Regulatory impact assessment on capital requirements for reverse mortgage loans

28 October 2015
Agency disclosure statement

1. This Regulatory Impact Statement (RIS) has been prepared by the Reserve Bank of New Zealand. It provides analysis on changes to the capital requirements for reverse mortgage loans.

2. Between March 5 and April 17 2015 the Reserve Bank consulted on proposals to define specific capital requirements for reverse mortgage loans. Currently, the Reserve Bank’s capital adequacy framework does not distinguish between standard and reverse mortgages. The consultation proposed to assign risk weights to these loans in line with those prescribed by the Australian Prudential Regulation Authority. In response to submissions from the consultation, the Reserve Bank has made some amendments to the proposed changes.

3. This RIS takes into account the feedback received during the consultation period and informs the policy decision as published by the Reserve Bank on 21 August 2015.

Problem definition

4. A reverse mortgage is a loan secured by a residential property where no principal payments and generally no interest payments become due until the property is vacated or sold.\[^1\] Recourse to other assets is normally not available to the reverse mortgage lender, which means that the lender bears any negative equity risk. Reverse mortgages are generally marketed to borrowers who are retired and have significant equity in their home. A reverse mortgage allows the borrower to access the equity without having to repay or service the loan whilst living in the property.

5. Although not widely offered by banks currently, there is some $300m worth of reverse mortgage assets held by a small number of banks in New Zealand. With more people reaching retirement age in the coming years and decades, there is the potential for reverse mortgage lending to increase. Regulatory clarity around the capital treatment of reverse mortgage loans may contribute to further growth within this market.

6. A normal mortgage loan exposes the lender to credit risk in the event of the borrower not meeting his or her repayment obligations and the collateral being insufficient to cover the outstanding loan amount. Reverse mortgages work differently. The total amount one can borrow under a reverse mortgage is normally capped at a certain percentage of the value of the residential property. The older the borrower, the higher the initial amount he or she can borrow. Interest is applied to the initial loan plus any previous interest (compound interest) but no repayments are made until the borrower vacates the property. At that point, the lender is repaid the initial loan, i.e. the principal, plus any interest that has accumulated in the intervening period.

7. This gives reverse mortgage loans a risk profile that is quite different from that of a standard mortgage. In theory, compounding interest could turn a loan into negative equity. Under the terms of typical reverse mortgage contracts, the risk of the property falling into negative equity cannot be passed on to the borrower or the borrower’s estate. Once the value of the security has been realised, the borrower or their estate is under no obligation to repay any outstanding amount of the loan. Therefore, one of the key risks for a reverse mortgage would be a situation where the borrower stays in

\[^1\] Although not common in New Zealand, other variants may include interest payments or a time limit on the principal plus any interest to be repaid.
the property longer than was anticipated. Alternatively, if the value of the property does not grow as quickly as anticipated, or indeed falls, the lender may be exposed to a loss.

8. At a portfolio level, the long and uncertain maturity profile of reverse mortgage assets presents challenges that require assumptions for a number of factors. If an assumption, such as the expected path of house prices, turns out to be incorrect then a lender could suffer unexpected losses.

9. Consequently, the Reserve Bank does not believe that it is appropriate to apply the same risk weights to standard mortgages as to reverse mortgages, as is currently the case in its capital adequacy framework.

10. Under the Internal Ratings-Based (IRB) approach to capital adequacy, detailed in the BS2B chapter of the Reserve Bank’s Banking Supervision Handbook, accredited banks are required to develop probability of default estimates in calculating the capital charge for different portfolios. Under typical reverse mortgage contracts a concept of payment default is somewhat meaningless, and there is currently no relevant IRB approach to modelling credit risks from reverse mortgages. IRB banks currently calculate the capital requirements for their reverse mortgage portfolios using the standardised (BS2A) approach.

**Objectives**

11. The Reserve Bank’s main objective with regard to the financial system is defined in Section 68 of the Reserve Bank Act. This section states that the Reserve Bank is tasked with promoting the maintenance of a sound and efficient financial system. As part of this, the Reserve Bank sets capital adequacy policies for registered banks.

12. Capital adequacy requirements aim to ensure that banks retain a sufficient level of capital for the risks associated with their lending. The Reserve Bank’s capital adequacy requirements are designed with regard to the costs that they impose on banks and the effects that the requirements have on banks’ ability to provide financial services to the public, and the maintenance of a competitive and efficient banking system.

