA) securitisation standards.

The distinguishing feature of high grade mortgage bonds in New Zealand is that they rely on a regulated and standardised framework which is reasonably prescriptive with regard to:

» the quality of the underlying mortgage loan portfolios

» the types of securities that may be issued

» the disclosure and documentation requirements

» the repo-eligibility of all senior notes issued under a pre-approved programme

» the market placement of a fraction of the total issuance during a reference period

The **quality of the loan portfolios** is governed based on principles that ensure:

» a fair mix of qualities of mortgage loans is chosen through portfolio criteria and limits

» incentives to cherry pick either very good or very bad mortgage loans are balanced

» the portfolios present a reasonable reflection of the asset quality in the New Zealand market

The **types of securities** on issue are restricted by:

» a high level of minimum subordination (10%)

» a simple capital structure with three classes of notes and strictly sequential waterfalls

» a limited range of structures that may be offered including a funding-only option too (i.e., an issuance where the Issuer is not seeking capital relief; rather, the focus is on accessing term funding to support the issuer's lending activities, In such a scenario, the issuer is not required to sell all tranches to investors but can retain the junior tranches)

The **disclosure and documentation** is thorough and standardised, requiring that:

» the RBNZ and Investors can analyse the quality of the portfolios independently

» the Issuers provide high quality performance reports as part of the surveillance (The RBNZ requires data submission as per requirements mentioned later in the paper. Further, the reports and valuation are standardized through the RMO Valuation model covered later in the paper)

» the wholesale marketing and legal documentation is reasonably standardised

The **repo-eligibility of senior notes** will be governed by the RBNZ through:

» in principle pre-approval of a new RMO issuance programme

» approval of any new series of notes prior to the issue date

» acceptance of RMO senior notes as collateral in all financial market operations

The **market placement of the notes** is incentivised through:

» limiting the retention of senior notes by an originator for use as regulatory liquidity

» an obligation for Issuers to place a fraction of the notes during a reference period

» a marketing process that ensures an arms-length process and price discovery

RMOs - How?

Key Terms and Conditions

Eligible Loans	i. mortgage loans that have been originated by a single originator (if the mortgage loans were originated by multiple originators, this will need to be discussed and agreed with the RBNZ at the relevant time); ii. mortgage loans in NZD with variable rates or fixed rates; iii. mortgage loans to New Zealand citizens or residents; iv. mortgage loans where the land subject to the related mortgage has a residential dwelling erected on it: 1. which is not under construction; or 2. which is in the final stage of completion (construction completed and awaiting a code of compliance certificate); or 3. which is undergoing permitted renovations; v. mortgage loans secured by a related mortgage that is: 1. a first ranking mortgage over land in New Zealand; or 2. a second ranking mortgage where (A) the Seller is also the first ranking mortgagee and the first ranking mortgage is also being acquired by the Issuer or (B) the first ranking mortgage is already held by the Issuer; vi. mortgage loans fully repayable in 30 years; vii. mortgage loans that are not in default; viii. mortgage loans that are fully drawn, or, where a residential dwelling is in the final stage of completion or undergoing renovations, are drawn > 80%; ix. mortgage loans where an obligor has made all scheduled interest payments due and payable over the last 90 days; x. mortgage loans that carry a loan level indexed Loan-to-Value Ratio (LVR) of not more than 80% (indexed LVR is LVR adjusted for house price index); xi. mortgage loans with a o/s principal balance of <=2 million NZD; xii. mortgage loans that comply in all material respects with all applicable laws; xiii. mortgage loans that are not "low doc" or "no doc" loans (in each case, being loans where the Originator has not been provided with any documentary evidence of the obligor's ability to repay the mortgage loan); and xiv. mortgage loans that are assignable without the consent of the related obligor.
Replenishment	The Issuer will have the option to replenish the pool: a. within a two-year period from the closing date and b. by reinvesting principal collected from the mortgage loans into new mortgage loans from the same originator.

