Consultation Paper: Proposed changes to the bank capital adequacy framework (internal models based approach) (BS2B)

Consultation Document

The Reserve Bank invites submissions on this Consultation Paper by 29 April 2011.

Submission and enquiries about the consultation should be addressed to:

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Please note that submissions may be published. If you think any part of your submission should properly be withheld on the grounds of commercial sensitivity or for any other reason, you should indicate this clearly.

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SECTION 1: INTRODUCTION

1. Since the first quarter of 2008, the Reserve Bank of New Zealand's (the Reserve Bank) capital adequacy requirements for banks incorporated in New Zealand have been based on the Basel II framework. Within this framework banks are allowed to use their own internal models as a basis of determining their minimum capital requirements, subject to their models being accredited by the Reserve Bank. In practice, the accreditation of these models has involved a number of conditions to be met and overlays to be applied to the Reserve Bank's satisfaction, to ensure the internal models are sufficiently conservative.

2. The four largest banks in New Zealand have been accredited to operate as internal models (IM) banks under the Basel II capital framework. These banks are required, through their conditions of registration, to calculate their minimum regulatory capital requirements in accordance with the Reserve Bank's Capital Adequacy Framework (Internal Models Based Approach) (BS2B).

3. At the time they were accredited, the Reserve Bank advised IM banks that the corporate lending models they applied to New Zealand farm exposures were inadequate and would be further reviewed post-accreditation. In cases where models were insufficiently conservative, it was necessary to require banks to hold additional capital pending this further work. Given the commonality of the key risk drivers between banks, the Reserve Bank undertook to lead the modelling work in this area.

4. The Reserve Bank began its farm lending consultation with IM banks in December 2008. Our initial concerns were not just about the adequacy of bank models, but also the apparent easing of farm lending credit criteria and seemingly optimistic approach of some farmers to debt accumulation that took place for several years up to about 2008. During 2009 the Reserve Bank wrote to the IM banks outlining its proposed farm lending policy, and published details of this policy in the Reserve Bank *Bulletin* (September 2009 edition). The Reserve Bank has since held further discussions with IM banks, and has now refined its farm lending policy for consultation. The broad thrust of the new proposals has thus been well-flagged in the market. Banks have over the last three years recognised the need to revert to more conventional, tighter credit standards, and hence the proposed new policy reflects changes that are already being incorporated into lending decisions.

5. The proposed new farm lending capital policy is reflected in the proposed changes to BS2B (appended). The proposed changes to BS2B also include an aspect of the new farm lending policy that is applicable to corporate exposures more generally (loan maturity). In addition, the Reserve Bank is taking the opportunity in this consultation to propose a number of other minor changes in some other areas. Finally, the new version of BS2B will result in a minor consequential change to the Reserve Bank's Connected Exposures Policy (BS8).

6. The remainder of this paper is structured as follows:

   Section 2 describes the Reserve Bank's farm lending capital policy and related proposed changes to BS2B.

   Section 3 describes the Reserve Bank's view about the impact of loan maturity on systemic risk and related proposed changes to BS2B.

   Section 4 describes several minor miscellaneous changes proposed to BS2B.

   <u>Attachments</u> to this paper shows the precise changes proposed to BS2B and BS8 in track change format.

7. The Reserve Bank invites submissions from interested parties on its proposals by 29 April 2011. The Reserve Bank is particularly interested in responses to the questions presented in boxes throughout this consultation document, although welcomes any relevant submissions.

8. The Reserve Bank will take final decisions on its proposals taking into account submissions received. The revised BS2B requirements will be applied to IM banks via changes to their conditions of registration, effective from 30 June 2011.

