

MEMORANDUM FOR FSO
FROM Financial Policy (Matthew Brunton)
DATE 5 December 2018
SUBJECT **Calibration of Leverage Ratio**
FOR YOUR Decision

It is recommended that the Committee:

- **Note** that APRA has released a new consultation paper, proposing a 3.5% leverage ratio requirement for IRB banks instead of their previously proposed 4%.
- **Agree** to consult on, in the Capital Review, **either**:
 - a 3% leverage ratio for all NZ registered banks, or
 - a 3.5% leverage ratio for IRB banks and 3% for standardised banks (in line with APRA).

Background

1. This paper follows on from a previous FSO memo, which described the benefits and potential costs of leverage ratio requirements.¹ The outcome from that FSO Committee was a decision to consult on including both disclosure and minimum leverage ratio requirements, with a later paper to decide the calibration.² This paper now addresses which calibration should be used in the consultation.
2. Since the previous decision, APRA has released its summary of submissions and a new consultation on the leverage ratio. It now proposes a 3.5% minimum leverage ratio requirement for IRB banks instead of its previously proposed 4%. They also are proposing a 3% requirement for standardised banks.
3. In the previous FSO Committee, it was agreed to consult on a Tier 1 Capital Ratio, inclusive of buffers, of up to 16% of RWA.

Recap on rationale of a leverage ratio

4. A leverage ratio is intended as a backstop, restricting the amount banks can leverage their balance sheet and trading book to accommodate for risks that are not captured in the risk-based framework.³ A leverage ratio may not stop these risks, but it does limit how vulnerable banks are to them

¹ #7683677

² #7700675

³ These risks are likely to be unknown. For example, the accuracy of the ratings on RMBS was a risk that was unknown in the 2000s until the GFC.

5. A leverage ratio can also avoid or limit deleveraging processes that often occur during crises and can destabilise financial systems and the real economy.
6. Additionally, a leverage ratio is more internationally comparable than a capital ratio, providing a complementary tool for investors to analyse banks positions. More detailed analysis on the benefits and costs can be found in #7683677.

Impact on risk sensitivity

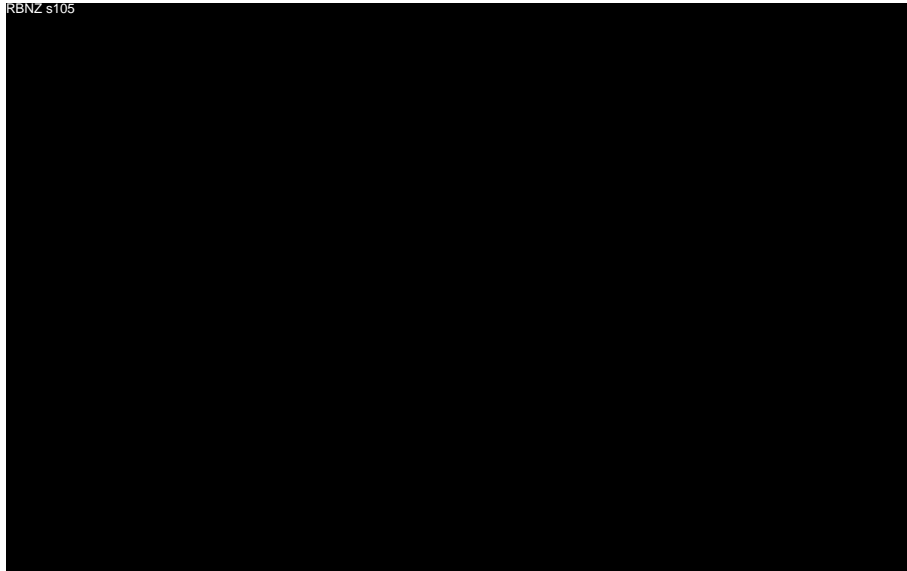
7. Given the proposed 16% Tier 1 requirement, it is unlikely that a leverage ratio requirement will become more constraining than the capital ratio requirements. For example, a minimum leverage ratio of 3.5% would mean a bank would need an average risk weight of around 22% for it to be more binding than capital requirements. Currently banks have average risk weights of around 55%. As such there is no expected impact on risk-sensitivity for banks, particularly for banks operating above Tier 1 Ratios of 16%.