Portfolio Limits	Limit Type	Pool Level Weighted Average	Loan Level
	Nature of Pool	Discrete or Replenishing	Verified NZ Residential Borrower Unit
	LVR	<=60%	<=80%
	Borrower Concentration	Top 10 <=5% Top 50 <=15% Min. no. of loans – 500	<=$1m
	IO Loans	<=20%	NA
	Investment Loans	<=20%	NA
	Fixed Rate Loans	>=45%	NA
	Remaining Term	<=20 years	<=30 years
Notes	1. Class A / A1+A2 – Total <=90% and A1 <=75% 2. Class B – Optional and >=2% 3. Class C – For Originator and >=8% Minimum subordination required is higher of 10% or required for AAA rating		
Liquidity reserve	1% per Class for first 2 years and 1% for the entire amount thereafter. It can be released once Class A and B notes are redeemed		

RMO capital structure and credit support mechanisms

Class of Notes	Size		Legal Maturity	Expected Life	Call Rights	Income Payable	Principal Payable
	Minimum	Maximum					
Liquidity (AA)	20/100 *	45/100 *	<= 30y	1y <= AA <= 2 y	not callable	fixed	soft bullet
Term (AB)	45/100 *	70/100 *	<= 30y	AB <= 10 y	callable if pool <= 10%	fixed or floating ***	pass through
Capital (C)	10/100	35/100	Last Payment	C >= 10 y	not callable **	floating	pass through
Waterfall	separated for interest, principal, charge off, termination; strictly sequential; pro-rata trigger 20%						

Source: RBNZ

*AA and AB Notes proportional risk sharing

** Conditional on termination

***fixed-rate share conditional on moderate balance principle

Class of Notes	Risk Category	Capital Support	Seller Risk Retention	Liquidity Reserve	Liquidity Ranking	Haircut on Repo	Liquidity Value
Liquidity (AA)	Senior Secured	>= 10%	-	1%	Primary	3% to 7%	<= 97%
Term (AB)	Senior Secured	>= 10%	-		Primary	5% to 9%	<= 95%
Capital (C)	Capital Secured	0%	100% *	-	-	-	0%
Loss Buffer	excess cash trapped up to 1% of single series invested amount; further excess cash trapped as joint series trust reserve						

Source: RBNZ

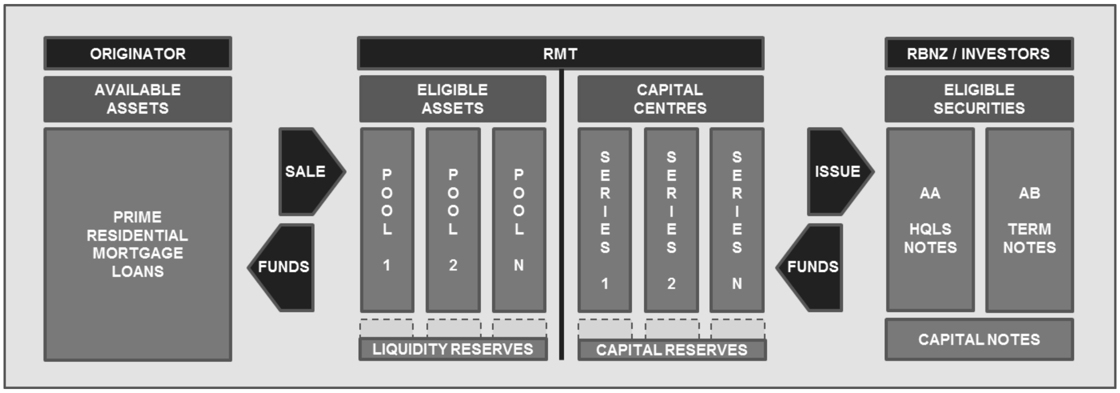
RMO Framework

RMO Collateral Framework

Source: RBNZ

The collateral framework would regulate the process for RMOs to become repo-eligible in domestic market operations of the RBNZ. This process would ensure a disclosure of relevant information about the mortgages included in a loan pool and would include a thorough assessment of the features of any new RMO series or replenished note offerings. As is the case for Kauri Bonds, the RBNZ would support markets with an 'in-principle' eligibility confirmation.