SECTION 2: FARM LENDING

9. Over the last two years the Reserve Bank has held discussions with IM banks on farm lending risks and requested and analysed bank data on farm lending. The Reserve Bank has also developed a national dairy stress-testing model (New Zealand farm lending risk is substantially driven by risk in lending to the dairy sector). This model has been used to stress-test banks' farm exposures consistent with the Basel II standard of capital adequacy (for Basel II regulatory purposes, banks are required to hold enough capital to meet unexpected losses with a probability of 0.999 over one year). The Reserve Bank has used these sources of information as input into the development of its new farm lending capital policy. This new policy is described below.

Farm lending defined

10. The Reserve Bank's farm lending capital policy gives rise to different treatment for farm lending exposures compared to non-farm lending corporate exposures. We therefore propose to establish a new farm lending subclass within the BS2B corporate asset class. We propose that farm lending is defined relatively narrowly – to include banks' lending to farms but not to the wider agricultural sector that provides supplies and support to farms (e.g. loans to primary product processors or to rural servicing businesses would not be captured).

11. This proposal would be given effect by amendments to sections 4.2 and 4.13 of BS2B, and the inclusion of section 4.4(c) as shown in the attachment to this paper.

Q1: Do you envisage any difficulties identifying farm lending exposures on the basis of the proposed amendments to BS2B?
Q2: Is there a risk of materially inconsistent classification of farm lending exposures across IM banks?
Q3: Is there a better way to define farm lending exposures, for instance by reference to the Australian and New Zealand Standard Industrial Classification (ANZSIC)?

Downturn loss-given-default estimates

12. In the Reserve Bank's view, IM bank loss-given-default (LGD) models do not sufficiently take the possibility of large falls in farm land prices into account. We therefore propose to prescribe the set of minimum LGD estimates for IM banks contained in the following table.

Proposed Minimum LGD for farm lending exposures

LVR	Under 30%	30%-39%	40%-49%	50-59%	60-69%	70% and over
LGD	10.0%	15.0%	22.5%	32.5%	40.0%	42.5%

13. This proposal would be given effect by amendments to sections 4.13 and 4.61 of BS2B, and the inclusion of sections 4.12A and 4.61A into BS2B as shown in the attachment to this paper.

14. In the event of a resurgence in land prices in which farm land valuations deviate materially from fundamentals (such as that observed in recent times), we may propose more conservative minimum LGD requirements to take account of the risk of a more substantial fall in farm land values.

Q4: Do you consider the proposed minimum LGD estimates are sufficiently conservative?
Q5: Do you envisage any practical difficulties implementing this proposal?
Q6: What would be the impact on regulatory capital of implementing this proposal (as at 31 December 2010)?

Homogeneity in the farming sector

15. The Basel II framework assumes that small business lending is more heterogeneous than large business lending and therefore subject to less systemic risk (i.e. losses relating to small business lending are relatively weakly correlated). In the Basel II framework this view of risk is given effect through the 'firm size adjustment' (an adjustment to capital requirements for loans to firms that have annual sales of less than $50 million). Many New Zealand farms are subject to the firm size adjustment.

16. In the Reserve Bank's view this aspect of the Basel II framework incorporates an overly optimistic view of the extent that risks in the New Zealand farm sector can be diversified. New Zealand farm lending is in fact relatively homogeneous. A single sector (dairy) accounts for the majority of farm lending, and changes in dairy land prices have an indirect effect on land values and hence risk in the sheep and beef sector which account for most of the remainder of farm lending.

17. The results of the Reserve Bank's stress testing work (in relation to the key farm sector of dairy) support the homogeneous nature of New Zealand farm lending. This work showed much greater losses in deep stress events compared to those that would occur if the Basel firm size adjustment correctly represented the extent to which individual exposures were correlated.

18. The Reserve Bank therefore proposes to withdraw the concessional treatment provided for farm lending through the firm size adjustment. This proposal would be given effect by the inclusion of a section 4.139A into BS2B as shown in the attachment to this paper.

Q7: Do you agree with the rationale for removing the concessional treatment provided for farm lending by the firm size adjustment?
Q8: Do you envisage any practical difficulties with this proposal?
Q9: What would be the impact on regulatory capital of this proposal (as at 31 December 2010)?