When should a leverage ratio be binding?

8. A key issue in determining the calibration of the minimum leverage ratio requirement is determining when it may be acceptable for the leverage ratio to be binding before a capital ratio. A key driver of which ratio becomes the binding one in a crisis is the average risk-weight of a bank's portfolio.
9. Generally, a leverage ratio can be thought of setting a minimum risk-weight for a bank approaching its *minimum* requirements. A higher minimum risk weight (i.e. higher leverage ratio) means that a bank below this risk weight would breach its leverage ratio before its capital ratio.
10. A leverage ratio of 3.5% would equate to a minimum risk-weight of roughly 58% for when a bank breaches minimum requirements. A 3% leverage ratio equates to roughly a 50% minimum risk weight.⁴
11. Setting a minimum risk-weight protects banks from the potential risks that may not be adequately captured by the risk-based framework, as described earlier. However, setting it too high can create perverse incentives for banks that are near their *minimum* capital requirements (i.e. 6% Tier 1 Capital), if they are below the minimum risk-weight.

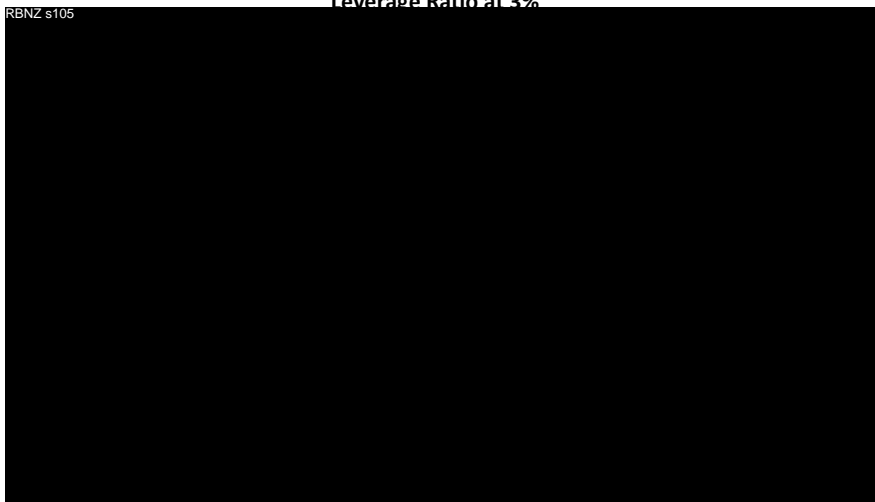
⁴ The actual minimum amount for each bank would vary around these points due to the additional considerations in the leverage ratio calculation, such as in the treatment derivatives.

12. Our current estimates show that a 3.5% leverage ratio may be binding for RBNZ s105 before the capital ratio is binding. Figure 1 shows this, with banks in the bottom-right triangle to have a binding leverage ratio before a binding capital ratio. This is based on changes in risk-weights from other Capital Review proposals (i.e. scalar and output floor).



13. In contrast, a 3% leverage ratio, shown for both IRB and standardised banks, is not currently expected to be binding before the capital ratio for any of the IRB banks, and may be binding for RBNZ s105 before the Capital Ratio is.

**Figure 2: The Relationship between Capital and Leverage Ratios
Leverage Ratio at 3%**



This paper proposes that the Capital Review consult on either:

- A 3% minimum leverage ratio and a disclosure requirement for all banks, or
- A 3.5% minimum leverage ratio for IRB banks, a 3% minimum leverage ratio for standardised banks, as well as a disclosure leverage ratio requirement for all banks.