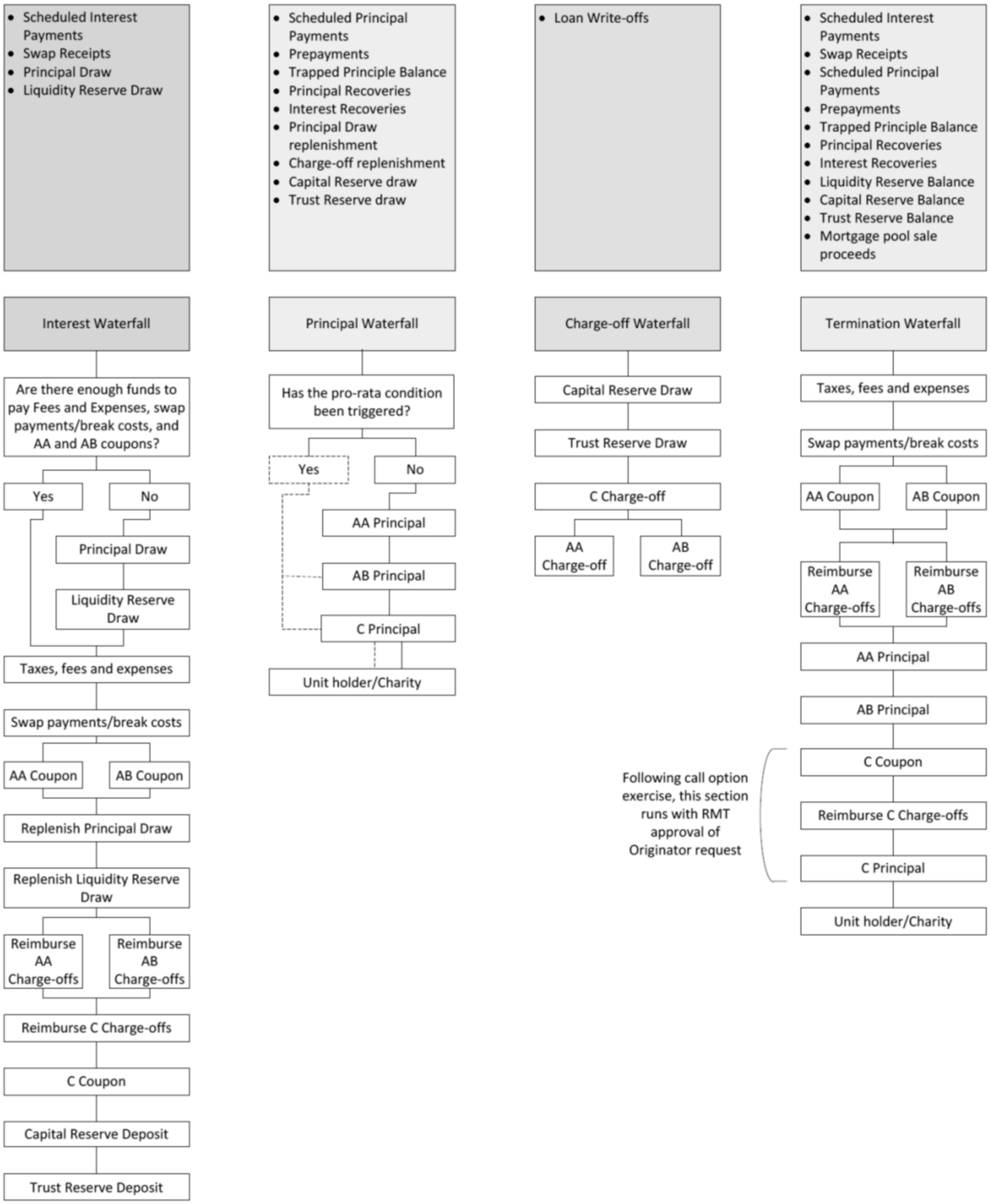
RMO Operational Framework



Source: RBNZ

The operational framework would be a special purpose trust that would function as a bankruptcy-remote funding platform. This 'Residential Mortgage Trust (RMT)' would fund the purchase of eligible mortgage loans by issuing eligible securities. Eligible securities would be limited to two types of 'notes'. The first type would be a 'high quality liquidity substitute' (HQLS), and the second would be a 'term note'. These notes would be protected from credit losses through capital notes. The entitlements for each series would be separated into loan pools and capital centres.