19. In addition to the changes proposed above, in our view IM banks should consider whether their corporate lending portfolio contains a concentration of farm or dairy lending that generates an exposure to systematic risk that is greater than the standard Basel II model assumes. This matter will be discussed further in a forthcoming consultation on changes to the Reserve Bank's guidance on banks' Internal Capital Adequacy Assessment Process (BS12).

SECTION 3: LOAN MATURITY

20. The Basel II model gives significant weight to the contractual maturity of a loan in determining the risk of non-retail loans. For instance, a loan with a contractual term of five years is considered 60 percent more risky than a loan with a one-year contractual term. The Reserve Bank has reviewed this feature of the Basel II model. While this review was initially undertaken as part of the review of farm lending risk, the issue is in fact relevant to corporate exposures more generally.

21. The Reserve Bank's view is that the Basel II model greatly overstates the sensitivity of risk to contractual maturity, particularly the sensitivity of maturity to systemic risk. It is therefore proposed to remove this input from the capital equation completely.

22. As the Basel II corporate capital equation is calibrated to a neutral maturity position of 2.5 years, our proposal would have a one-off effect of increasing capital for loans with contractual maturities of less than 2.5 years, and reducing capital for loans with contractual maturities of more than 2.5 years. Farm loan maturities are relatively long and so our proposal is expected to reduce farm lending capital charges.

23. The proposals above would be given effect by the changes to sections 4.13, 4.86 and 4.136, and the inclusion of sections 4.12A and 4.186A into BS2B as shown in the attachment to this paper.

Q10: Do you agree with the rationale for setting the maturity input into the capital equation for corporate exposure at 2.5 years?
Q11: Do you envisage any practical difficulties with this proposal?
Q12: What would be the impact on regulatory capital of this proposal (as at 31 December 2010)?

24. By the same logic, there could be a case for also removing the loan maturity input for sovereign and bank exposures. It has not been a priority for the Reserve Bank to consider this matter in depth, but this is a matter that may be reviewed in the future.

SECTION 4: MISCELLENEOUS CHANGES

25. The Reserve Bank proposes making a small number of minor miscellaneous changes to BS2B. These changes are shown in the attachment and also noted here. In all cases there is no change in policy intent, and except for (i) and (iii), the changes are very minor editorial corrections.

    i. A new section 3.3A is proposed to clarify some minor aspects of capital ratio calculations. The proposed new section would confirm that for the purposes of determining capital ratios, 'credit exposures' include the minor asset categories such as fixed assets. The new section would also confirm that the Basel II scalar applies to exposures for which the standardised approach to credit risk is used. Evidence of some uncertainty on these matters arose in the course of the recent bank disclosure review.

ii. A correction to a typographical error in section 4.7(b)(ii) will be made – 'explicity' will be changed to 'explicitly'. Also a correction to a typographical error in section 4.9 will be made – 'so' will be changed to 'do'.

iii. A new section 4.150A is proposed to clarify the definition of LVR as used in the determination of minimum LGD estimates for residential real estate exposures. This section clarifies that LVR is defined as the current loan balance as a percentage of the value of the security at the time the loan was originated, and that the current loan balance includes the credit equivalent of any off balance sheet exposures. We are confident IM banks already use a definition of residential real estate LVR consistent with this definition. The additional section is therefore proposed to confirm and lock in our policy intent and existing practice.

iv. In section 4.137, there is a reference to a footnote 19 that does not exist, and will therefore be deleted.

v. A correction to section 4.139 will be made. Currently this section refers to a formula in section 2.52. Section 2.52 does not exist. Section 4.139 should refer to section 4.136.

26. The Reserve Bank is also proposing a consequential change to BS8. In particular it is proposed to alter the reference to BS2B in paragraph 4d to refer to the June 2011 version rather than the October 2010 version.