How a Leverage Ratio fits in

Capital Review

Numerator (Capital Instruments)

Denominator (Risk Weights)

Capital Ratio

Total Loss Absorbing Capital

Leverage Ratio

Capital Buffers
What is a Leverage Ratio?

- A leverage ratio is a non-risked based capital ratio. Instead of risk-weighted assets, it uses gross exposure values.

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\text{Leverage Ratio} = \frac{\text{Tier 1 Capital}}{\text{Exposure Measure}} \quad \text{Tier 1 Capital Ratio} = \frac{\text{Tier 1 Capital}}{\text{RWA}}
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Historically, there was a reluctance to adopt non-risk based leverage ratio requirements.

However, following the GFC regulators and the Basel Committee acknowledged shortfalls in the risk-based capital framework.

The inclusion of leverage ratio requirements in Basel III is meant to address two of these shortfalls:
- The impact of deleveraging on a financial system, and
- The need for a ‘backstop’ to the risk-based framework.
Objective 1: The impact of deleveraging

- This was to avoid and mitigate the impact of deleveraging that is often associated with preceding periods of high leverage and can be destabilising to broader financial systems.
- The deleveraging process can occur through the restriction of lending and credit growth, a ‘credit-crunch’, which can have damaging second-round effects on the financial system.
- It can also happen through the liquidation of bank assets, particularly securitized assets, which can expose banks to losses through changes in market prices.
Objective 2: A ‘backstop’ to the risk-based framework

- Growing attention to the issue of regulatory arbitrage, with a number of research papers and the Basel Committee noting the incentives to ‘game’ internal models.
- A leverage ratio, as a gross-exposure based measure, is a blunt but effective backstop. Does not fall with gaming of risk-weights, unlike capital ratios. Ensures that a bank’s capital-to-exposure doesn’t fall below a certain point.
- Capital Review already addressing some of these concerns (dual reporting and output floor). Effectiveness of these depends on their final form.

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\text{Tier 1 Capital Ratio} \uparrow = \frac{\text{Tier 1 Capital}}{\text{RWA} \downarrow}
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\text{Leverage Ratio} = \frac{\text{Tier 1 Capital}}{\text{Exposure Measure}}
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Key considerations
1 – Interaction with capital ratios

• A potential cost is a loss of risk-sensitivity if banks focus on a leverage ratio rather than capital ratios.
• However, calibration of the leverage ratio can be done so that banks are closer to their minimum capital ratios than their minimum leverage ratios in normal periods.
Several bank submissions to earlier consultation paper highlighted a desire for alignment with international frameworks, particularly with APRA.

Benefits of international alignment include administrative efficiencies (for foreign-owned banks) and greater understanding of NZ framework to external stakeholders.

We propose the leverage ratio calculation is based on APRA methodology.
Key Considerations

3 – Interaction with markets

- A leverage ratio that follows an international methodology (in this case APRA’s) will allow for greater understanding to investors.
- It may undermine the capital ratio’s influence on the market, however evidence from the US suggest that this has only been observed for large complex banks during the GFC.
- Market participants can already easily access other leverage ratios and information not required by RBNZ.
Key Considerations
4 – Compliance costs

• There would be additional compliance costs from leverage ratio requirements.
• However, this would be lower under APRA rather than Basel methodology
  - Same methodology as parent for IRB banks
  - Simplified version of the Basel calculation for standardised banks
Overall benefits and costs

- Benefits seems relatively low
  - Current changes in the Capital Review partially address the need for a backstop.
  - However, leverage ratio requirements would align NZ with international standards.
- The costs also seem relatively low
  - RBNZ doesn’t have a monopoly over market information and evidence suggests capital ratios are still better measurements.
  - Requirements can be calibrated to reduce risk of losing risk-sensitivity.
  - There may be additional compliance costs
Financial Policy would like the Committee to agree that the Bank consults on including leverage ratio requirements (both disclosure and minimum) in the ‘Ratio Consultation Paper’.

This will be presented as our preferred option of the three.

A final minimum amount will be presented and decided by the Committee with the final capital ratio calibration.
Appendix: Stylised impact of the Capital Review

Figure 1: Likely impact of Capital Review

Stylised example of the impact of denominator changes

Stylised example of the impact of ratio changes