RMO Cash Flow Waterfall



Source: RBNZ

Data Requirements

The RBNZ classifies the loan level disclosure requirements into transactional, counterparty, loan exposure, principal and interest, security property, borrower and performance information (90 fields in all). The data can be flagged as required for Due Diligence and Marketing or RBNZ reporting or investor reporting. For certain fields where Non-Deliverability of data is allowed, loan data may be omitted under valid pretext of ND1, ND2, ND3 or ND4.

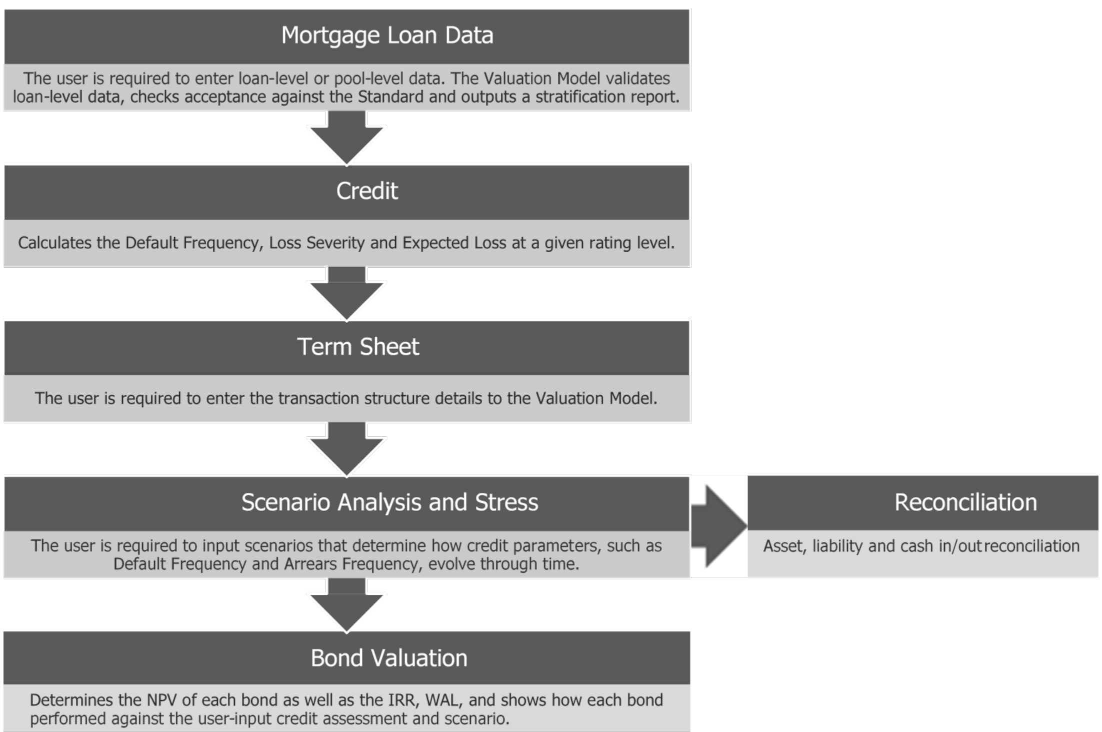
For the valuation model, files required are:

1. Loan Level Data with 46 fields which include the details at Split Loan Level has been recommended by RBNZ. The fields include, but are not limited to, pool cut dates, important dates for loans, security, valuation, documentation type, interest rates, amortization and delinquency.
2. Payment file (mid-transaction template) has 32 fields including 3M OIS, Swaps, Interest and Principal draws, collections, outstanding, prepayments, recoveries, write-offs, charge-offs, unpaid interest, call events, and termination events.

RMO Valuation Method

Mechanics of Valuation Model

The valuation model is an expected loss model and is composed of the following modules:



Source: RBNZ

Operating the model

Most user-enabled changes to the model can be done through the Maintenance tab, which can be navigated to via the 'Maintenance' button on the Home page of the RMO Valuation Model

Maintenance Buttons	Description
Postcode Lookup	This tab contains a list of all valid postcodes and their regional mapping. The source is New Zealand Post.
Swap Curve	The user should update market quotes for the NZ swap curve here.
Default Frequency ("DF") and Market Value Decline ("MVD") Inputs	Default inputs are included in the Valuation Model. These inputs affect the credit analysis for each implied rating level. The inputs consist of: » Benchmark values at each implied rating level » Multiples that adjust the benchmark DF » Multiples that adjust the benchmark MVD