13. In this case, the Reserve Bank seeks to adjust its capital requirements for reverse mortgage loans, to better reflect the risks that banks face from these loans. The Reserve Bank’s current capital adequacy requirements do not distinguish between standard and reverse mortgages, despite their different nature and risk profiles. Additionally, the Reserve Bank seeks to provide regulatory certainty about the capital treatment of reverse mortgages by clarifying and aligning its requirements for both standardised and IRB banks.

**Policy options**

14. In the consultation paper the Reserve Bank sought feedback on three options for the capital treatment of reverse mortgages.

**Do nothing**

15. The status quo of not having a policy for non-standard mortgage products such as reverse mortgages would mean that banks would continue to use the capital
requirements for standard mortgages for their reverse mortgage portfolios. Banks on the standardised approach would continue to use the risk weights that were calibrated for standard, amortising mortgages, potentially misrepresenting the risks associated with reverse mortgage lending. Banks accredited for the IRB approach would continue to use the standardised risk weights for standard mortgages in their capital calculation, as risk weights cannot meaningfully be estimated for reverse mortgages under the current capital adequacy framework for these banks.

16. In the absence of specific capital requirements for reverse mortgages, banks would continue to face uncertainty as to the capital treatment of these products. Having publicly consulted on this issue, they may however anticipate that at some point the Reserve Bank is likely to change capital requirements for reverse mortgages. This regulatory uncertainty could have negative consequences for market efficiency and innovation.

**Exposure based net present value calculation**

17. The second option that the Reserve Bank consulted on was a proposal to retain the current risk weight categories and calibration for residential mortgages, but to adjust the exposure amount by calculating a net present value of the expected future accrued interest, which would be added to the principal loan amount. This adjustment to the exposure amount would apply to both standardised and IRB banks. This is similar to the approach taken by the PRA in the United Kingdom. An NPV calculation would effectively narrow the gap between the capital treatment of standard and reverse mortgages by compensating for the lack of interim repayments in reverse mortgage contracts. However, to do so would require a calculation that is complex and subject to uncertainty.

**Specific risk weights for reverse mortgages**

18. The third option is to specify risk weights directly for reverse mortgages, which would apply to both standardised and IRB banks. This is the approach taken by APRA in Australia and OSFI in Canada. Risk weights would be prescribed directly for IRB banks, due to the aforementioned difficulties in estimating meaningful probabilities of default for use in banks’ models. Similar to the calibrations in Australia and Canada, this option would retain the existing risk weights for standard mortgages and apply a higher average level of risk weights for reverse mortgages at a given LVR.

19. Due to the effect of compounding interest and the lack of repayments on reverse mortgages, under the existing calculation method which uses the property value at origination an LVR for a reverse mortgage would increase over time. Submissions argued that to retain the existing calculation method for LVRs while at the same time increasing risk weights may lead to an overly conservative capital treatment for reverse mortgages. Therefore, if risk weights are increased, it could be appropriate to allow for the property value used in the calculation of the LVR of a reverse mortgage to be updated from time to time.

**Preferred option**

20. The first option, to do nothing, would fail to align the Reserve Bank’s capital adequacy requirements with the risks associated with reverse mortgages. Neither would this option resolve the lack of guidance in the Reserve Bank’s capital requirements for the treatment of reverse mortgages by IRB banks.
21. The second option would in part better align capital requirements for reverse mortgages with their risk profile by more accurately representing the size of the associated loan at the point of origination. However, to do so is necessarily complex and the modelling involved requires several assumptions to be made. The calculations involved would be subject to uncertainty and could be made inconsistently across banks. To create a net present valuation framework for mortgage exposures would introduce further complexity to the Reserve Bank’s capital adequacy framework and impose costs on banks in its administration.

22. The Reserve Bank’s preferred option is to specify risk weights directly for reverse mortgages. This option is administratively simpler and achieves the Reserve Bank’s objectives of aligning the capital requirements for reverse mortgages with their risk profile in a cost-effective manner. Further, given the close connections between the New Zealand and Australian banking systems, it would be sensible to adopt a similar capital treatment.

23. In response to submissions received, the Reserve Bank has made some adjustments to the calibration of the capital treatment proposed in the consultation document. This includes the introduction of an intermediate LVR bucket and risk weight, for loans with an LVR of between 61 and 80 percent. Doing so allows for a greater differentiation of risk in reverse mortgage portfolios. Additionally, the Reserve Bank will adjust its policy on the revaluation of properties securing reverse mortgages. This adjustment will require reverse mortgage lenders to reassess property values every three years, with an anchoring approach that ensures this is done conservatively. The proposed rule is designed to minimise any asymmetric revaluation behaviour or gaming that could understate the risks that lenders face from their reverse mortgages.