Maintenance Buttons	Description
Scenario Lookups	Default scenarios are included in the Valuation Model. The scenario options include: » Timing of defaults » Timing of arrears » Volume of prepayments » Volume and direction of interest rate stress
Reset to Default Values	Resets the following to the default values: Benchmark values in the BM tab DF multiples, MVD multiples and PD Scaler in the Loan Multiples tab » DF multiples in the Pool Multiples tab » RBNZ limits in the RBNZ Limits Check tab » Sample scenario inputs in the Scenario Parameters tab » Scenario lookups » Default Recovery Periods in the Term Sheet tab

RMO – Market Acceptance

May 2018 consultation response:

Following a three-month consultation period, the RBNZ received submissions from investors, banks, non-bank lenders and agencies in March 2018. Eight key technical areas of commentary emerged from the Round Table and the various submissions received. These are summarised in the following table:

Primary and secondary collateral policy objectives	» Investors mostly support the issues raised and targets outlined in the RBNZ proposal. They agree that a consistent liquidity back-up infrastructure is likely to lower liquidity and systemic risks; this could be further improved if the concept included more eligible parties in the future. They assert that tradability of mortgage instruments in the domestic markets and a greater and more regular supply of bonds would make the segment more attractive in the future. » Banks as issuers partly disagree with the objectives as outlined in the RBNZ's proposal. Some argue the RBNZ should stick to setting some high level principles for RMBS; others see limited value added from RMO when compared with traditional RMBS as found in regional markets such as Australia; the majority of banks expressed a preference to hold on to an internal RMBS regime.
Eligible mortgage loan quality	» Investors support the idea of creating transparency over the qualities of eligible loans, as it makes credit portfolio assessments easier and allows risk monitoring over the life of a transaction; they advise that some of the eligible loan criteria settings might have been too conservative as to allow for a higher scale in liquidity operations and more depth to evolve in the domestic RMBS markets; some emphasise that discrete pools (where loan portfolios are fixed at the start of a transaction and could not be changed) are in general much easier to analyse than replenishing pools; if the pools become standardised, trading RMBS in secondary markets is much more likely. » Banks raise concerns that the proposed eligible loan criteria would be too restrictive. This could result in cherry picking good loans off a bank's balance sheet in a crisis leaving depositors worse off; some respondents emphasise that the scalability of liquidity support in a crisis would require relaxing the loan quality to support bank liquidity as much as possible; others are concerned that monitoring the compliance with these criteria will create new costs and in many cases would require IT system and possibly front line process changes, to be borne by their customers.
Eligible capital and product structures	» Investors support a simple, transparent and comparable capital structure approach; they prefer the RMO concept to become less complex and strictly sequential in proposed waterfalls; some assert that short-term and longer-term notes would be desirable to be issued; others advise that the required capital support should be allowed to differ among issuers as their mortgage loan origination standards varied; elements of negative carry for some of the notes could be avoided. » Banks disagree with the rationale of some of the safety features in RMO; a lower yield and negative carry can be a cost to Issuers and Investors alike; others would agree to simpler and safer RMBS but raise concerns that the RMO standard could likely crowd out traditional RMBS; some banks argue if internal RMBS were structurally safer compared with external RMBS, this could make them in principle tradable, even though they differ structurally from RMBS traded in markets. RMO as a standard should be made as simple and cost effective as feasible. Some banks provided RBNZ with respective proposals how that could be achieved.
Disclosure and data	» Investors express a preference for prospectuses, documentation and data to be of a rather high standardisation to allow for a more efficient internal analysis and more reasonable management cost; consistent loan level data is needed to allow an independent risk assessment and risk monitoring; investor reports and data should be of a high quality and supplied on a regular basis. » Banks remark that current RMBS disclosure practices align with regular market practices in Australia; some promote a minimum standard for investor reports which would be sufficient for risk monitoring; others raise concerns that the requirement of a central data repository could create very high costs; some regard regular supply of loan level data as less necessary as the bonds would have to remain externally rated and rating agencies provided regular risk reviews.
Operational requirements	» Investors express some preference for a central back-up servicer solution given the small market and high operational risks in an event of default of a major originator; control rights should be clearly defined, and move to the senior note classes subject to trigger events; to legally dissociate a trust or SPV effectively from an originator remains important and it would be positive if the current legal regime could be aligned with that prevalent for Covered Bonds. Common reserves within a trust and other elements of cross-collateralisation could be avoided. » Banks highlight that the rules upon which the servicing could be transferred from an originator to a third party would have to become clearer to avoid any operational risks or negative incentives; they emphasise that in case of an originator default the back-up servicing was usually provided through the administrator and additional back-up services would thus be largely redundant; banks argued that a reasonable divergence of payer and receiver positions in a trust or SPV are unavoidable but they could continuously be managed through adjustable swap arrangements.

Legal documentation	»	Investors support a standard documentation framework, as it reduces the costs of due diligence; they prefer shorter and more transparent documents that allow quicker analysis; and they support the idea of a fixed suite of standard documents to be extended as necessary.
	»	Banks express doubt that a standard documentation could be reflective of all business situations; some highlight that existing RMBS documentations are already pretty similar in their content; others suggest that the RBNZ should continue to accept different documentation standards.
Regulatory incentives	»	Investors highlight that the RBNZ should consult fund management advisers to ensure the products resulting from the standard would fit well into strategic asset allocations of a broader investor community; they advise that the attractiveness of the new standard would also depend on how the resulting instruments would be ranked under Solvency II and liquidity regulations.
	»	Banks highlight that regulatory conditions have been a key reason why few RMBS were issued over the past decade; some think that the RBNZ should review capital rules to avoid additional capital charges from holding RMBS liquidity assets; others suggest that the RBNZ should continue to accept traditional RMBS as liquidity assets for smaller lenders. To become eligible offshore, the securities would need to comply with respective requirements.
Transition process	»	Investors confirm positive market demand for the products subject to a stepwise roll-out; they remark that the transition needs to allow for a reasonable time frame for investment mandates to be changed before investments can start; they recommend the standard should be discussed and promoted with major fund management and strategy advisers; they recommend the new standard to be supported with a communication strategy that would include the RBNZ.
	»	Banks remark that the proposed transition period to introduce the new standard is too short; some suggest that the Internal RMBS could be amended to still comply for an interim period; others advocate that the RBNZ should allow for a period of at least five years to market up to 50% of current Internal RMBS in the market and pre-position respective third party collateral instead; some banks highlight that the RBNZ could support market liquidity if it engaged itself in this market or if it accredited more holders of RMO as eligible in its market operations.

Conclusion

As expected, the Banks (and other issuers) are not very supportive of this exercise of dating out the internal RMBS as eligible for repo or working with RBNZ towards quick acceptance of RMO as repo eligible products. The Investor community which benefits from the RMO framework thinks differently and is of the opinion that the proposed framework would meet the objectives with which the RBNZ has undertaken the massive exercise. The RBNZ is proactively working with all stakeholders in the market to ensure a smooth transition to what it believes to be the product of the future for residential mortgage securitization in the country. This author expects that it is a matter of time before the RMO framework is the norm in the New Zealand market in a shape not very different from the one which is evolving through various consultations with market participants. This would help New Zealand capital markets to align with the prolific structured relatively liquid RMBS market of its neighbour, Australia.

References

Various policy documents from the RBNZ website found at the following link and mentioned below (https://www.rbnz.govt.nz/markets-and-payments/domestic-markets/review-of-mortgage-bond-collateral-standards):

1. Introducing a high grade residential mortgage backed securities framework for New Zealand
2. Review of mortgage bond collateral standards Part A, Part B and Part C—November 2017
3. RMO Framework—Key terms and conditions (November 2018)
4. Residential mortgage loan level data template
5. Summary of submissions—Review of mortgage bond collateral standards
6. ANZ Bank New Zealand Limited response
7. ANZ Bank New Zealand Limited, ASB Bank Limited, Bank of New Zealand and Kiwibank joint response
8. Australian Securitisation Forum response
9. Cooperative Bank Limited response
10. Kiwibank response
11. Westpac Bank response
12. RMO Valuation Model and User Guide